

## Harnett County Department of Public Health Improvement Permit

A building permit cannot be issued with only an Improvement Permit

PROPERTY LOCATION: 40 Old Hamilton Road (SR 1776)  
 ISSUED TO: Cumberland Homes Inc. SUBDIVISION \_\_\_\_\_ LOT # \_\_\_\_\_  
 NEW  REPAIR  EXPANSION   
 Type of Structure: 34x46 sfd, 3 beds 2 bath  
 Proposed Wastewater System Type: At-Grade Sys.  
 Projected Daily Flow: 360 GPD  
 Number of bedrooms: 3 Number of Occupants: 6 max  
 Basement  Yes  No  
 Pump Required:  Yes  No  May be required based on final location and elevations of facilities  
 Type of Water Supply:  Community  Public  Well Distance from well 50+ feet  
 Permit valid for:  Five years  No expiration  
 Permit conditions: \_\_\_\_\_

Authorized State Agent: [Signature] Date: 04/07/2022 SEE ATTACHED SITE SKETCH  
 The issuance of this permit by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. This site is subject to revocation if the site plan, plat, or the intended use changes. The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to conditions of this permit.

### Construction Authorization

(Required for Building Permit)

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

ISSUED TO: Cumberland Homes Inc. PROPERTY LOCATION: 40 Old Hamilton Road (SR 1776)  
 SUBDIVISION \_\_\_\_\_ LOT # \_\_\_\_\_  
 Facility Type: 34x46 sfd, 3 beds 2 bath  New  Expansion  Repair  
 Basement?  Yes  No Basement Fixtures?  Yes  No  
 Type of Wastewater System\*\* LOW PROFILE CHAMBERL SIS. (SIS) (Initial) Wastewater Flow: 360 GPD  
 (See note below, if applicable   
AT-GRADE 2576 REDUCTION (Repair)  
**Installation Requirements/Conditions**  
 Septic Tank Size 1600 gallons Number of trenches 3  
 Pump Tank Size 1000 gallons Exact length of each trench 115 feet Trench Spacing: 9 Feet on Center  
 Trenches shall be installed on contour at a Soil Cover: 470 inches (MIN)  
 Maximum Trench Depth of: 12 inches (Maximum soil cover shall not exceed  
 (Trench bottoms shall be level to +/-1/4" 36" above the trench bottom)  
 in all directions)  
 Pump Requirements: \_\_\_\_\_ ft. TDH vs. \_\_\_\_\_ GPM Aggregate Depth: NA inches below pipe  
 Conditions: PUMP TO MEDIUM/BAKER D-BOX EQUAL DISTRIBUTION NA inches above pipe  
NA inches total

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

\*\*If applicable: I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit.

Owner/Legal Representative Signature: \_\_\_\_\_ Date: \_\_\_\_\_

This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be transferred when there is a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit. SEE ATTACHED SITE SKETCH

Authorized State Agent: [Signature] Date: 04/07/2022  
ANDREW CORNO Construction Authorization Expiration Date: 04/07/2027

