

Harnett County Department of Public Health Improvement Permit

A building permit cannot be issued with only an Improvement Permit

ISSUED TO: John Roberts / Charles Gray PROPERTY LOCATION: 4375 NC 55 W
 SUBDIVISION _____ LOT # _____
 NEW REPAIR EXPANSION Site Improvements required prior to Construction Authorization Issuance: _____
 Type of Structure: Ext. 2-Bedroom SFD
 Proposed Wastewater System Type: 25% Reduction Sys.
 Projected Daily Flow: 240 GPD
 Number of bedrooms: 2 Number of Occupants: 4 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: 08/27/2021 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: John Roberts / Charles Gray PROPERTY LOCATION: 4375 NC 55 W
 SUBDIVISION _____ LOT # _____
 Facility Type: Ext. 2-BR SFD New Expansion Repair
 Basement? Yes No Basement Fixtures? Yes No
 Type of Wastewater System** 25% Reduction System (Initial) Wastewater Flow: 240 GPD
 (See note below, if applicable 25% Reduction System (Repair)
Installation Requirements/Conditions
 Septic Tank Size 1000 gallons Exact length of each trench 75 feet Trench Spacing: 9 Feet on Center
 Pump Tank Size _____ gallons Trenches shall be installed on contour at a Soil Cover: 12 inches
 Maximum Trench Depth of: 24 ~~24~~ 20 inches (Maximum soil cover shall not exceed 36" above the trench bottom)
 (Trench bottoms shall be level to +/-1/4" in all directions)
 Pump Requirements: _____ ft. TDH vs. _____ GPM Aggregate Depth: NA inches below pipe
 _____ inches above pipe
 _____ inches total
 Conditions: _____

**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: 08/27/2021
ANDREW CORBIN Construction Authorization Expiration Date: 08/27/2026

