



Onslow County Health Department
612 College Street
Jacksonville, North Carolina 28540
Phone: (910) 938-5851 Fax: (910) 989-2341

OPERATIONS PERMIT (GS 130A-337)

Permit No: **EOP2009-00886**

Category: **New**

Owner: DIVERSIFIED INVESTORS INC

Address: KINGSWOODS LOT 38 S2 JACKSONVILLE, NC

Subdivision: KINGSWOODS

Lot: 38

Section: 2 Block: Phase:

Location: LOT 38 KINGSWOODS LOCATED ON
BURRELL LANE.

FINAL PLOT/REMARKS

System Type: II

System Classification: a. Conventional
septic system (single family or 480 GPD or
less)

Manufacturer: Conventional

Model #: GTR

System Info: conventional system with
soc-tile

SR #:

Facility/Daily design flow: **3 BEDROOM/<360 GPD**

Water Supply: Public

THIS DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE.

Installed By: BILLY MARSHBURN

Business Name: LANDWORKS BACKHOE & SEPTIC

Signed By: Erin Moyer

Date: _____

10/02/2009



Onslow County Health Department
 612 College Street
 Jacksonville, North Carolina 28540
 Phone: (910) 938-5851 Fax: (910) 989-2341

Handwritten initials

CONSTRUCTION AUTHORIZATION
 (GS 130A-336)

Permit No: **ECA2009-00122**

Category: New

THIS AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION SHALL
 BE VALID FOR A PERIOD EQUAL TO THE PERIOD OF VALIDITY OF THE
 IMPROVEMENT PERMIT. NOT TO EXCEED 5 YEARS.

Owner: DIVERSIFIED INVESTORS INC

Address: KINGSWOODS LOT 38 S2 JACKSONVILLE, NC

Subdivision: KINGSWOODS

Lot: 38

Section 2

Block:

Phase:

Location: LOT 38 KINGSWOODS LOCATED ON BURRELL LANE.

SR #:

System Type/Description: II Conventional

System Classification: c. Conventional system with shallow placement

Facility/Daily design flow: 3 BEDROOM/ <360 GPD

System Info: SOC-TILE DRAINAGE INSTALLED AND APPROVED 02/20/09

LTAR: .6 gpd/sq. ft.

Water Supply: Public

Septic Tank Size: >900 gallons

Pump Tank Size: gallons

Nitrification Area: 600 sq. ft.

Nitrification Area: 200 lin. ft.

No of Lines: 4

Line Length: 50'

Line Width: 3'

Trench Bottom Depth: 12" - 18"

(SEE ATTACHED PAGES 1 - 4 of 4 FOR ADDITIONAL PERMIT CONDITIONS)

Signed By: Andrew Lake, *Andrew M. Lake* Date: 02/26/2009

NOTE: Permit is subject to revocation if site plans or intended use change.

ONslow COUNTY HEALTH DEPT.

OPERATIONS PERMIT

(GS 130A-337)

Permit No.: **22653**

Systems Type: IIc

Owner: Kingswoods, Section II

Address: Lot #38

Location: off Five Mile Road

Sr#: ~

THIS DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE.

Installed By: Landworks

Signed By: C. M. Moore

Date: 10-2-09

FINAL PLOT / REMARKS

4-50' conventional lines
w/ soc-tile
3 Bedroom / ≤ 360 GPD

ONslow COUNTY HEALTH DEPT.

CONSTRUCTION AUTHORIZATION

(GS 130A-336)

THIS AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION SHALL BE VALID FOR A PERIOD EQUAL TO THE PERIOD OF VALIDITY OF THE IMPROVEMENT PERMIT. NOT TO EXCEED 5 YEARS.

Permit No.: **22653**

Fee: IIc

Owner: Kingswoods, Section II

Address: Lot #38

Location: off Five Mile Road

Sr#: ~

System Type/Description: Conventional with drainage LTAR: 0.6 gpd/sq. ft.

Septic Tank Size: ≥ 900 gallons

Nitrification Area: 600 sq. ft. 200 lin. ft.

No. of lines: 4 Line length 50' x 3'

Trench bottom depth: 12"-18" with 6" cover above and 5' beyond

(SEE ATTACHED PAGES 1-4 of 4 FOR ADDITIONAL PERMIT CONDITIONS)

Signed: Andrew M. Lake Date: 02/26/09

ONslow COUNTY HEALTH DEPT.

IMPROVEMENT PERMIT

(GS 130A-336)

- Valid for 5 years from date of issuance.
- Valid without expiration.