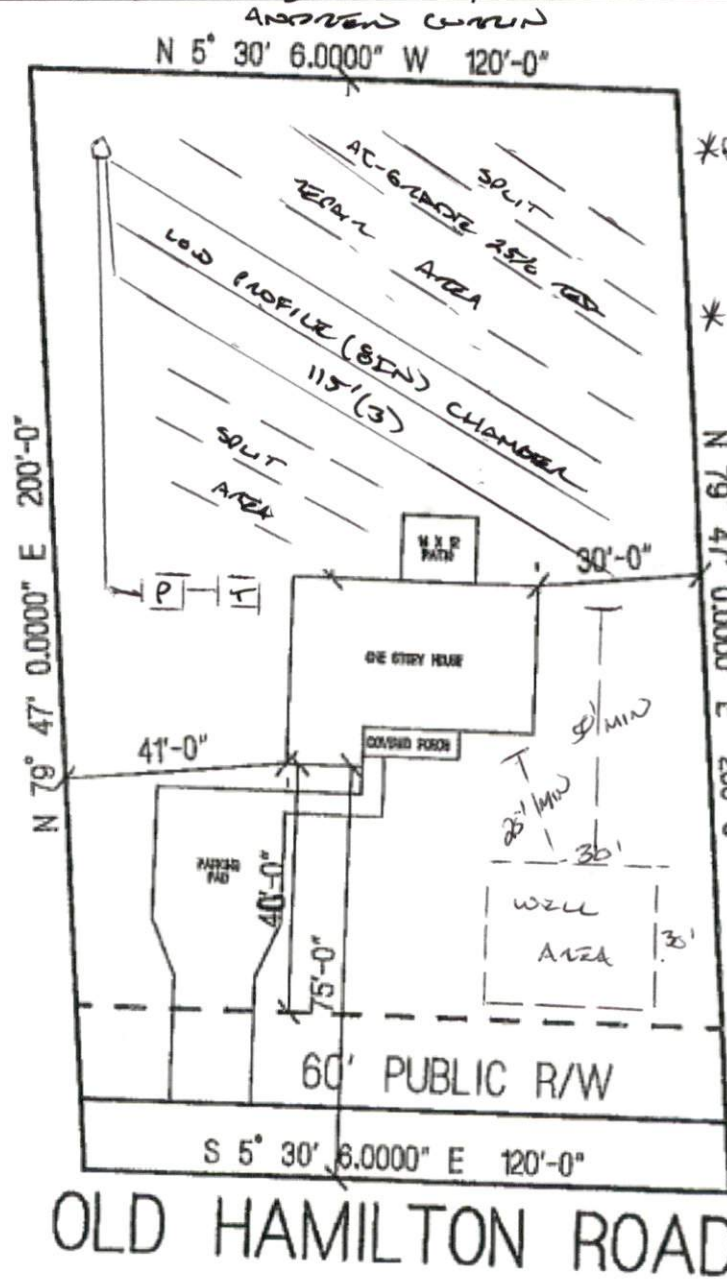
Application # SFD2203-0066

# Harnett County Department of Public Health Site Sketch

Property Location: 40 Old Hamilton Road (SR 1776)

Issued To: Cumberland Homes Inc. Subdivision \_\_\_\_\_ Lot # \_\_\_\_\_

Authorized State Agent: [Signature] Date: 04/07/2022



\*PUMP TO MED NW/LARGE  
D-BOX EQUAL  
DISTRIBUTION  
\*12IN LOW PROFILE (8IN)  
CHANGEL W/ 4-6IN  
CAP  
LARGER COVER MIN  
2-4IN IMPACT  
COVER MAY BE  
REQUIRED  
\*NO LARGE REAR  
PORCH OR DECK  
PERMISSIBLE

This drawing is for illustrative purposes only. System installation must meet all pertinent laws, rules, and regulations.

**Adams Soil Consulting  
1676 Mitchell Road  
Angier, NC 27501  
919-414-6761**

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July 25, 2019  
Project #802

Steven Pate

RE: Preliminary soil/site evaluation for ~42 acres located adjacent to Old Hamilton and Antioch Church Roads in Harnett County.

Mr. Pate,

Adams Soil Consulting (ASC) conducted a preliminary soil evaluation on the above referenced parcel to determine the areas of soils which are suitable for subsurface wastewater disposal systems (conventional & LPP). The evaluation was performed using hand auger borings during moist soil conditions based on the criteria found in the State Subsurface Rules, 15ANCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems". From this evaluation, ASC sketched the boundary between the suitable soils and unsuitable soils onto property map obtained from the Harnett County GIS database. There were portions of the wooded area of the property that were not thoroughly evaluated.

At the time of the evaluation the property was vacant of any residential dwellings. The parcel is located in the Coastal Plain region of Harnett County. The soils have formed from marine parent material. The suitable soils on this parcel have characteristics similar to the Goldsboro and Norfolk soil series. The attached soils map indicates the areas of suitable vs. unsuitable soils. The Goldsboro and Norfolk soil series variations found on the property were generally suitable for subsurface wastewater systems. That is, the morphology of the soils contains suitable characteristics that would support subsurface septic systems such as sandy clay loam textured subsoils which is not considered expansive and have blocky structure with no indicators of restrictive characteristics within 24 inches of the soil surface. This soil unit is shown as the cross-hatched soil unit on the attached soil map and generally would be suitable for ultra-shallow conventional type (at grade with 12-inch trench bottoms) septic systems.

Several factors should be considered before a final subdivision plan is created for this property. The suitable soil areas cannot be affected by future homes, driveways, patios, excavation or filling activities and if an on-site well is used then a 100' setback is required around the well head. An exact square footage of suitable soils required per lot to obtain a permit cannot be given due to soil variability and topographic characteristics on each lot. The amount of suitable soils required to support a 3-bedroom residence may range between 8,000ft<sup>2</sup>-12,000ft<sup>2</sup> per lot. These soil area estimates are based upon soil application rates for a sandy loam to clay textured subsoil with a range of 0.3 gallons per day/square foot and 0.4 gallons per day/square foot for conventional type systems. The ultimate application rate will be assigned by the Harnett County Health Department based on a detailed evaluation. During construction activities the disturbed areas should be

minimized as much as possible. The same precautions should be taken when the individual lots are cleared for home sites. Only the vegetation should be removed in the areas of the proposed drain fields on lots to prevent any disturbance of the naturally occurring soil. A lot with adequate areas of suitable soils can be deemed unsuitable due to poor planning or site disturbance. Adams Soil Consulting recommends that all lot clearing activities are delayed until a permit is issued by the local health department, with the exception of clearing thick vegetation to access the lot.