Harnett County Department of Public Health Site Sketch

Property Location: 4375 NC 55 W

Issued To: John Roberts / Charles Gray Subdivision _____ Lot # _____

Authorized State Agent: *Andrew Washburn* Date: 08/27/2021

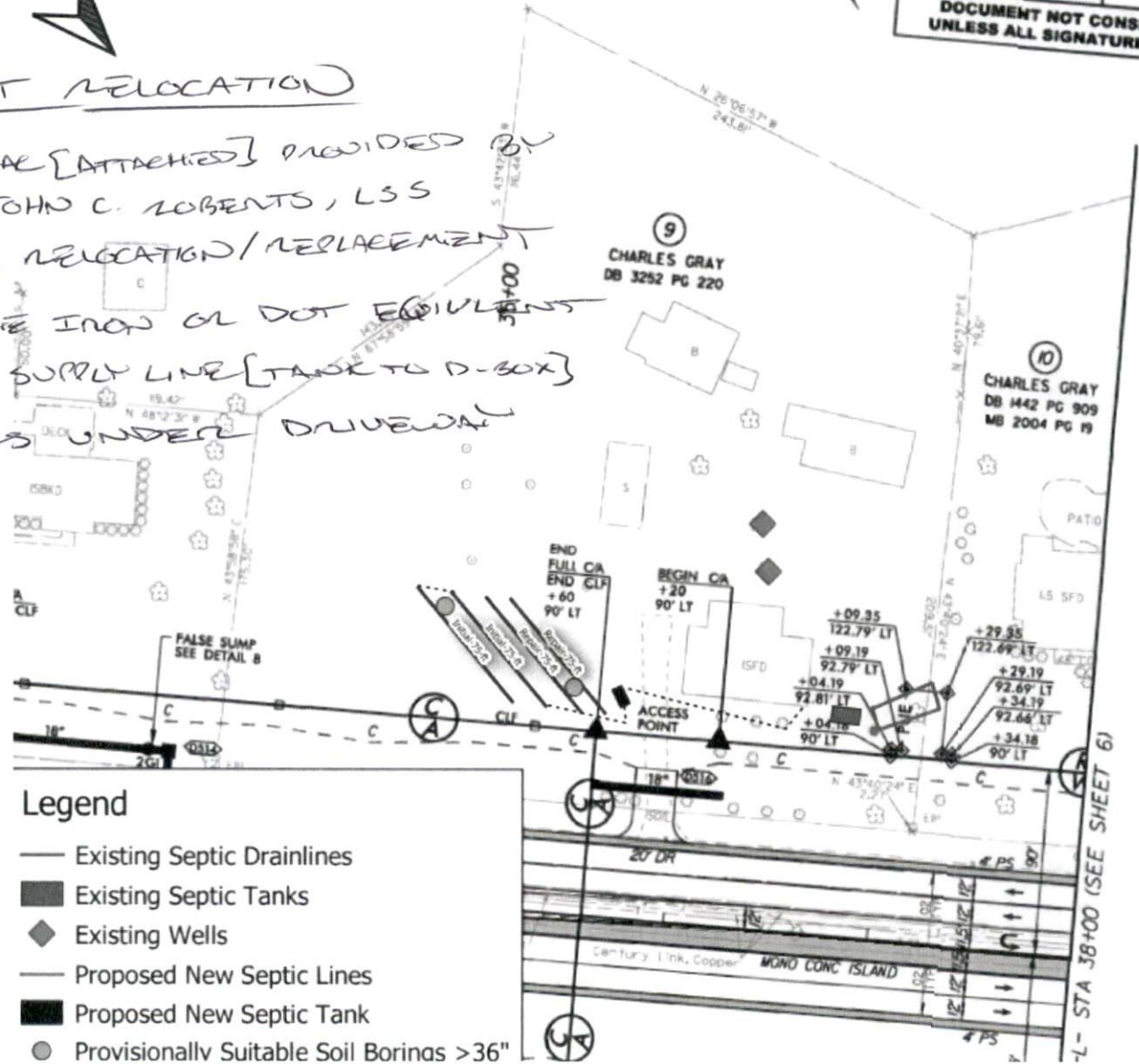


ANDREW WASHBURN

DOCUMENT NOT CONSID
UNLESS ALL SIGNATURES

DOT RELOCATION

- * PROPOSAL [ATTACHED] PROVIDED BY JOHN C. ROBERTS, LSS
- * TANK RELOCATION / REPLACEMENT
- * DUCTILE IRON OR DOT EQUIVALENT IF SUPPLY LINE [TANK TO D-BOX] GOES UNDER DRIVEWAY



- Legend**
- Existing Septic Drainlines
 - Existing Septic Tanks
 - ◆ Existing Wells
 - - - Proposed New Septic Lines
 - Proposed New Septic Tank
 - Provisionally Suitable Soil Borings >36"

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

Residential Subsurface Wastewater Treatment and Disposal System Proposal

Property:
4375 NC 55 W
Angier, NC
PIN: 0682-75-9522.000
Harnett County, NC
Ground Truth Job # 21-148

Prepared For:

The Right of Way Group, LLC
225 Green Street, Suite 910
Fayetteville, NC 28301

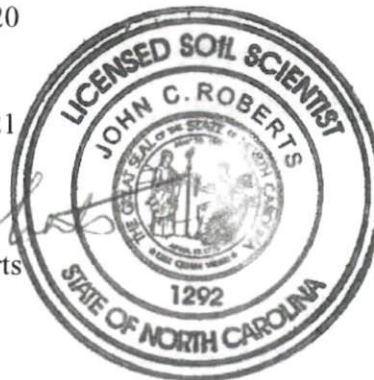
Prepared By:



Ground Truth Soil Consulting, PLLC
1302 Roberts Road
Newport, NC 28570
(252) 725-1320

August 3, 2021


John C. Roberts



INTRODUCTION & SITE DESCRIPTION

A Soil & Site Evaluation was performed for NC DOT Parcel 009 located at 4375 NC 55 W, Angier, NC (PIN: 0682-75-9522.000). Ground Truth Soil Consulting, PLLC (Ground Truth) was retained to prepare a proposal for an on-site wastewater treatment and disposal system that would allow for the relocation of a subsurface septic system of a 2-bedroom home (240 GPD). The lot was evaluated in accordance with North Carolina statutes for waste disposal (“Laws and Rules for Sewage Treatment and Disposal Systems”, amended December 6, 2018”).

The NCDOT project R5705A is proposed to impact the existing septic drainfield. A relocation permit is requested to relocate the septic tank and septic drainfield.

The field survey was conducted in May and June 2021 by John C. Roberts, LSS. Soil borings were advanced via a hand auger and evaluated under moist conditions using procedures listed in the *Field book for Describing and Sampling Soils, Version 3.0*. Soil color was determined using a Munsell Soil Color Chart. Observations of the landscape as well as soil properties (depth, texture, structure, soil wetness, restrictive horizons, etc.) were recorded. It was determined sufficient amount of Provisionally Suitable Group III soils are available within the project area for installation of a Gravity-Flow Conventional System initial system for a 2-bedroom system. Sufficient area of Provisionally Suitable soils also exists to support a Gravity-Flow repair system.

