



Z O N I N G   B O A R D   A G E N D A

APRIL 27, 2015, 7:00PM, SFD COMMUNITY CENTER

1. Call to order
2. Introductions
3. Consent agenda:
  - A. Approval of agenda
  - B. Approval of 1/26 minutes
4. Rezoning Case RZ-02-15 AG (Agricultural) to CU-RS-40 (Conditional Use Residential) in a General Watershed Area
5. Preliminary subdivision plat approval - Birkhaven 7
5. Other business (as needed)
6. Adjourn



## Z O N I N G   B O A R D   M I N U T E S

JANUARY 26, 2015, 7:00PM, SFD COMMUNITY CENTER

1. Hess opened the meeting at 7:02pm. The following were present:

**Planning and Zoning Board**

Nancy Hess, Chair

Jeff Davis

Dick Feulner

Kathy Rooney

Trudy Whitacre

Scott Henson, Alternate

**Staff**

Julie Reid, Town Planner

Torren Fury, Attorney

**Guests:**

Renee Weidel, Property Owner

Chris Rohrer, PLS

2. Members of the staff and Planning and Zoning Board introduced themselves.

3. CONSENT AGENDA

The Planning Board reviewed the Agenda and the proposed minutes. A motion was made to approve the consent agenda and the September 22, 2014 as presented. M/S Davis/Feulner, passed (5-0-0).

4. REZONING 01-15

Ms. Reid gave a brief overview of the rezoning of this property and of the proposed subdivision and referred to a preliminary sketch plan. Ms. Weidel is developing 8.313-acres of her 131 -acre farm. This rezoning and subsequent subdivision will result in five residential lots with ten percent (10%) of the total area designated as open space. The open space will be accessed by a ten-foot easement along the east side of the development. There is an existing foot path within this easement.

She noted that the rezoning proposed is **CU-RS-40/WGA** -Residential District by Conditional Use in a Water Supply General Area. The owner proposes a condition limiting development to single family detached housing. The remaining 122.7 acres will remain **AG/WGA** - Agricultural District in a Water Supply General Area and will continue as a residence and a working farm.

Additionally, a twenty-five foot landscape easement is proposed along the south boundary of the proposed rezoning to preserve an existing stand of mature Arizona Cypress. This area of the farm had been used as a commercial nursery in the past.

A floodplain is located just to the south of the property being rezoned. No portion of the proposed rezoning is located in this floodplain.

She also noted the lots will be served by on-site wells and septic tank systems on each lot. There is no offsite sewage drainage fields anticipated.

Ms. Reid also asked to Board to note that the Shadow Creek Drive is shown on the 2005 Collector Street Plan. This alignment will begin at the western city limits and continue east to Armfield subdivision, just short of I-73. It will connect the north-south extensions of Eversfield Rd, Braelands Drive, Belford Road and Mahlon Lawrence Rd. The location of designated flood plains to the south of the Shadow Creek Road make north -south connections to Brookbank Road unlikely.

She also noted that during the subdivision review and approval process for Birkhaven 1-5, it was agreed that no more than 60 homes would be constructed as there would be only one access road. Birkhaven 6 was approved with another 16 lots having this same single access. There was discussion of the provision for a second access and providing for the connectivity of subdivision roads to major thoroughfare roads. This project proposes only five lots, but with access by extension to the same access road. She asked that the Board note that the connection to the north-south road alignments can only take place as land adjacent to those alignments is developed.

Ms. Reid asked the Board to review the proposal for compatibility with the Comprehensive Plan. She noted that Policy 3.5 "Avoiding clear cutting of trees and woodlands" does not just apply to open areas, but also to individual lots. She suggested that building setback areas as potential location for tree preservation. She noted that the building envelope, driveways and septic systems would require the removal of trees. Ms. Reid also noted that the existing mature tree cover helps prevent soil erosion by holding the soil in place. She noted the preservation of the trees in the open space is required as a secondary conservation area.

Ms. Rooney expressed her wish to see the Weidel timber management plan, but indicated it would not hold up her consideration of the rezoning request.

Mr. Rohrer spoke on behalf of the request. He explained how a small farmer of today could generate income to cover the costs of maintaining a farm. He explained that revenues were needed to maintain or purchase equipment, buildings and supplies.

The group discussed possible measures to designate, delineate and post open space. There was discussion of the role deed restrictions play in restricting the use of open space. They discussed instances of home owner encroachment into designated open space. They discussed the uses and control of uses in open space areas. They also talked about the possible connectivity of open space.

**A motion was made** "that a recommendation for **approval** of the request for rezoning from AG (Agricultural) (120,000 square foot lots) to CU-RS-40 (Conditional Use Residential), located in a Watershed General Area (60,000 square foot lots) be forwarded to the Town Council. The uses listed in this request include only one permitted use, single family detached housing. The request is consistent with the town's adopted comprehensive plan because it complies with policy 6.0 and 6.1 relating to low density single family homes and is in the public interest because the proposed development is consistent with surrounding zoning and residential development. "M/S Davis/Feulner , passed (5-0-0). Ms Rooney asked that a copy of the timber management plan be made available to the Town Council.

5. Chair Hess asked if there was any other business. There being none, she asked for a motion.
7. A motion was made to adjourn the meeting. M/S Davis/Rooney, passed (5-0-0).



**PLANNING DEPARTMENT REPORT** *APRIL 15, 2015*

**Memorandum to:** Planning and Zoning Board members

**From:** Julie A. Reid, Town Planner

**Regarding:** Case RZ-02-15

**LOCATION:** The Town of Summerfield has received an application to rezone a 3.149 - acre portion of a 30.57- acre tract of land located at 2109 YY Pleasant Ridge Road, Bruce Township, being Guilford County Parcel 0219733. The requested 3.149 acres would be located south of the terminus of Morganshire Drive (Trotters Ridge II Subdivision).

**OWNER(S)/APPLICANT:** Charlie and Dwala Higgins, 2105 Pleasant Ridge Road, Greensboro, NC

**PROPOSED DEVELOPER:** Charlie and Dwala Higgins, 2105 Pleasant Ridge Road, Greensboro, NC

**TOTAL ACREAGE:** The subject site is a 3.149 - acre portion of a 30.57- acre tract of land.

**REQUEST:** The proposed rezoning is from AG (Agricultural) (120,000 square foot lots) to CU-RS-40 (Conditional Use Residential), located in a General Watershed Area (60,000 square foot lots).

**Only proposed permitted use – Single Family Detached Residence**

The addition of the Conditional Use District designation provides the opportunity for conditions that are mutually agreed upon. The one condition requested would limit the development to one use, detached single family residential homes.

A preliminary sketch plan is attached for review. This plan may change significantly through the review and approval process.

**CHARACTERISTICS OF THE PROPOSED DISTRICT:** The RS-40, Residential Single-Family District is primarily intended to accommodate single-family detached dwellings on large lots in areas without access to public water and wastewater services. The district is established to promote single-family detached residences where environmental features, public service capacities, or soil characteristics necessitate very low-density single-family development. Development within this district for five or more lots requires Open Space dedication. Two lots are proposed within the requested rezoning area. A third lot, the residual lot, will remain Agricultural District zoning.

**OBSERVATIONS:** *The 30.57 acre tract is part of large lot family subdivision. The southern portion of the 30.57-acre tract is located in a Special Flood Hazard area. This would make access from the south complicated and expensive. The area to be rezoned is on the northern portion of the parcel and will extend the existing*



public road from Trotter Ridge II Subdivision into the parcel. New lots will be adjacent to those in the adjoining subdivision.

Future access to the remainder of the 30.57-acre parcel and the 27.984-acre parcel west of this parcel would be from this roadway extension.

Two streams are shown on the 30.57 acres parcel. A stream classification study was completed for both. It was determined that the stream shown on the east side of the parcel does not meet the criteria for jurisdictional stream protection buffers.

**Process Requirements and Notes:** All required submittal requirements and fees have been received.

### **COMPATIBILITY WITH COMPREHENSIVE PLAN:**

**1. Appropriate, Limited Commercial Development** – Not applicable

**2. Sidewalk, Bikeway and Trail System** – none

**3. Community Character Preservation** – none

**4. Transportation Improvements** –

Policy 4.5:

So as to (1) minimize the use of major roadways for purely local trips, (2) allow for public road access, and (3) facilitate the development of Summerfield as a walkable and bikeable community, the **Town shall encourage STREET CONNECTIONS BETWEEN ADJOINING RESIDENTIAL AREAS**, - provided that the street layout discourages cut-through traffic through established neighborhoods.

**5. Water Supply and Sewage Treatment Options** – Individual wells are proposed. The approval of wastewater facilities for each lot will be necessary for a final approval of this request.

**6. Appropriate Housing and Residential Development** – Summerfield's appealing residential areas, exemplified by neighborhoods set among expanses of open space, woodlands, and pastures, shall continue to be a defining attribute of the community.

Policy 6.1: Residential development in Summerfield should remain mostly LOW DENSITY, SINGLE-FAMILY DETACHED HOUSING.

**7. Parks and Recreation Improvements** – Not applicable.

**8. Attractive Community Appearance** – This development will not be visible from any major roads.

**9. Quality School Facilities** – This is a small subdivision and little impact is anticipated.

**10. Summerfield Road Focus Area** – Not applicable.



**11. Historic Preservation** – *There are no historical structures on the site.*

**12. Summerfield as a Limited Services Local Government** – *The Town of Summerfield should continue to focus on the highest priorities of area residents – managing growth and preserving and enhancing the area’s quality of life.*

**SUGGESTED MOTION FORMAT FOR CONSIDERATION**

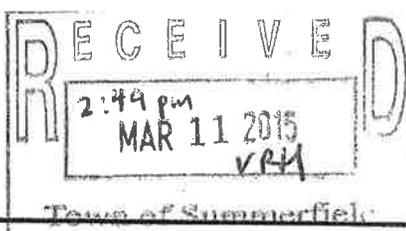
**Note:** North Carolina General Statute 160A-383 requires that “prior to adopting or rejecting any zoning amendment” each local governing board “shall adopt a statement describing whether its action is consistent with an adopted comprehensive plan and explaining why the board considers the action taken to be reasonable and in the public interest.” For the purposes of this statute, this document is “The Town of Summerfield Comprehensive Plan.”

*“I move that a recommendation for (approval) (conditional approval) (denial) of the request for rezoning from AG (Agricultural) (120,000 square foot lots) to CU-RS-40 (Conditional Use Residential), located in a Watershed General Area (60,000 square foot lots) be forwarded to the Town Council. The uses listed in this request include only one permitted use, single family detached housing. The request (is) (is not) consistent with the town’s adopted comprehensive plan because*

*(List):* \_\_\_\_\_

*and (is) (is not) in the public interest because* \_\_\_\_\_.





Town of Summerfield  
Development Bulletin  
Effective January 7, 2005  
www.summerfieldgov.com

Summerfield Application for  
Conditional Use Rezoning

Date Submitted: \_\_\_\_\_ Fee/Receipt #: \_\_\_\_\_ Case Number: \_\_\_\_\_

Provide the required information as indicated below. Pursuant to the Town of Summerfield Development Ordinance, this application will not be processed until application fees are paid; the form below is completed and signed; and all required maps, plans and documents have been submitted to the satisfaction of the Enforcement Officer. Additional sheets for tax references, signature blocks and conditions are available upon request.