This report discusses the location of suitable soils for subsurface wastewater disposal systems and does not guarantee any permits or approval required by the local health department. Any potential lots may require septic systems utilizing pumps, shallow or ultra-shallow conventional trench placement, low pressure pipe systems, and/or reductions systems for final approval. The rules governing on-site wastewater disposal systems are complex and the interpretation of the rules are based upon the opinions of regulators (state and county level). Due to the subjective nature of the permitting process and the variability of naturally occurring soils, ASC cannot guarantee that areas delineated as suitable for on-site wastewater disposal systems will be permitted by the governing agencies. These permitting considerations should be taken into account before a financial commitment is made on a tract of land.

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

Sincerely,



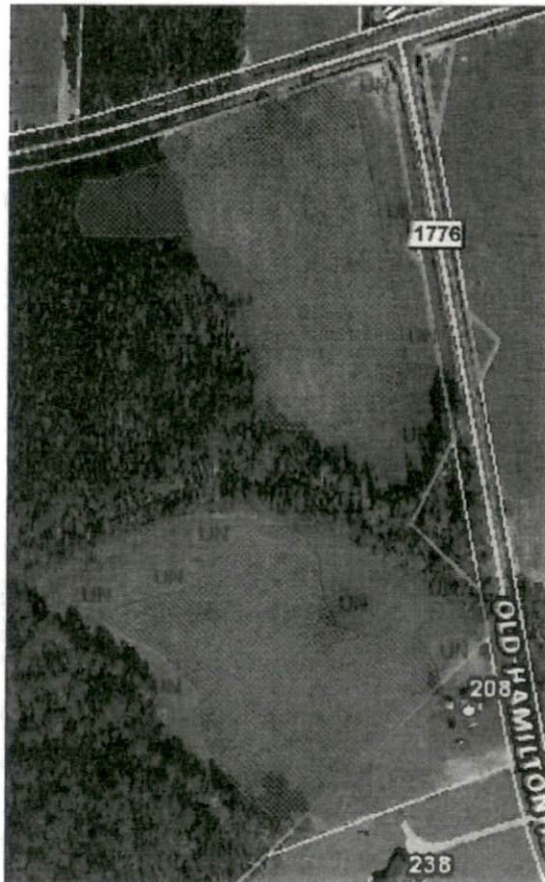
Alex Adams  
NC Licensed Soil Scientist #1247




**Profile Description #1**  
**0-3% Slope, Linear Slope**

<b>Horizon</b>	<b>Depth</b>	<b>Color</b>	<b>Texture</b>	<b>Structure</b>	<b>Moist Consistence</b>	<b>Wet Consistence</b>
		10YR				
Ap	0-5"	4/4	Sandy Loam	granular	friable	non sticky, non plastic
		10YR				
E	5-20"	6/4	Loamy Sand	granular	V. friable	non sticky, non plastic
		10YR	Sandy Clay			slightly sticky, slightly
Bt1	20-36"	4/6	Loam	SBK	firm	plastic

Preliminary Soils Evaluation  
 Portion of ~42 acres (PIN #1506-37-3257)  
 Old Hamilton and Antioch Church Roads - Harnett County



	Areas contain soils with 24 inches or more of unsuitable material and have potential for slow-flow conventional or LPF type septic systems.
UN	Unsuitable areas or areas not evaluated



Adams  
 Soil Consulting  
 919-414-6761  
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GRAPHIC SCALE  
 1" = 200'



\*Preliminary Soils Evaluation

\*Soil boundary was sketched onto a preliminary map of the property taken from public records.

\*Not a Survey.

\*Septic system setbacks listed below for new lots.

- 1) 10' from property lines.
- 2) 100' from wells for primary systems.
- 3) 50' from surface waters (streams, ponds, lakes).

\*Any mechanical disturbances such as grading, cutting and filling of the suitable soil areas can render areas unsuitable for future septic systems.

\*See accompanying report for additional information.

\*Due to Soil Variability, Adams soil consulting cannot guarantee that the areas shown as suitable will be permitted by the local Health Department.