LOCATION

The lot is located at 4375 NC 55 W in Angier, NC.

PLANS AND SPECIFICATIONS

A. Septic Tank

1. The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and 1,000 gallons in capacity (at minimum).
2. The septic tank shall be fitted with an approved effluent filter.
3. It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tanks have had time to properly cure and are free of cracks or other structural deficiencies.

B. Pipes and Fittings

1. All discharge piping, connectors and supply lines should be made of SCH 40 PVC.
2. All joints must be properly “welded” utilizing the appropriate PVC cement for each application.
3. The supply line will be approximately 60 feet long from the septic tank to the upper septic drainline of the initial system.
4. Plumbing underneath the house may need to be replumbed to site the septic tank in new location.

C. Distribution Method

1. Drainlines will be fed via serial distribution.
2. Any part of the supply line installed under the driveway will need to be encased in ductile iron pipe, or equivalent, to a minimum of 10-ft either side of driveway.

D. Drainfield Installation-Initial

1. The drainfield has been previously laid out on-site utilizing metal stemmed flags. The property owner/builder should mark this area and isolate it as much as possible from construction traffic.
2. Under no circumstances shall any construction take place within the drainfield area while the soil is in a wet condition.
2. The specified system is a gravity-flow system. Accepted Systems, Infiltrator Quick4 chambers or equivalent will be utilized. Drainlines shall be installed no deeper than 20 inches.
3. The drainfield consists of two (2) lateral trenches to be constructed 3-foot wide by 75 feet in length. Total drainline length is 150 feet.
5. The maximum trench depth for this system shall be 24 inches.
6. The laterals are to be installed keeping the individual trench bottoms level from beginning to end.
7. The trenches should be left open for the final inspection by the HCEH.

E. Final Landscaping

1. Final cover over the drainfield shall be at least 6 inches deep. If additional cover is needed, Group II (sandy loam) or Group III (sandy clay loam) soil shall be utilized.
2. The drainfield shall be shaped to shed rainwater and be free from low spots.
3. The drainfield area should be planted with grass as soon as possible to prevent erosion. The soil should be limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

F. Utility Conflicts

1. The builder and property owner must take special care in planning for water, power, gas, telephone and cable lines. These utilities shall be kept clear of all parts of the septic system and its proposed repair area. Improper planning for underground utilities can negatively impact the installation and, in some cases, cause irreparable damage and permit revocation. If there are any questions regarding preferred routes, contact the HCEH as soon as possible.
2. Lawn irrigation should not be placed over the drainfield area.

MAINTENANCE

G. In General

1. The owner must maintain the drainfield area through periodic mowing. The drainfield must not be allowed to become overgrown.
2. The septic tank should be pumped every 4 years or when the solids within the septic tank reach an elevation that is equivalent to 25 percent of the volume of the tank. In some situations, the tanks may need to be pumped more frequently. If using a garbage disposal, it is recommended that the homeowner has the septic and pump tanks cleaned out annually.
3. When it becomes necessary to clean the effluent filter, the filter should be removed and the accumulated debris washed back into the septic tank – not onto the lawn.
4. Any damp areas, leakages or malfunctions in the drainfield area should be addressed immediately.
5. Divert gutter downspouts and surface water runoff away from the septic tanks and septic drainfield.

DESIGN SPECIFICS

Initial System

Daily Design Flow:	240 GPD – 2 bedroom house
Septic Tank Size:	1,000 Gallons (minimum)
Effluent Loading Rate:	0.4 GPD per sq. ft.
Drainfield Type:	Accepted Systems Quick 4 Chambers or Equivalent
Distribution Method:	Serial Distribution
Number of Drainlines:	(2) 3' Wide x 75' Long
Total Trench Length:	150 Linear Feet
Maximum Trench Depth:	24 inches
Final Cover Requirement:	6 Inches

Repair Specifics

Effluent Loading Rate:	0.4 GPD per sq. ft.
Drainfield Type:	Accepted Systems Quick 4 Chambers or Equivalent
Distribution Method:	Gravity
Total Trench Length:	(2) 3' Wide x 75' Long
Maximum Trench Depth:	24 Inches
Final Cover Requirement:	6 Inches