Pursuant to Section 3-12 of the Town of Summerfield Development Ordinance, the undersigned hereby request Town of Summerfield to rezone the property described below from the AG zoning district to the CU-RS-40 zoning district. Said property is located AT THE SOUTHERN TERMINUS OF MORGANSHIRE DRIVE in BRUCE Township; Being a total of: 3.149 acres.

Further referenced on the Guilford County Tax Maps as (additional tax reference sheets available upon request):

- Parcel Number 0 2 1 9 7 3 3
- Parcel Number \_\_\_\_\_
- Parcel Number \_\_\_\_\_
- Parcel Number \_\_\_\_\_

Check One:

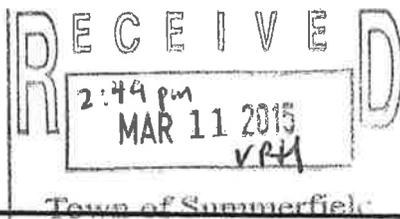
- The property requested for rezoning is an entire parcel or parcels as shown on the Guilford County Tax Map.
- The property requested for rezoning is a portion of a parcel or parcels as shown on the Guilford County Tax Map; a written legal description of the property and a map are attached.

Check One:

- The applicant is the property owner(s)
- The applicant is an agent representing the property owner(s); the letter of property owner permission is attached.
- The applicant has an option to purchase or lease the property; a copy of the offer to purchase or lease is attached (financial figur
- The applicant is

CHARLIE B HIGGINS OR DWALA V HIGGINS 2105 PLEASANT RIDGE RD GREENSBORO NC 27410-9251		1772 66-19/530 NC 58520
Pay to the Order of <u>Town of Summerfield</u>		<u>3/11/15</u> Date
<u>Eight hundred, eighty two &amp; 00/100</u> Dollars		\$ <u>882.00</u>
<b>Bank of America</b>		<b>Bank of America Advantage®</b>
ACH R/T 053000196		For <u>Rezoning Application</u>
DWALA V. HIGGINS		MP
⑆053000196⑆ 000023918436⑆1772		

Conditional Use Rezoning



Town of Summerfield  
Development Bulletin  
Effective January 7, 2005  
www.summerfieldgov.com

Summerfield Application for  
Conditional Use Rezoning

Date Submitted: \_\_\_\_\_ Fee/Receipt #: \_\_\_\_\_ Case Number: \_\_\_\_\_

Provide the required information as indicated below. Pursuant to the Town of Summerfield Development Ordinance, this application will not be processed until application fees are paid; the form below is completed and signed; and all required maps, plans and documents have been submitted to the satisfaction of the Enforcement Officer. Additional sheets for tax references, signature blocks and conditions are available upon request.

Pursuant to Section 3-12 of the Town of Summerfield Development Ordinance, the undersigned hereby request Town of Summerfield to rezone the property described below from the AG zoning district to the CU-RS-40 zoning district. Said property is located AT THE SOUTHERN TERMINUS OF MORGANSHIRE DRIVE in BRUCE Township; Being a total of: 3.149 acres.

Further referenced on the Guilford County Tax Maps as (additional tax reference sheets available upon request):

- Parcel Number 0 2 1 9 7 3 3
- Parcel Number \_\_\_\_\_
- Parcel Number \_\_\_\_\_
- Parcel Number \_\_\_\_\_

Check One:

- The property requested for rezoning is an entire parcel or parcels as shown on the Guilford County Tax Map.
- The property requested for rezoning is a portion of a parcel or parcels as shown on the Guilford County Tax Map; a written legal description of the property and a map are attached.

Check One:

- The applicant is the property owner(s)
- The applicant is an agent representing the property owner(s); the letter of property owner permission is attached.
- The applicant has an option to purchase or lease the property; a copy of the offer to purchase or lease is attached (financial figures may be deleted).
- The applicant has no connection to the property owner and is requesting a third party rezoning.

**Conditional Use Rezoning Requirements:**

- Zoning Development Plan. A development plan illustrating proposed conditions and other pertinent information is required for all residential conditional use rezoning requests. Development Plan elements not illustrating proposed conditions are subject to subdivision and site plan review. Refer to Appendix 2, Map Standards of the Town of Summerfield Development Ordinance.
- Zoning Conditions. Use and/or development conditions must be provided. Complete Part Two of this application. Refer to uses as listed in Table 4-3-1 of the Town of Summerfield Development Ordinance.

**Application materials checklist:**

Filing for a rezoning or conditional use rezoning requires:

- ❖ A completed and signed Application Form;
- ❖ Application fee;
- ❖ A Development Plan for residential rezonings;
- ❖ legal description of the property;
- ❖ Environmental Inventory for residential rezoning and non-residential rezoning over 5 acres (check with Planning Staff for specific requirements)

**Conditional Use Rezoning  
Application, Part II**

**Use Conditions**

Uses of the property shall be limited to the following uses as listed in Article IV, Table 4-3-1 of the Town of Summerfield Development Ordinance:

- 1) SINGLE FAMILY DETACHED DWELLINGS ONLY
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_

**Development Conditions**

Development of the property shall occur in accordance with the following standards and requirements in addition to those specified in the Town of Summerfield Development Ordinance:

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_

A Conditional Use Rezoning Application must be signed by current property owner(s).

*I hereby agree to conform to all applicable laws of Summerfield and the State of North Carolina and certify that the information provided is complete and accurate to the best of my knowledge. I acknowledge that by filing this application, representatives from Town of Summerfield Planning Department may enter the subject property for the purpose of investigation and analysis of this request. Additional signature pages are available upon request.*

Respectfully Submitted,

*Dwala V. Higgins*  
Applicant Signature  
CHUCK B. HIGGINS, JR.  
DWALA V. HIGGINS

Name

2105 PLEASANT RIDGE ROAD  
Mailing Address

GREENSBORO, NC 27410  
City, State and Zip Code

336.664.5900  
Phone Number

dwala.higgins1@gmail.com  
Email

\_\_\_\_\_  
Representative/Agent Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Mailing Address

\_\_\_\_\_  
City, State and Zip Code

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
Email

**Additional Tax Map References**

Further referenced on the Guilford County Tax Maps as:

Parcel Number \_\_\_\_\_

**Additional rezoning questions:**

1. Type of use and improvement proposed:

SINGLE FAMILY DETACHED DWELLINGS

2. Do substantial reasons exist which prevent the subject property from being used in accord with the current Zoning classification?

No

3. State the way in which the proposed change will be appropriate and desirable to the Town of Summerfield and what effect the proposed change will have upon the immediate neighborhood.

THE PROPOSED CHANGE WOULD ALLOW FOR ADDITIONAL LOW DENSITY DEVELOPMENT AND LITTLE TO NO EFFECT ON THE IMMEDIATE NEIGHBORHOOD.

4. What changing conditions make the passage of this proposed amendment necessary?

SUMMERFIELD IS EVOLVING INTO A MORE RURAL RESIDENTIAL COMMUNITY.

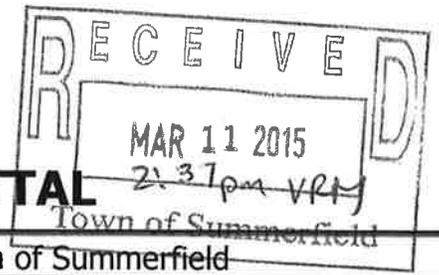
5. Are there circumstances that justify the proposed change? If so, state them.

CHILDREN OF APPLICANT DESIRE TO LIVE ON THE PROPOSED TRACT(S).

6. How does the proposed zoning change affirm the policy(ies) of the Town of Summerfield Comprehensive Plan?

POLICY 6.1 ~ LOW DENSITY DETACHED HOUSING





**TRANSMITTAL**

<b>To:</b>	Town of Summerfield
<b>Attn:</b>	Julie Reid
<b>Re:</b>	0213733
<b>Job No:</b>	15100003
<b>Date:</b>	March 11, 2015
<b>Cc:</b>	File

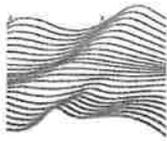
Attached for your  approval  review  comments  file, or  use are the following items:

Quantity	Description
1	Rezoning Sketch
1	Legal Description
1	Environmental Inventory
1	Vicinity Sketch

**REMARKS:** The Applicant should have dropped off the application and check for fees. Please let me know as soon as possible if any items have been omitted or will be required. Additional copies for P & Z and Town Council are available upon request. Thanks.

If you have any questions or require additional information, please contact the appropriate person.

Christopher M. Rohrer, PLS      Ph. (336) 605-0328      [chris@landsolutionspc.com](mailto:chris@landsolutionspc.com)



# LAND SOLUTIONS

LAND SURVEYING, DESIGN AND PLANNING

March 10, 2015

RE: Site Analysis / Environmental Inventory – Portion of Parcel No. 219733

In accordance with the Town of Summerfield Development Ordinance, Land Solutions has prepared this site analysis in conjunction with a request to rezone approximately 3.149 acres from AG to CU-RS-40.

### Site Details

This tract is located South of the terminus of Morganshire Drive within the Trotter Ridge II Subdivision. The entire tract is located within the Greensboro General Water Supply Watershed, Reedy Fork, WS III. This site consists of wooded steady sloping topography. There are no areas on this portion of the property that are located within a designated flood zone but there are areas located within a designated flood zone on the remaining portion of this parcel. This tract is currently vacant. There are no existing improvements on this tract. Soil types are primarily Madison Clay Loam, which can support the type of development proposed. No Open Space areas are required for this proposal, but the following documents (Attached) were reviewed by Land Solutions staff:

- National Wetlands Inventory Maps
- Guilford County Soil Survey
- Natural Heritage Inventory of Guilford County
- Flood Insurance Rate Maps (FEMA)
- NCDOT Topographic Map
- Northwest Area Plan
- Town of Summerfield Development Ordinance and Comprehensive Plan

There are no documented wetlands, historic sites, archaeological sites or critical habitat areas located in the requested area as identified on any of the reference documents.

### Primary and Secondary Conservation Areas

This site does require the establishment of Primary or Secondary conservation areas.

### Conclusions and Development Strategy

This plan meets or exceeds the goals and specifications of the Town of Summerfield Development Ordinance, the Town of Summerfield Comprehensive Plan and the RS-40 Residential District.

Should anyone wish to visit the property, please contact Land Solutions or applicant to arrange access to the property.

If you have any questions or require further information, please feel free to contact us.

Sincerely,



Christopher M. Rohrer, PLS

\\landserver\data\Company Files\2015 Projects\15100003\Docs\Environmental Inventory 3-10-15.doc



U.S. Fish and Wildlife Service

# National Wetlands Inventory

Parcel No. 219733

Mar 10, 2015



## Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:



Included with this soil in mapping are small areas of soils that have a sandy loam surface layer and a few small areas of soils that have slopes of more than 6 percent. Also included are a few small areas of Cecil soils, a few small areas of soils that have rock fragments on the surface, and a few small areas of soils that have only a few flakes of mica in the subsoil.