Ground Truth Soil Consulting, PLLC

4375 NC 55 W
Angier, NC
PIN -
0682-75-9522.000

Soil and Site Evaluation

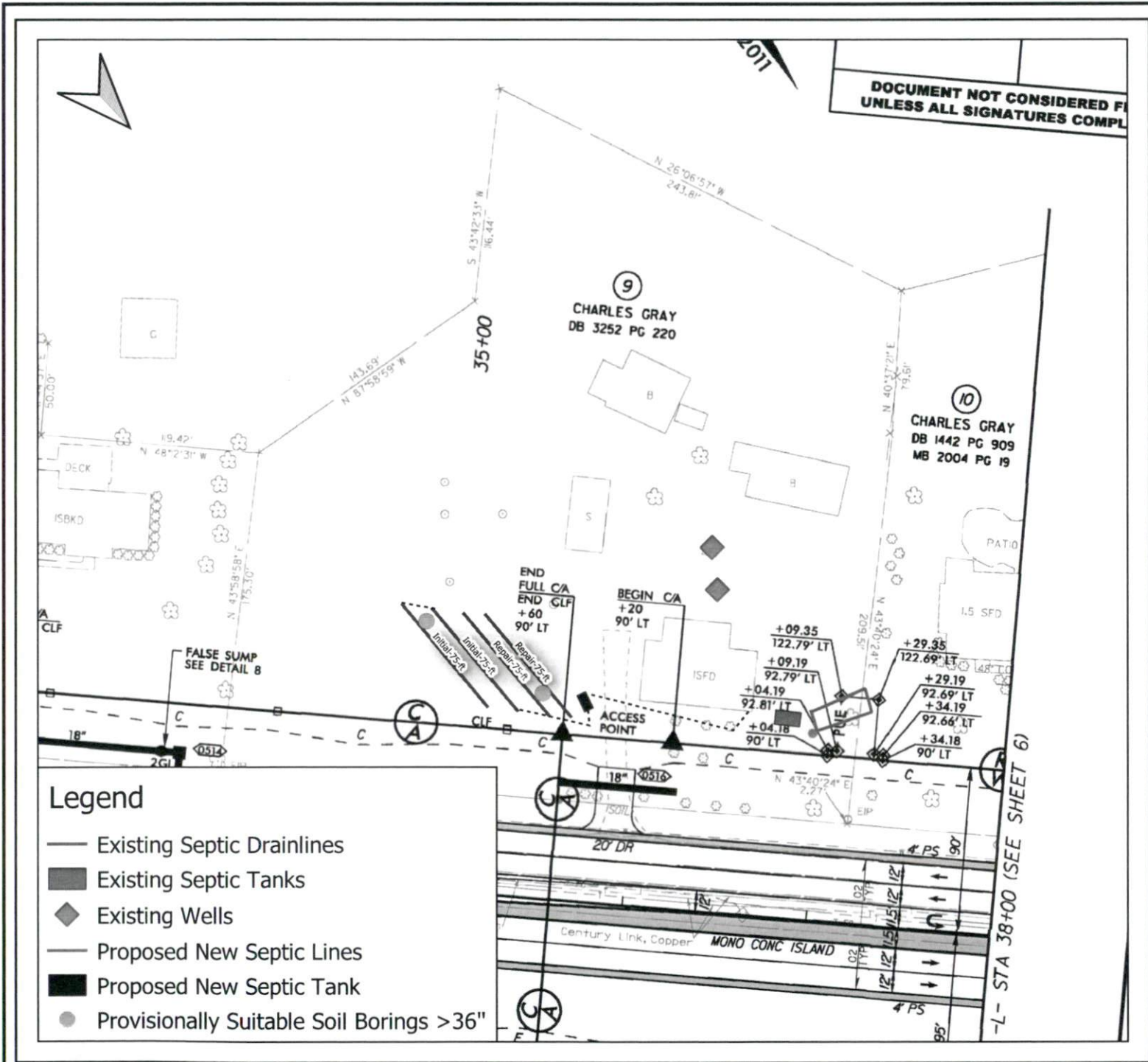
Harnett County

Scale:
1" = 75'

Figure 1	Date: August 2021
	GT Job No. 21-148



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETE



- Legend**
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 - Existing Septic Tanks
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-L- STA 38+00 (SEE SHEET 6)