The organic-matter content of the surface layer is low. Permeability is moderate, available water capacity is low, and the shrink-swell potential is low. Reaction of the subsoil is strongly acid or very strongly acid. Depth to bedrock is more than 60 inches. The seasonal high water table is at a depth of more than 6 feet.

Most of the acreage of this soil is in pasture or cultivated crops. The rest is in forest. Slope, runoff, erosion, permeability, and mica content are the main limitations in the use and management of this soil.

This soil has moderately low potential for row crops such as corn and soybeans. Minimum tillage and crop residue management aid in controlling runoff and erosion. Conservation practices such as installing and maintaining sod in drainageways, constructing terraces and diversions, stripcropping, establishing field borders, contour farming, and using crop rotations that include close-growing crops also aid in conserving soil and water. The potential for the production of hay and pasture plants such as fescue, sericea lespedeza, red clover, and white clover is moderate. Proper pasture management helps to ensure adequate protective cover, which reduces runoff and controls erosion.

This soil has moderate potential for most urban uses because of permeability. The moderate permeability limits performance of septic tank absorption fields, but this limitation generally can be overcome by modifying the absorption field or increasing the size of the absorption area. The potential for most recreation uses is high.

This soil has moderate potential for broadleaf and needleleaf trees. The dominant trees are shortleaf pine, loblolly pine, Virginia pine, sweetgum, red oak, white oak, and maple. The main understory species are dogwood, cedar, holly, pin oak, sassafras, and black cherry. Capability unit IIIe-2; woodland group 4c.

**McC2—Madison clay loam, 6 to 10 percent slopes, eroded.** This well drained soil is on long, fairly narrow upper side slopes on uplands. The mapped areas are 3 to 40 acres in size.

Typically, the surface layer is reddish brown clay loam about 5 inches thick. The subsoil is 29 inches thick; the upper part is red clay, and the lower part is mottled red clay loam. The underlying material, to a depth of 80 inches, is mottled reddish yellow sandy clay loam in the upper part and mottled reddish yellow sandy loam in the lower part.

Included with this soil in mapping are small areas of soils that have a sandy loam surface layer and a few areas of soils that have only a few flakes of mica in the subsoil. Also included are a few areas of soils that have rock fragments on the surface and small areas of Cecil soils.

The organic-matter content of the surface layer is low. Permeability is moderate, available water capacity is low, and the shrink-swell potential is low. Reaction of the subsoil is strongly acid or very strongly acid. Depth to bedrock is more than 60 inches. The seasonal high water table is at a depth of more than 6 feet.

Most of the acreage of this soil is forested. The rest is mainly in cultivated crops and pasture. Slope, runoff, erosion, permeability, and mica content are the main limitations in the use and management of this soil.

This soil has low potential for crops because of slope and erosion. The potential for hay and pasture plants such as fescue, sericea lespedeza, red clover, and white clover is moderate. Proper pasture management helps to ensure adequate protective cover, which reduces runoff and controls erosion.

This soil has only moderate potential for urban uses because of permeability and slope. The limitation of slope can be reduced or modified by special planning, design, or maintenance. Erosion is a hazard when ground cover is removed. The moderate permeability limits performance of septic tank absorption fields, but this limitation generally can be overcome by modifying the field or increasing the size of the absorption area. The potential for recreation is moderate.

This soil has moderate potential for broadleaf and needleleaf trees. The dominant trees are shortleaf pine, loblolly pine, Virginia pine, sweetgum, red oak, and white oak. The main understory species are dogwood, cedar, holly, pin oak, sassafras, and black cherry. A clayey subsoil is the main limitation in the use and management of this soil for woodland. Capability unit IVE-2; woodland group 4c.

**McD2—Madison clay loam, 10 to 15 percent slopes, eroded.** This well drained soil is on narrow lower side slopes. The mapped areas are 3 to 35 acres in size.

Typically, the surface layer is reddish brown clay loam about 5 inches thick. The subsoil is 29 inches thick; the upper part is red clay, and the lower part is mottled red clay loam. The underlying material, to a depth of 80 inches, is mottled reddish yellow sandy clay loam in the upper part and mottled reddish yellow sandy loam in the lower part.

Included with this soil in mapping are a few small areas of soils that have a sandy loam surface layer and a few areas of soils that have rock fragments on the surface. Also included are a few areas of Cecil soils and a few areas of other Madison soils.

The organic-matter content of the surface layer is low. Permeability is moderate, available water capacity is low, and the shrink-swell potential is low. Reaction of the subsoil is strongly acid or very strongly acid. Depth to bedrock is more than 60 inches. The seasonal high water table is at a depth of more than 6 feet.

Most of the acreage of this soil is forested. The rest is mainly in pasture. Slope, runoff, erosion, permeability, and mica content are the main limitations in the use and management of this soil.

roots and few medium root channels; common thin distinct discontinuous clay films on faces of peds; very strongly acid; gradual wavy boundary.

B22t—16 to 32 inches; reddish yellow (7.5YR 6/6) clay; common fine distinct light gray mottles, few medium distinct very pale brown (10YR 8/4) mottles, and few fine distinct reddish yellow mottles; moderate medium angular blocky structure; very firm, sticky and plastic; few medium roots and root channels; common thin distinct discontinuous clay films on faces of peds; very strongly acid; gradual wavy boundary.

B3—32 to 38 inches; mottled brownish yellow (10YR 6/8), strong brown (7.5YR 5/8), and light gray (10YR 7/2) clay loam; weak medium angular blocky structure; firm, sticky and plastic; few medium root channels; few thin faint patchy clay films on faces of peds; few fine uncoated sand grains; very strongly acid; gradual wavy boundary.

C—38 to 80 inches; mottled strong brown (7.5YR 5/8) and white (10YR 8/1) clay loam; massive; firm; 90 percent saprolite; very strongly acid.

The solum ranges from is 20 to 60 inches in thickness. Depth to bedrock is greater than 48 inches.

The A horizon is pale brown, dark brown, light brownish gray, or grayish brown sandy loam or loamy sand.

The B1 horizon, if present, is yellowish brown sandy clay loam. The B2t horizon is strong brown, reddish yellow, yellowish brown, or brownish yellow sandy clay loam or clay loam. The B horizon is strongly acid to very strongly acid.

The C horizon is commonly variegated yellowish red, strong brown, yellow, white, or gray sandy clay loam or clay loam.

### Iredell Series

The Iredell series consists of moderately well drained, slowly permeable soils that formed in residuum weathered from diorite, gabbro schist, and other rocks high in content of ferromagnesian minerals. These soils are on flats, in concave areas, and around the heads of intermittent drainageways. Slopes are 0 to 4 percent.

Typical pedon of Iredell fine sandy loam, 0 to 4 percent slopes, about 1 mile east of Pleasant Garden on State Road 3418 to junction with State Road 3412, about 3/4 mile southeast on State Road 3412 to farm road, and 500 yards south of highway in pasture:

Ap—0 to 7 inches; grayish brown (10YR 5/2) fine sandy loam; weak medium subangular blocky structure parting to moderate medium granular structure; very friable; many fine and medium roots; few small fragments of quartz; few small concretions; neutral; clear wavy boundary.

B1—7 to 9 inches; yellowish brown (10YR 5/8) sandy clay loam; small pockets of light brownish gray (10YR 6/2) fine sandy loam mixed throughout; weak medium subangular blocky structure; friable; common medium roots; few medium concretions; few small fragments of quartz; medium acid; clear smooth boundary.

B2t—9 to 27 inches; light olive brown (2.5YR 5/4) clay; moderate medium and coarse angular blocky structure; very firm, very sticky and very plastic; common thin distinct discontinuous clay films on faces of peds; common fine and medium roots; few very fine pale yellow fragments; slightly acid; gradual wavy boundary.

B3—27 to 32 inches; mottled olive brown (2.5YR 4/4), olive (5Y 4/3), and olive gray (5Y 4/2) clay loam; moderate medium angular blocky structure grading to massive; firm, sticky and plastic; few medium roots; common thin distinct discontinuous clay films on faces of peds; common very fine pale yellow fragments; neutral; gradual wavy boundary.

C1—32 to 41 inches; mottled yellow (2.5Y 7/6), olive brown (2.5Y 4/4), and olive gray (5Y 4/2) sandy clay loam; few pockets of gray clay loam; massive; friable; 85 percent saprolite; mildly alkaline; gradual wavy boundary.

C2—41 to 60 inches; mottled black, olive, olive gray, and yellow clay loam; massive; friable; 90 percent saprolite; mildly alkaline.

R—60 inches; hard dark colored diorite.

The solum ranges from 20 to 36 inches in thickness. Depth to bedrock is 40 to 72 inches.

The Ap horizon is dark brown, grayish brown, or dark grayish brown fine sandy loam or sandy loam.

The B1 horizon is yellowish brown or light olive brown. The B2t horizon is light olive brown, olive brown, or yellowish brown. The B3 horizon is pale olive, olive brown, light olive brown, or brownish yellow clay loam or sandy clay loam. The B horizon is medium acid to neutral.

The C horizon is sandy loam, sandy clay loam, or clay loam.

### Madison Series

The Madison series consists of well drained, moderately permeable soils that formed in residuum weathered from acid micaceous metamorphic rock. These soils are on fairly narrow ridges and long, fairly narrow side slopes. Slopes are 2 to 35 percent.

Typical pedon of Madison sandy loam, 6 to 10 percent slopes, 3 miles north of Regional Airport on North Carolina Highway 68, 3/4 mile west on State Road 2016, 0.5 mile north on State Road 2070, and 25 feet north of State Road 2016 in pine forest:

Ap—0 to 5 inches; reddish brown (5YR 4/4) sandy loam; weak medium granular structure; very friable; many fine roots; few fine flakes of mica; medium acid; abrupt smooth boundary.

B2t—5 to 29 inches; red (2.5YR 4/6) clay; weak medium subangular blocky structure; firm, sticky and slightly plastic; few fine and medium roots and root channels; few thin faint patchy clay films on faces of peds; many fine flakes of mica; when dry the mica appears as reddish yellow (7.5YR 7/6) streaks; strongly acid; gradual irregular boundary.

B3—29 to 34 inches; red (2.5YR 4/8) clay loam; few fine distinct reddish yellow mottles; weak fine subangular blocky structure; friable; slightly sticky and slightly plastic; few fine and medium roots; few thin faint patchy clay films on faces of peds; many fine and medium flakes of mica; few fine fragments of weathered mica gneiss; strongly acid; gradual irregular boundary.

C1—34 to 58 inches; reddish yellow (5YR 6/8) sandy clay loam; few fine prominent dark gray mottles; massive; friable; many fine and medium flakes of mica; 85 percent mica gneiss saprolite; strongly acid; gradual irregular boundary.

C2—58 to 80 inches; reddish yellow (5YR 6/8) sandy loam; common fine prominent black mottles; massive; very friable; 90 percent mica gneiss saprolite; strongly acid.

The solum ranges from 20 to 40 inches in thickness. Depth to bedrock is more than 60 inches. Few to many flakes of mica occur in the upper part of the profile, and many occur in the lower parts. Mica schist and mica gneiss fragments are on the surface and throughout the profile in places.

The A horizon is reddish brown, dark brown, brown, yellowish red, or yellowish brown sandy loam, fine sandy loam, or clay loam.

The B1 horizon, if present, is yellowish red sandy clay loam. The B2t horizon is red or light red clay or clay loam. The B3 horizon is red or yellowish red clay loam or sandy clay loam. The B horizon is strongly acid to very strongly acid.

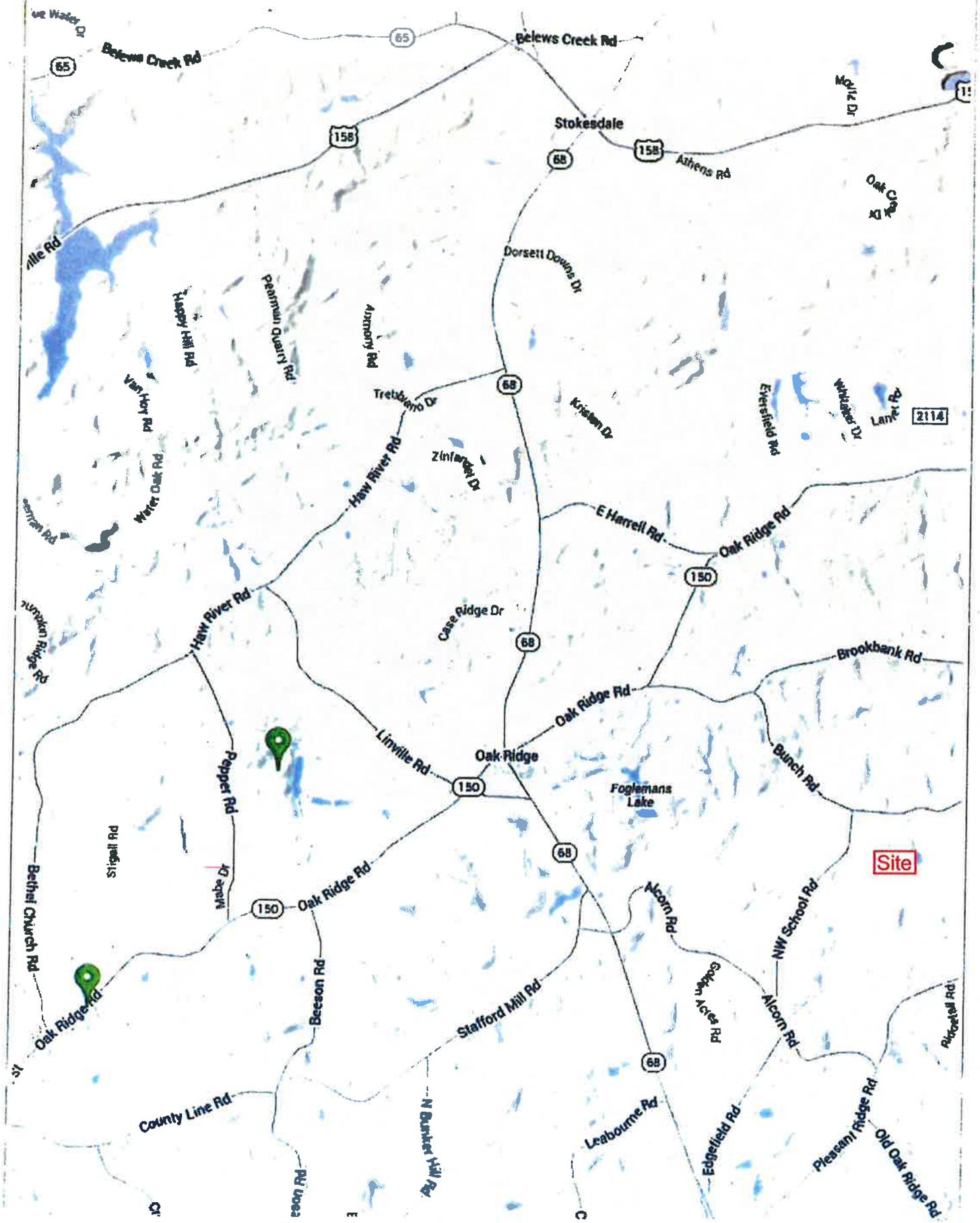
The C horizon is red, yellowish red, or reddish yellow sandy clay loam, sandy loam, or loam.

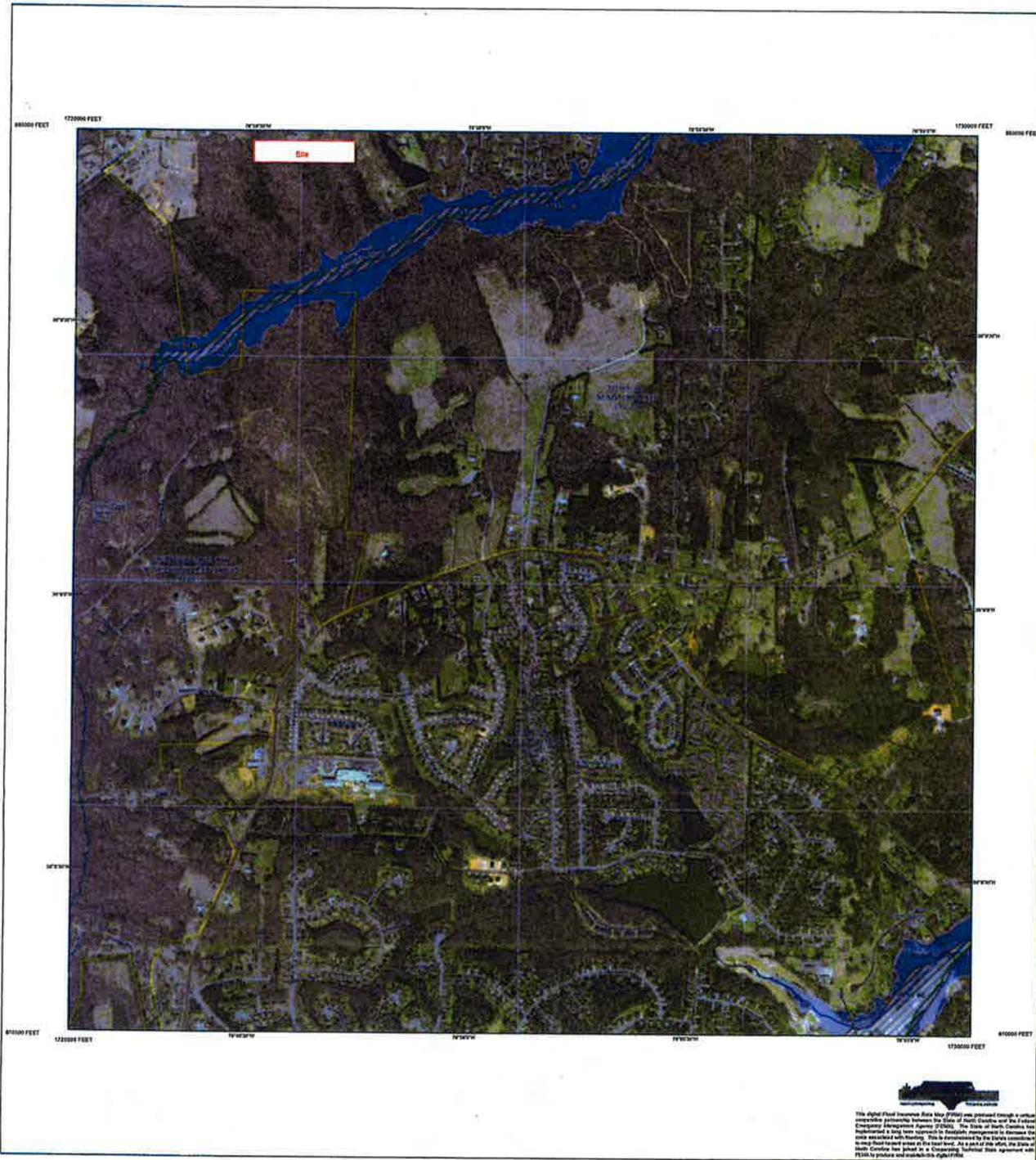
### Mecklenburg Series

The Mecklenburg series consists of well drained, slowly permeable soils that formed in material weathered from dark colored basic rocks such as diorite, gabbro, and horn-

Piedmont Land Conservancy - Protected Areas

Close Window Reset Map





The digital flood insurance rate map (DFIRM) was produced through a unique partnership between the State of North Carolina and the Federal Emergency Management Agency (FEMA). The State of North Carolina has authorized a long-term agreement to establish management in the State and to participate with FEMA. This is done through the State's participation in the National Flood Insurance Program (NFIP). As a part of the agreement, the State of North Carolina has entered into a Cooperating Technical State Agreement with FEMA to produce and maintain its digital DFIRM.

**FLOOD HAZARD INFORMATION**

SEE FIS REPORT FOR ZONE DESCRIPTIONS AND INDEX MAP  
 THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTP://FRIS.NC.GOV/FRIS](http://FRIS.NC.GOV/FRIS)

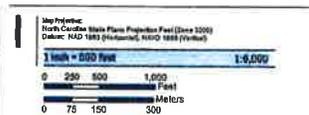
- SPECIAL FLOOD HAZARD AREAS**
  - Without Base Flood Elevation (BFE) Zone A, X, or AP
  - With BFE or Depth Zone A, X, or AP
  - Regulatory Flashway
  - 0.2% Annual Chance Flood Hazard, Areas of 1% Annual Chance Flood with Average Depth Less Than One Foot or With Drainage Areas of Less Than One Square Mile Zone X
  - Future Conditions 1% Annual Chance Flood Hazard Zone X
  - Areas with Reduced Flood Risk due to Levee Sea Notes Zone X
- OTHER AREAS OF FLOOD HAZARD**
  - Areas Determined to be Outside the 0.2% Annual Chance Flood Hazard Zone X
  - Channel, Culvert, or Storm Sewer Accredited or Provisionally Accredited Levee, Dike, or Floodwall
  - Non-tropical Levee, Dike, or Floodwall
  - North Carolina Geodetic Survey bench mark
  - National Geodetic Survey bench mark
  - Contractor EAL/CFMFP Survey bench mark
  - Cross Sections with 1% Annual Chance Water Surface Elevation (WSE)
  - Coastal Transect
  - Coastal Transect Baseline
  - Profile Baseline
  - Hydrographic Features
  - Limit of Study
- OTHER FEATURES**
  - Jurisdiction Boundary

**NOTES TO USERS**

For information and questions about this map, available products, associated with the DFIRM including various versions of this DFIRM, please refer to the National Flood Insurance Program (NFIP) website, [www.flood.gov](http://www.flood.gov). For information on the National Flood Insurance Program (NFIP), please refer to the National Flood Insurance Program (NFIP) website, [www.flood.gov](http://www.flood.gov). For information on the National Flood Insurance Program (NFIP), please refer to the National Flood Insurance Program (NFIP) website, [www.flood.gov](http://www.flood.gov).

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) NOTE**  
 This map may include approximate boundaries of the CBRS for informational purposes only. Flood hazards to be excluded from the CBRS are those that are not included in the CBRS. The CBRS is the boundary between the CBRS and the NFIP. The CBRS is the boundary between the CBRS and the NFIP. The CBRS is the boundary between the CBRS and the NFIP.

**SCALE**



**PANEL LOCATOR**

Panel	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000
1000	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020
1100	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120
1200	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220
1300	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320
1400	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420
1500	1500	1501	1502	1503	1504	1505	1506	1507	1508	1509	1510	1511	1512	1513	1514	1515	1516	1517	1518	1519	1520
1600	1600	1601	1602	1603	1604	1605	1606	1607	1608	1609	1610	1611	1612	1613	1614	1615	1616	1617	1618	1619	1620
1700	1700	1701	1702	1703	1704	1705	1706	1707	1708	1709	1710	1711	1712	1713	1714	1715	1716	1717	1718	1719	1720
1800	1800	1801	1802	1803	1804	1805	1806	1807	1808	1809	1810	1811	1812	1813	1814	1815	1816	1817	1818	1819	1820
1900	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
2000	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2100	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120
2200	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220
2300	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320
2400	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420
2500	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520
2600	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620
2700	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720
2800	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820
2900	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920
3000	3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016	3017	3018	3019	3020

**FEMA**  
 National Flood Insurance Program

**NORTH CAROLINA FLOODPLAIN MAPPING PROGRAM**  
 NATIONAL FLOOD INSURANCE PROGRAM  
 FLOOD INSURANCE RATE MAP  
 NORTH CAROLINA  
 PANEL 7827

Panel Contains:  
 COMMUNITY: GREENSBORO, CITY OF  
 GUILFORD COUNTY  
 SUDBURY, TOWN OF

CD: 0000  
 PARL: 7827  
 SUFFIX: 0000

MAP NUMBER: 374.07827001  
 EFFECTIVE DATE: 6/18/2007

**Legal Description for Proposed Tract One  
Being a Portion of Guilford County Parcel No. 219733**

Beginning at a point, said beginning point being the southeastern corner of Lot No. 14, Trotter Ridge II, Phase One as recorded in Plat Book 118, Page 21 in the Guilford County Register of Deeds; thence from said beginning point South 02°45'08" East 150.33' to a point; thence North 88°56'30" West 464.78' to a point; thence South 00°06'50" West 50.01' to a point; thence North 88°56'30" West 50.01' to a point; thence North 00°06'50" East 50.01' to a point; thence North 88°56'30" West 360.17' to a point; thence North 19°22'22" West 160.07' to a point; thence South 88°56'30" East 920.84' to the point and place of beginning, containing 3.149 acres, more or less.





2013001349

GUILFORD CO, NC FEE \$26.00

NO TAXABLE CONSIDERATION

PRESENTED & RECORDED:

01-08-2013 03:51:38 PM

JEFF L. THIGPEN  
REGISTER OF DEEDS

BY: ANDREW S ADKINS  
DEPUTY-OB

BK: R 7433

PG: 2251-2254

NORTH CAROLINA GENERAL WARRANTY DEED

*HMA*

Excise Tax: *NTL*

Parcel Identifier No. \_\_\_\_\_ Verified by \_\_\_\_\_ County on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

By: \_\_\_\_\_

Mail/Box to: \_\_\_\_\_

This instrument was prepared by: Robert D. Douglas, III, (without Title Examination) *PLU R D D III*

Brief description for the Index: \_\_\_\_\_

THIS DEED made this *19<sup>th</sup>* day of *October*, 2012, by and between

GRANTOR

GRANTEE

CHARLES B. HIGGINS, JR., and wife, DWALA V. HIGGINS  
and ANN SUMNER and husband, JOHN EUGENE SUMNER  
and JAMES R. HIGGINS

JAMES R. HIGGINS and wife, DOLORES P. HIGGINS  
2103 Pleasant Ridge Road  
Greensboro, NC 27410

Enter in appropriate block for each Grantor and Grantee: name, mailing address, and, if appropriate, character of entity, e.g. corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in the City of \_\_\_\_\_, BRUCE Township, GUILFORD County, North Carolina and more particularly described as follows:

See Exhibit A and Exhibit B which are attached hereto and incorporated herein by reference.

The property hereinabove described was acquired by Grantor by instrument recorded in Book \_\_\_\_\_ page \_\_\_\_\_.

All or a portion of the property herein conveyed \_\_\_ includes or \_\_\_ does not include the primary residence of a Grantor.

A map showing the above described property is recorded in Plat Book \_\_\_\_\_ page \_\_\_\_\_.

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever, other than the following exceptions:

Easements, rights of way and restrictions of record, if any, and ad valorem taxes for the current year.

IN WITNESS WHEREOF, the Grantor has duly executed the foregoing as of the day and year first above written.

Ann Sumner (SEAL)

Print/Type Name: ANN SUMNER

By: \_\_\_\_\_

Charles B. Higgins, Jr. (SEAL)

Print/Type Name: CHARLES B. HIGGINS, JR.

Dwala V. Higgins (SEAL)

Print/Type Name: DWALA V. HIGGINS

James R. Higgins (SEAL)

Print/Type Name: JAMES R. HIGGINS

By: \_\_\_\_\_

Print/Type Name & Title: \_\_\_\_\_

John Eugene Sumner (SEAL)

Print/Type Name: JOHN EUGENE SUMNER

State of NORTH CAROLINA - County of GUILFORD



I, the undersigned Notary Public of the County and State aforesaid, certify that CHARLES B. HIGGINS, JR. and DWALA V. HIGGINS personally appeared before me this day and acknowledged the due execution of the foregoing instrument for the purposes therein expressed. Witness my hand and Notarial stamp or seal this 19 day of October, 2012.

Mary Bridges Hines

Mary Bridges Hines Notary Public  
Notary's Printed or Typed Name

My Commission Expires: 8-22-2016

State of North Carolina - County or City of Guilford



I, the undersigned Notary Public of the County and State aforesaid, certify that JOHN EUGENE SUMNER and ANN SUMNER personally appeared before me this day and acknowledged the due execution of the foregoing instrument for the purposes therein expressed. Witness my hand and Notarial stamp or seal this 19 day of October, 2012.

Mary Bridges Hines

Mary Bridges Hines Notary Public  
Notary's Printed or Typed Name

My Commission Expires: 8-22-2016

State of North Carolina - County or City of Guilford



I, the undersigned Notary Public of the County and State aforesaid, certify that JAMES R. HIGGINS personally appeared before me this day and acknowledged the due execution of the foregoing instrument for the purposes therein expressed. Witness my hand and Notarial stamp or seal this 19 day of October, 2012.

Mary Bridges Hines

Mary Bridges Hines Notary Public  
Notary's Printed or Typed Name

My Commission Expires: 8-22-2016

EXHIBIT A  
TO  
DEED FROM CHARLES B. HIGGINS, JR. ET UX  
AND  
ANN SUMNER ET UX  
AND  
JAMES R. HIGGINS  
TO  
JAMES R. HIGGINS ET UX

Tract 2 of Higgins Family Property:

Beginning at the northeast corner of Lot 2, Lois V. Kellam et al, Plat Book 112, Page 77 and also being in the eastern line of Lot 33 of Trotter Ridge, Phase 2, Plat Book 119, Page 84; and

Running thence with Trotter Ridge, Phase 2, South 88° 56' 30" East 708.7 feet to a point;

Thence a new line South 19° 22' 22" East 1727.83 feet to a point in the line of STDM Development, LLC (Book 6660, Page 72);

Thence with STDM North 89° 50' 20" West 799.44 feet to a point in the line of Shugart Management, Inc., (Book 6612, Page 1160);

Thence with Shugart North 02° 09' 00" East 789.99 feet to a point, the northeast corner of Shugart Management, Inc.;

Thence still with Shugart, North 89° 45' 58" West 488.50 to a point, the southeast corner of Lot 3, Lois V. Kellam et al, Plat Book 112, Page 77;

Thence with east line of Lots 2 and 3 of Lois V. Kellam et al, North 01° 33' 33" west 844.72 feet to the Point and Place of Beginning, containing 27.984 acres, more or less, and being Tract 2 according to Property Exhibit Higgins Family by Borum Wade and Associates, dated September 3, 2011.

TOGETHER with a 60 foot right of way for ingress, egress and regress to Morganshire Drive, the centerline of which begins at the centerline of Morganshire Drive in the north line of the property which lies to the immediate east of the property described above, and which extends southwardly 350 feet to a point; thence westwardly to the western line of the property described above. This right of way is subject to the terms and conditions more particularly set forth in that certain deed from James R. Higgins, et al, to Charles B. Higgins and wife, recorded in Book 7433, Page 2241, in the Guilford County Registry.

EXHIBIT B  
TO  
DEED FROM CHARLES B. HIGGINS, JR. ET UX  
AND  
ANN SUMNER ET UX  
AND  
JAMES R. HIGGINS  
TO  
JAMES R. HIGGINS, ET UX

Tract 4 of Higgins Family Property:

Beginning at a point, which point is located in the southeast corner of the property of David H. Raper, Jr., and wife, (Deed Book 3990, Page 1521), said point also being in the line of Christopher Reid Clark and Autumn Clark Cummings (Book 5070, Page 266); and running thence South 22° 24' 48 East 1067.41 feet to a point;

Thence with Clark and Lot 1 of the property Autumn Michelle Clark Cummings, Plat Book 134, Page 118, South 34° 15' 09 East 462.51 feet to a point, a common corner of Lots 1 and 2 of Autumn Michelle Clark Cummings, Plat Book 134, Page 118 and also being the northeast corner of James R. Higgins, (Book 3844, Page 854) see also Plat Book 97, Page 77;

Thence with Higgins North 81° 16' 35" West 647.13 feet to a point, Higgins northwest corner, a corner with Sumner (Book 7132, Page 310);

Thence with Sumner, North 30° 03' 42" East 440.07 feet to a point;

Thence still with Sumner North 22° 24' 48" West 300.00 feet to a point;

Thence North 77° 6' 20" West 888.34 feet to a point;

Thence North 00° 35' 00" West 221.82 feet to a point in the line of David H. Raper, Jr.;

Thence with Raper, North 89° 25' 00" 200.41 feet to a point;

Thence still with Raper North 70° 21' 25" East 567.07 feet to the Point and Place of Beginning, containing 12.414 acres, more or less, and being Tract 4 according to Property Exhibit Higgins Family by Borum Wade and Associates, dated September 3, 2011.

**ONSITE SOILS**  
JOSEPH A. HINTON  
LICENSED SOIL SCIENTIST



145 RIVER RIDGE ROAD ◆ EDEN, NORTH CAROLINA 27288 ◆ 336-623-5439  
e-mail [jhinton@triad.rr.com](mailto:jhinton@triad.rr.com)

February 4, 2002

Chuck Higgins  
2105 Pleasant Ridge Road  
Greensboro, NC 27410

Dear Mr. Higgins,

I have completed a preliminary soil evaluation of a parcel located off of Pleasant Ridge Road in Guilford County to determine the feasibility of installing ground absorption sewage treatment and disposal systems. This evaluation was conducted in accordance with current soil science practices and technology with a hand auger. A map of the area evaluated is enclosed.

**AREA A (RED)** The surface layer has a texture of loam or clay loam, 7 to 15 inches. The subsurface layer to a depth of 37 to 42 inches has textures of clay and clay loam. Structure appears to be subangular blocky with firm, slightly sticky, slightly plastic consistence. The clay was found to be slightly expansive. Lenses of weathered rock were observed in the lower portion of this layer. The depth to the seasonal high water table is greater than 42 inches. Slopes range from 6 to 12 percent. The soil properties and characteristics observed were found to be provisionally suitable for the installation of a conventional type ground absorption sewage treatment and disposal system. The recommended long-term acceptance rate is .3 gallons per day per square foot.

**AREA UN (BLACK)** This area was found to be unsuitable due to irregular, complex slope patterns, poorly drained soils, expansive clay mineralogy, required setbacks from streams, and/or shallow depth of suitable soil material.

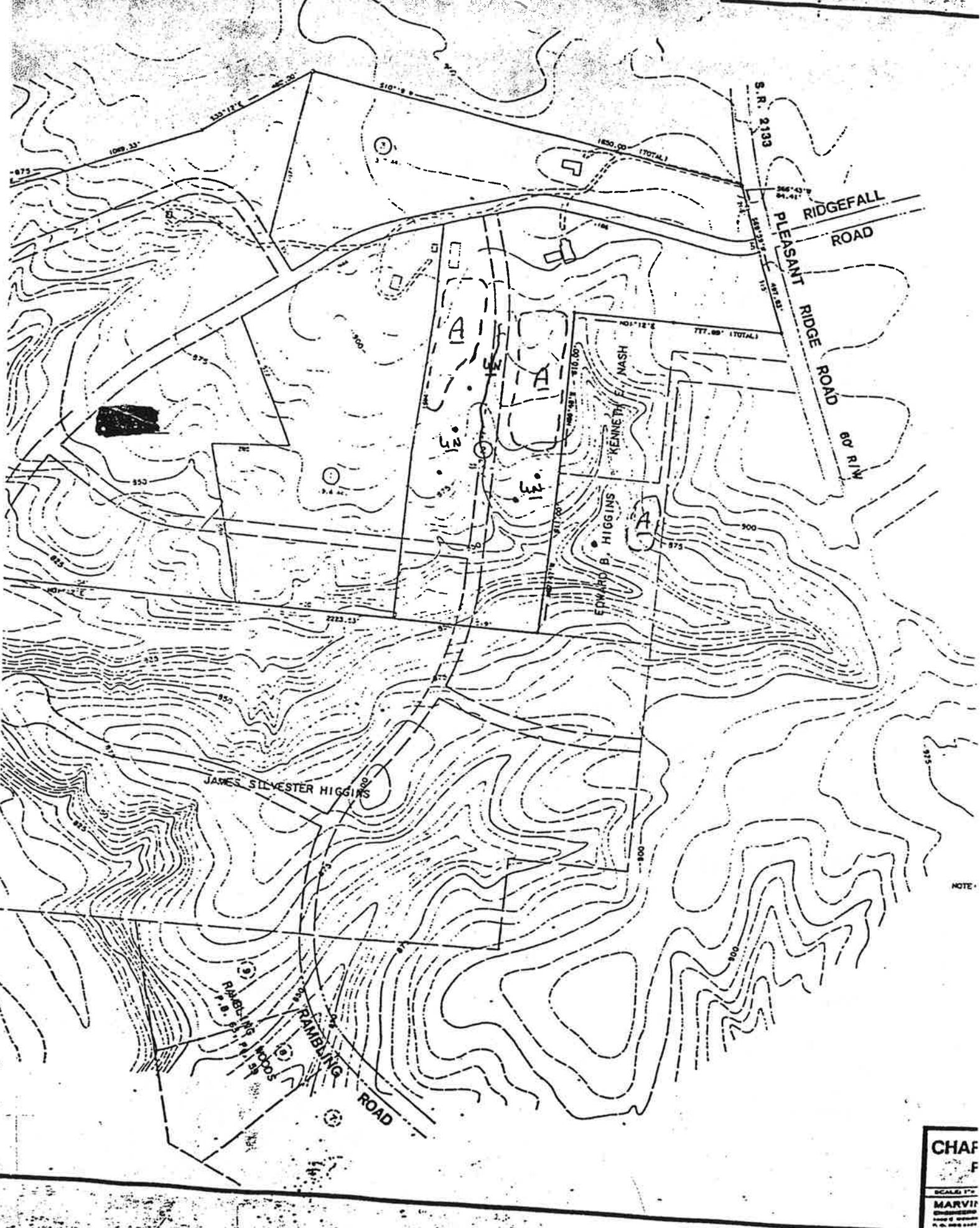
If you have any questions contact me at 336-623-5439.

Respectfully,

*Joseph A. Hinton*

Joseph A. Hinton  
Licensed Soil Scientist



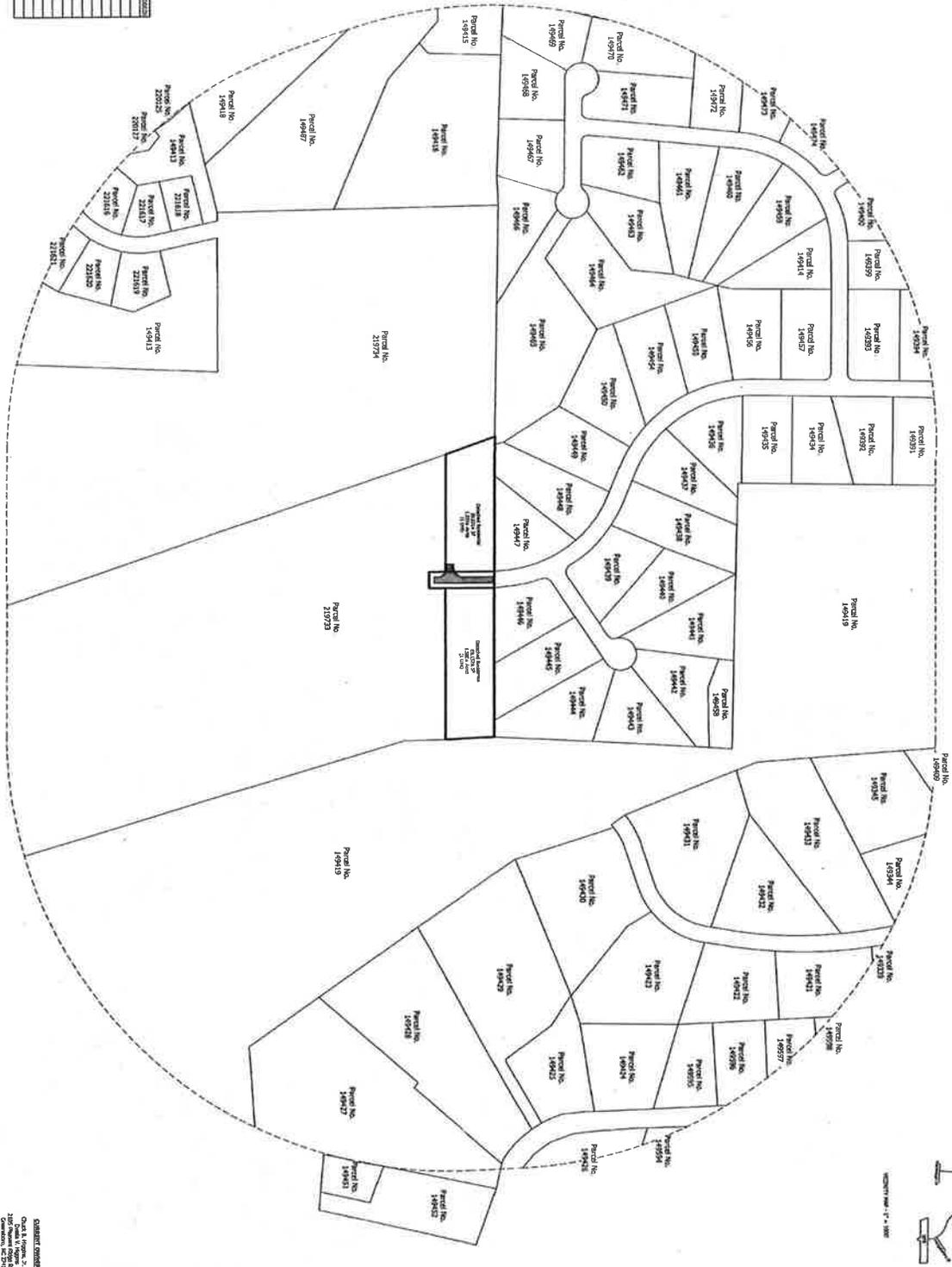


NOTE:

**CHAP**  
**F**  
 SCALE 1" = 100'  
**MARVIN**  
 ENGINEERS  
 1000 E. 10th St.  
 DENVER, CO. 80202



1. All parcels shown on this map are subject to the provisions of the zoning ordinance. 2. The zoning ordinance is available for review at the Planning Department, 300 South Regional Road, Suite 104, Greensboro, NC 27409. 3. The zoning ordinance is available for review at the Planning Department, 300 South Regional Road, Suite 104, Greensboro, NC 27409. 4. The zoning ordinance is available for review at the Planning Department, 300 South Regional Road, Suite 104, Greensboro, NC 27409. 5. The zoning ordinance is available for review at the Planning Department, 300 South Regional Road, Suite 104, Greensboro, NC 27409. 6. The zoning ordinance is available for review at the Planning Department, 300 South Regional Road, Suite 104, Greensboro, NC 27409. 7. The zoning ordinance is available for review at the Planning Department, 300 South Regional Road, Suite 104, Greensboro, NC 27409. 8. The zoning ordinance is available for review at the Planning Department, 300 South Regional Road, Suite 104, Greensboro, NC 27409. 9. The zoning ordinance is available for review at the Planning Department, 300 South Regional Road, Suite 104, Greensboro, NC 27409. 10. The zoning ordinance is available for review at the Planning Department, 300 South Regional Road, Suite 104, Greensboro, NC 27409.



**REZONING SECTION PLAN AND CATCHMENT**

Parcel No.	Area (Acres)	Area (Sq. Ft.)
149419	1.00	136,000
149420	1.00	136,000
149421	1.00	136,000
149422	1.00	136,000
149423	1.00	136,000
149424	1.00	136,000
149425	1.00	136,000
149426	1.00	136,000
149427	1.00	136,000
149428	1.00	136,000
149429	1.00	136,000
149430	1.00	136,000
149431	1.00	136,000
149432	1.00	136,000
149433	1.00	136,000
149434	1.00	136,000
149435	1.00	136,000
149436	1.00	136,000
149437	1.00	136,000
149438	1.00	136,000
149439	1.00	136,000
149440	1.00	136,000
149441	1.00	136,000
149442	1.00	136,000
149443	1.00	136,000
149444	1.00	136,000
149445	1.00	136,000
149446	1.00	136,000
149447	1.00	136,000
149448	1.00	136,000
149449	1.00	136,000
149450	1.00	136,000
149451	1.00	136,000
149452	1.00	136,000
149453	1.00	136,000
149454	1.00	136,000
149455	1.00	136,000
149456	1.00	136,000
149457	1.00	136,000
149458	1.00	136,000
149459	1.00	136,000
149460	1.00	136,000
149461	1.00	136,000
149462	1.00	136,000
149463	1.00	136,000
149464	1.00	136,000
149465	1.00	136,000
149466	1.00	136,000
149467	1.00	136,000
149468	1.00	136,000
149469	1.00	136,000
149470	1.00	136,000
149471	1.00	136,000
149472	1.00	136,000
149473	1.00	136,000
149474	1.00	136,000
149475	1.00	136,000
149476	1.00	136,000
149477	1.00	136,000
149478	1.00	136,000
149479	1.00	136,000
149480	1.00	136,000
149481	1.00	136,000
149482	1.00	136,000
149483	1.00	136,000
149484	1.00	136,000
149485	1.00	136,000
149486	1.00	136,000
149487	1.00	136,000
149488	1.00	136,000
149489	1.00	136,000
149490	1.00	136,000
149491	1.00	136,000
149492	1.00	136,000
149493	1.00	136,000
149494	1.00	136,000
149495	1.00	136,000
149496	1.00	136,000
149497	1.00	136,000
149498	1.00	136,000
149499	1.00	136,000
149500	1.00	136,000
149501	1.00	136,000
149502	1.00	136,000
149503	1.00	136,000
149504	1.00	136,000
149505	1.00	136,000
149506	1.00	136,000
149507	1.00	136,000
149508	1.00	136,000
149509	1.00	136,000
149510	1.00	136,000
149511	1.00	136,000
149512	1.00	136,000
149513	1.00	136,000
149514	1.00	136,000
149515	1.00	136,000
149516	1.00	136,000
149517	1.00	136,000
149518	1.00	136,000
149519	1.00	136,000
149520	1.00	136,000
149521	1.00	136,000
149522	1.00	136,000
149523	1.00	136,000
149524	1.00	136,000
149525	1.00	136,000
149526	1.00	136,000
149527	1.00	136,000
149528	1.00	136,000
149529	1.00	136,000
149530	1.00	136,000
149531	1.00	136,000
149532	1.00	136,000
149533	1.00	136,000
149534	1.00	136,000
149535	1.00	136,000
149536	1.00	136,000
149537	1.00	136,000
149538	1.00	136,000
149539	1.00	136,000
149540	1.00	136,000
149541	1.00	136,000
149542	1.00	136,000
149543	1.00	136,000
149544	1.00	136,000
149545	1.00	136,000
149546	1.00	136,000
149547	1.00	136,000
149548	1.00	136,000
149549	1.00	136,000
149550	1.00	136,000
149551	1.00	136,000
149552	1.00	136,000
149553	1.00	136,000
149554	1.00	136,000
149555	1.00	136,000
149556	1.00	136,000
149557	1.00	136,000
149558	1.00	136,000
149559	1.00	136,000
149560	1.00	136,000
149561	1.00	136,000
149562	1.00	136,000
149563	1.00	136,000
149564	1.00	136,000
149565	1.00	136,000
149566	1.00	136,000
149567	1.00	136,000
149568	1.00	136,000
149569	1.00	136,000
149570	1.00	136,000
149571	1.00	136,000
149572	1.00	136,000
149573	1.00	136,000
149574	1.00	136,000
149575	1.00	136,000
149576	1.00	136,000
149577	1.00	136,000
149578	1.00	136,000
149579	1.00	136,000
149580	1.00	136,000
149581	1.00	136,000
149582	1.00	136,000
149583	1.00	136,000
149584	1.00	136,000
149585	1.00	136,000
149586	1.00	136,000
149587	1.00	136,000
149588	1.00	136,000

Town of Summerfield  
Birkhaven Phase VII Subdivision Report  
Staff report: Julie A. Reid, Town Planner

**Owner:** Renee Brown Weidel  
7000 Belford Road  
Summerfield, NC 27358

**Developer:** Venn Birkhaven, LLC  
P.O. Box 10348  
Greensboro, NC 27404

**Location:** The subject site is an 8.313-acre portion of a 131-acre tract of land, 6900 Belford Road, Bruce Township, Guilford County Parcel 0149799 (located east of the terminus of Shadow Creek Drive -Birkhaven Subdivision). The proposed rezoning is from AG (Agricultural) to CU-RS-40 (Conditional Use Residential), located in a Watershed General Area.

**Parcel Size:** 8.313 Acres

**Number of Lots:** 5 residential lots with ten percent (10%) of the total area has been designated as open space

**Zoning:** The rezoning is CU-RS-40 (Conditional Use Residential), located in a Watershed General Area.

**Source of Water and Sewage Treatment:** The lots will be served by on-site wells and septic tank systems on each lot

**Submittals:**

The required submittals include the Preliminary Plat with all required data and Environmental Inventory. The submittal has the required documents. All fees have been received.

**Environmental Features:**

The soils map submitted in the environmental inventory indicates Cecil and Pacolet varieties.

Floodplain: The property is not located in Special Flood Hazard area as determined by the Federal Emergency Management Agency. There is a designated Special Hazard Area approximately 80 feet south of the proposed subdivision.

Topography: The site is heavily wooded with varying slopes dropping off to the east and the south.

Protected Natural Areas and Wildlife Habitats: No protected areas of wildlife habitats have been identified on this site.

Archaeological and Historic Sites: No Archaeological and Historic Sites have been identified on this site.

Woodlands : The site is heavily wooded. Conditions imposed at the time of rezoning limit land clearing activities to street construction, building envelopes, driveways and areas for wells and septic systems.

Farm land: There is no evidence of past or present agricultural activities on the site.

Scenic Roads: There is no designated scenic by-ways located on this property.

Plan Review – Engineering: The plans submitted are under review at this time by the Town's consulting engineer.

Transportation: There will be 5 lots along the extension of Shadow Creek Road. This east-west connector would serve to connect the extension of Eversfield Road, Braelands Drive (Birkhaven Subdivision), Belford Road and Mahlon Lawrence Drive (Armsfield Subdivision). The location of designated flood plains to the south make north –south connections to Brookbank Road unlikely.

## **Comments**

This property has been used for agricultural purposes and a single family residence in the past. The preliminary plat indicates 0.861 acres of open space, the 10 percent required. The large stand of trees standing at the northern portion of the site will be undisturbed and serve as open space. Trees on proposed lots will be preserved where possible. There is a ten foot easement for foot traffic to the proposed open space.

A landscape easement has been placed along the south property line, where existing Arizona Cypress are located.

There is no offsite sewage drainage fields anticipated. The need for off-site sewage drainage fields can be eliminated by careful evaluation of the existing soils and rational lot design. Approvals for on-site sewage systems will need to be approved by the Guilford County Public Health Department. Adjustments to lot lines may be required to maintain the sewage system on the lot it serves.

Addressing will occur after the final approval of the preliminary plat.

1. The owner/developer will secure a grading permit from Guilford County prior to land-disturbance activity.
2. Road will have to be built to NCDOT Standards for Subdivisions. Road plans will be submitted and approved for construction.

**Suggested motion(s) :**

---

**Conditional Approval:**

I move that the application for the Preliminary Plat Approval for Birkhaven VII Subdivision be given conditional approval. Conditions that must be met prior to an unconditional approval are:

1. All lots must be evaluated and approved for septic tank installation. When the approvals are received by the Town of Summerfield, the approval will be changed from conditional approval to approval.
2. Erosion and sediment plans have been submitted and approved. The owner/developer will secure grading permit from Guilford County prior to land-disturbance activity.
3. The developer will submit a draft of the agreement to be filed indicating who will be the owner or receiver of the open space.
4. Other \_\_\_\_\_

**Change in Preliminary Plat submittal**

I move that the application for the Preliminary Plat Approval for Birkhaven VII Subdivision be returned to the developer for amendment. The amendments required are \_\_\_\_\_. The reason for this action is: \_\_\_\_\_ Additional conditions that must be met prior to an unconditional approval are:

1. All lots must be evaluated and approved for septic tank installation. When the approvals are received by the Town of Summerfield, the approval will be changed from conditional approval to approval.
2. Erosion and sediment plans have been submitted and approved. The owner/developer will secure grading permit from Guilford County prior to land-disturbance activity.
3. The developer will submit a draft of the agreement to be filed indicating who will be the owner or receiver of the open space.
4. Other \_\_\_\_\_

---

**Denial:**

I move that the application for the Preliminary Plat Approval for Birkhaven VII Subdivision be (denied). The reason for this action is: \_\_\_\_\_





October 10, 2014

RE: Site Analysis / Environmental Inventory – Portion of Parcel No. 149799

In accordance with the Town of Summerfield Development Ordinance, Land Solutions has prepared this site analysis in conjunction with a request to rezone approximately 8.313 acres from AG to CU-RS-40.

**Site Details**

This tract is located East of the terminus of Shadow Creek Drive within the Birkhaven Subdivision. The entire tract is located within the Greensboro General Water Supply Watershed, Reedy Fork, WS III. This site consists of mostly wooded steady sloping topography. There are no areas on this portion of the property that are located within a designated flood zone but there are areas located within a designated flood zone on the remaining portion of this parcel. There are agricultural and/or forestry uses or programs located on this tract. There are no existing improvements on this tract except for some woven wire fencing. Soil types are primarily Cecil and Pacolet, which support the type of development proposed. In determining the priorities for Primary and Secondary Conservation Areas, the following documents (Attached) were reviewed by Land Solutions staff:

- National Wetlands Inventory Maps
- Independent Soil Survey
- Natural Heritage Inventory of Guilford County
- Flood Insurance Rate Maps (FEMA)
- NCDOT Topographic Map
- Northwest Area Plan
- Town of Summerfield Development Ordinance

There are no documented wetlands, historic sites, archaeological sites or critical habitat areas located in the requested area as identified on any of the reference documents. Site features defined by the Town of Summerfield Development Ordinance as Primary Conservation areas are identified on the Rezoning Sketch Map.

The proposed Open Space areas as shown on the Rezoning Sketch map were determined from site visits by Land Solutions staff, the applicant and consultation with the Town of Summerfield Planning Department.

**Primary and Secondary Conservation Areas**

This site is being proposed as a CU-RS-40 District. The Open Space requirements in the RS-40 District for subdivisions that have between 5 and 24 building lots are 10% or 0.831 Acres. The Primary Conservation Areas on this site consist of old growth trees as shown on the Rezoning Sketch Plan. The total Open Space proposed totals 0.861 Acres or 10.4% of the site. Due to the

available Primary Conservation Areas exceeding the Open Space requirements, Secondary Conservation Areas were not identified on the Rezoning Sketch Plan.

**Conclusions and Development Strategy**

As shown on the Rezoning Sketch Plan, the designated Open Space and Common Areas will provide for the protection and preservation of the existing tree stand(s) in accordance with the Town of Summerfield Development Ordinance.

This plan meets or exceeds the goals and specifications of the Town of Summerfield Development Ordinance, the Town of Summerfield Long Term Plan and the RS-40 Residential District.

Should anyone wish to visit the property, please contact Land Solutions or applicant to arrange access to the property.

If you have any questions or require further information, please feel free to contact us.

Sincerely,

  
Christopher M. Rohrer, PLS



U.S. Fish and Wildlife Service

# National Wetlands Inventory

Parcel No. 149799



## Wetlands

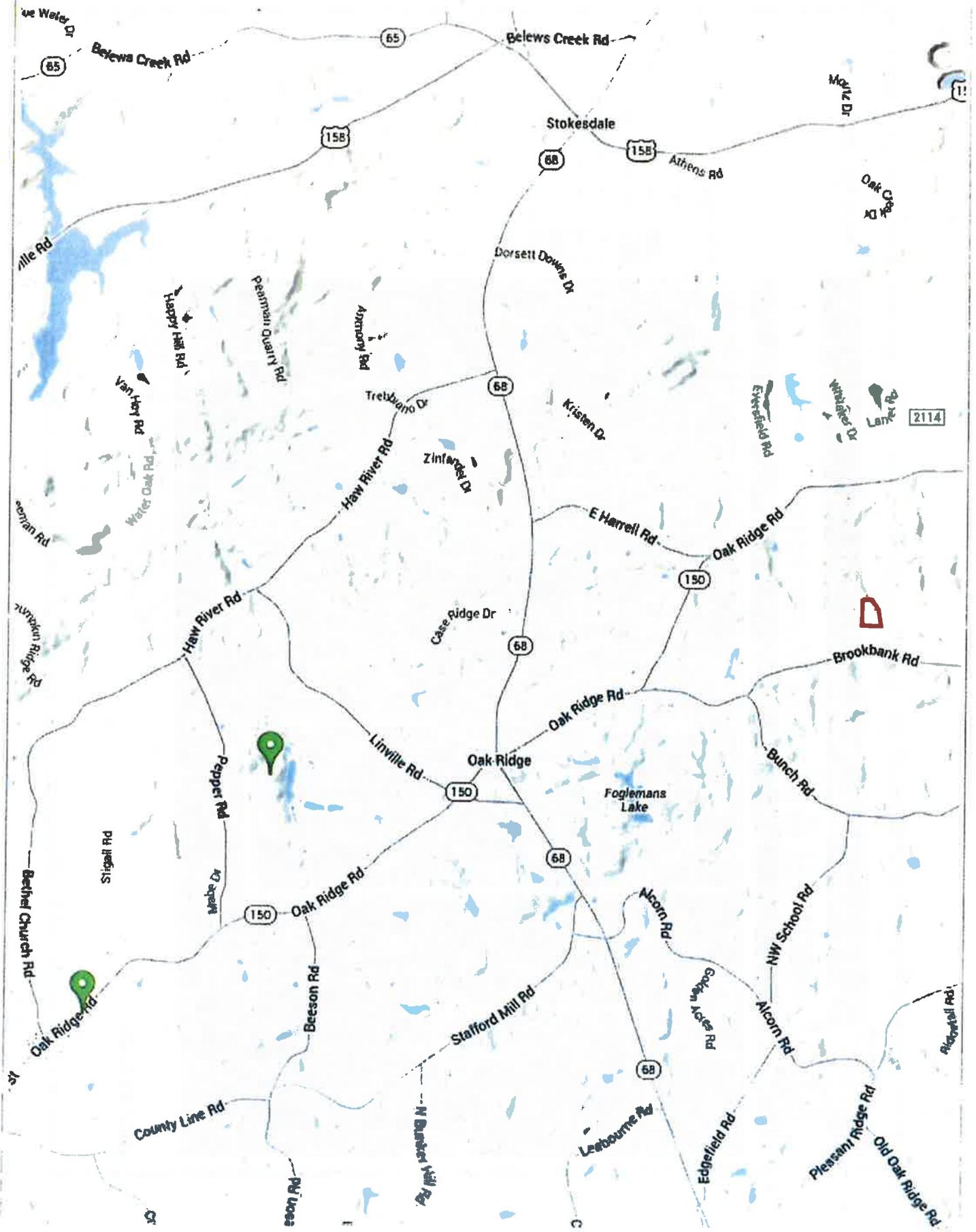
- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

Piedmont Land Conservancy - Protected Areas

Close Window Reset Map



# Greywater Environmental Services

Greywater Environmental Services  
Edwin Stott, RS, LSS  
PO Box 114  
Stoneville, NC 27048  
336-344-4008  
1greywater@gmail.com

September 14, 2014

Mr. Chris Rohrer, PLS  
Land Solutions, PC  
200 S Regional Rd.  
Greensboro, NC 27409

RE: +/- 8 acres Belford Road, PIN 0149799

Dear Mr. Rohrer:

On September 11, 2014, Greywater Environmental Services conducted a soil and site evaluation on the tract referenced above. This service was performed at your request and in accordance with the signed proposal/agreement. Soil borings were made using current soil science practices and were analyzed to determine soil suitability for on-site sewage disposal systems in accordance with 15A NCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems". The evaluation included the following criteria: landscape position and topography, soil morphology (structure, texture, and mineralogy), soil depth, soil wetness conditions, restrictive horizons, and available space. This evaluation was for residential strength wastewater applications. Any other type of use may require additional testing and/or stricter setbacks.

## FINDINGS

This tract is located in Guilford County in the Felsic Crystalline geologic region of the state. The upland soils on this tract in the conventional areas are most similar to the Cecil and Pacolet soil series. The Cecil and Pacolet soil series are generally usable for subsurface wastewater treatment and disposal systems with limitations being depth to saprolite. Saprolite was encountered in some areas as is common in the piedmont of North Carolina. Saprolite will be required to be evaluated using a backhoe with the county health department. The accompanying sketch shows 2 distinct areas. The red hatched area contains potentially usable soils with some minor topographical irregularities. Every effort was made to delineate those topographical features. The area to the south is in an abandoned tree nursery. Grass and underbrush have grown to the point it is nearly impossible to evaluate near the southern boundary of the nursery. Borings were made in this area, however without lot lines in the field, I did not know if I was on a proposed lot, or if I had moved out of the evaluation area. GPS signal was very weak in that canopy. This usable depth along with the slope percentage is used to determine the type of system that can be placed in the given area. Generally, soils with 30 inches or more of usable soils are considered to be usable for conventional, shallow placed conventional and accepted systems. Slope percentage will also be used in each area to determine the "slope correction" that may also affect this usable soil depth. Once slopes start to go over 10-15%, soils generally need to be deeper in order to maintain the usable depth on the downhill side of the trenches. Based on the soil borings conducted in the areas shown, these soils fall into Soil Group IV in accordance with 15A NCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems". These soils have an LTAR range of .1-.4gpd/ft<sup>2</sup>. Saprolite textures are different and a different LTAR table is used in accordance with rule .1956.

Conventional Area 1 this area is shown with a side hatch on the accompanying map and is red. Soils in this area were generally greater than 30 inches of usable material. Slopes in these areas were 4-8% on average. A septic system layout(s) will be needed in these areas to work around the small irregularities. These areas are shown on the enclosed sketch. These soils are most similar to Cecil

and Pacolet soil series. Saprolite was encountered in this area and a backhoe will be needed to evaluate by the county health department.

Cross hatched area, green as discussed before was very thick and not evaluated completely.

Neighboring wells and septic systems may impact this project; however, Greywater Environmental Services did not traverse any neighboring properties. The site plan for each individual building lot must ensure that adequate space is allotted for the septic system and a repair septic system. Generally, 4000 square feet per bedroom or 30 square feet per gallon will provide the adequate space needed on the ground for the installation of the primary septic system and preserve the repair area. This space is after all setbacks have been met and no obstructions are present. The county health department in the county in which this lot lies will ultimately establish the area for the septic system, the LTAR and the system type. Once they have conducted their evaluation after you have applied for the permits, the area that they designate must remain undisturbed unless authorized by the county health department. Excavation and mechanical type of clearing can render an otherwise usable area unusable if best management practices and careful site preparation and planning are not observed.

If this is to be a subdivision, each individual lot will have to be applied for at the local health department and evaluated. Final site approval for the issuance of improvement will be based on state and local regulations which are in force at the time of application for those permits. Upon application of permits, a specific use for the property will be required by the governing agency.

#### **CONCLUSION:**

The usage of a soil area for a subsurface wastewater treatment and disposal system is most accurately determined by performing a septic system layout for the specific use of the area. For example, a three bedroom house with an LTAR of .3 gpd/ft<sup>2</sup> using a 3 foot trench would require 400 feet of conventional or 300 feet of accepted nitrification trenches. Also, the repair area would need to be included as well. This would yield the need of 600 to 800 linear feet of nitrification line. Using a laser level, this can be placed on the ground to fully determine exactly how much space will be used. If individual layouts are not performed or desired, the land development plan should include for planning in the Piedmont of NC, 4000 square feet per bedroom or 30 square feet per gallon on the ground set aside for the septic systems for each lot.

If off-site septic systems, large community septic systems or other alternatives are desired, Greywater Environmental Services can assist you with planning.

This report discusses the general location of potentially usable soils for on-site wastewater disposal and the soil site limitations on the property that exists at the time of the evaluation. Greywater Environmental Services provides professional consulting specializing in the practice of soil science and wastewater management. Greywater Environmental Services is therefore hired for its professional opinion regarding these matters. Laws and rules governing wastewater treatment and disposal are forever evolving and subject to the interpretation and opinion of individuals which are employed by local and state agencies that govern these laws and rules. Due to this fact, Greywater Environmental Services can not guarantee in any way that any area located in the field, shown on a sketch, or discussed with the client will be permitted by any of these agencies. It is for this reason that Greywater Environmental Services strongly recommends to anyone considering a financial commitment on any piece of property be completely aware of any and all permit requirements on that property before purchase and obtain those permits prior to a final financial commitment.

Thank you for the opportunity to serve you with your site evaluation needs. Should you have any questions or concerns, or wish to discuss this report in further detail, do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Stott', written in a cursive style.

Edwin Stott  
North Carolina Licensed Soil Scientist  
1229

Encl: Soil Evaluation Sketch



1 inch = 100 feet



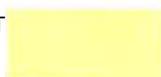
Disclaimer: This is not a survey. Information used was taken from Guilford county GIS website. There is no testament to accuracy of the data utilized to produce this sketch. Information obtained in the field was located using GPS technology. This sketch does not in any way guarantee any approval from any governing body. This sketch is not complete without the written report.



Conventional SEE REPORT



Thick vegetation SEE REPORT



COMPLEX TOPOGRAPHY  
SEE REPORT