Permit No.: **22653**

Fee: IIc

Owner: Kingswoods, Section II

Address: Lot #38

Location: off Five Mile Road

Sr#: ~

System Type/Description: Conventional with drainage LTAR: 0.6 gpd/sq. ft.

Facility/Daily design flow: 3 Bedroom / ≤ 360 GPD

Water supply: On-site well Comm. well Public Other

(SEE ATTACHED PAGES 1-4 of 4 FOR ADDITIONAL PERMIT CONDITIONS)

Signed: Andrew M. Lake Date: 03/02/08

NOTE: Permit is subject to revocation if site plans or intended use change.

Buff Ledger: **ORIGINAL**

Blue: **BUILDING INSPECTION**

Pink: **CLIENT**

PLOT PLAN

ECA 2009 - 00122

Owner: King woods
Address: lot # 38
Location: off 5 mile Road

15. Soc tile trench excavation: depth, grade, and fall shall be inspected prior to placement of aggregate in trench.
16. Aggregate shall be placed in trench at approved depth and inspected.

Soc Tile Specifications:

17. Soc tile shall be installed on top of aggregate and inspected.
18. The approved aggregate shall be installed over the soc tile, approved backfill, and swale graded over soc tile.
19. A Home Owner's Association shall be established for maintenance and repair of the community drainage system.
20. The Home Owner's Association Shall be responsible for maintaining the drainage system at all times for proper performance of the wastewater systems.
21. All soc tile shall be enclosed in a Drainage and Utility Easement (minimum 15').
22. The soc tile shall be $\geq 6''$ in diameter.
23. See attached drainage plan for soc tile depth and grade elevations.
24. Install 4" (in depth) of gravel in the bottom of the trench PRIOR to installing the soc tile. Backfill with gravel at least 30" above the soc tile, place filter fabric on top of the rock aggregate. The remaining trench depth (to within 6" of the natural grade/finished elevation) can be backfilled either with gravel or equivalent approved aggregate material such as clean, coarse river/mortar sand. The last 6" backfill/covering shall be with the native soil.
25. The soc tile, pipe, and cleanouts shall use approved connections for corrugated to hard pipe.
26. All soc tile cleanouts shall extend to finished grade and protected with an approved box.
27. Small surface swale 1' deep shall be constructed on top of the soc tile trench and drainfield graded to shed surface waters toward these swales.
28. The last 20' of solid pipe shall be Sch. 40 PVC with a properly constructed animal guard.
29. A 10' Drainage Easement shall be established for the conveyance of subsurface drainage to final outfall of Sch. 40 PVC solid pipe.

Additional Permit Conditions

1. Do not park or drive on any part of system or repair area
2. Nitrification trench aggregate shall be covered with straw, untreated paper or other approved materials prior to final cover/backfilling.
3. Do not install system under wet conditions.
4. Adhere to minimum set back requirements as stated in Rule .1950 and .1951 of NC Laws and Rules for Sewage Treatment and Disposal System (Article 11, G.S. Chapter 130A) unless otherwise indicated on this permit.
5. Rock used in soil absorption systems shall be clean, washed gravel or crushed stone and graded or sized in accordance with size numbers 3, 4, 5, 57, or 6 of ASTM D-448 (standard sizes of coarse aggregate) which is hereby adopted by reference in accordance with G.S. 150 B-14 (c). Documentation of aggregate size shall be available upon request.
6. All pump tanks shall be tested for water tightness. Septic tanks may be subject to a water tightness test.
7. The septic tank is designed to receive sewage or wastewater under gravity flow. However, if a system subject to the N.C. Plumbing Code is used to pump raw sewage to the septic tank, the sewage shall be reduced to gravity/non-turbulent flow by approved means at the inlet of the septic tank.
8. An accepted wastewater system may also be installed in accordance with the accepted wastewater system approval.(Maximum LTAR of 1.0 gpd/ft²)
9. A deeded and recorded map shall be submitted to the Environmental Health Section of the Onslow County Health Department **PRIOR TO** the issuance of the Construction Authorization.
10. Run lines parallel to contour to accommodate the trench bottoms referenced on the Construction Authorization.
11. An Approved stormwater plan shall submitted to the Onslow County Health Department **PRIOR** to the issuance of a Construction Authorization.
12. A preliminary house foundation survey including decks or decking shall be submitted to the Onslow County Health Department **PRIOR** to the issuance of a Construction Authorization to insure all setbacks will be maintained between system and repair areas.
13. Collection system shall be designed by a Professional Engineer and submitted for approval to the Environmental Health Section of the Onslow County Health Department **PRIOR TO** the issuance of a Construction Authorization.

Inspection Schedule:

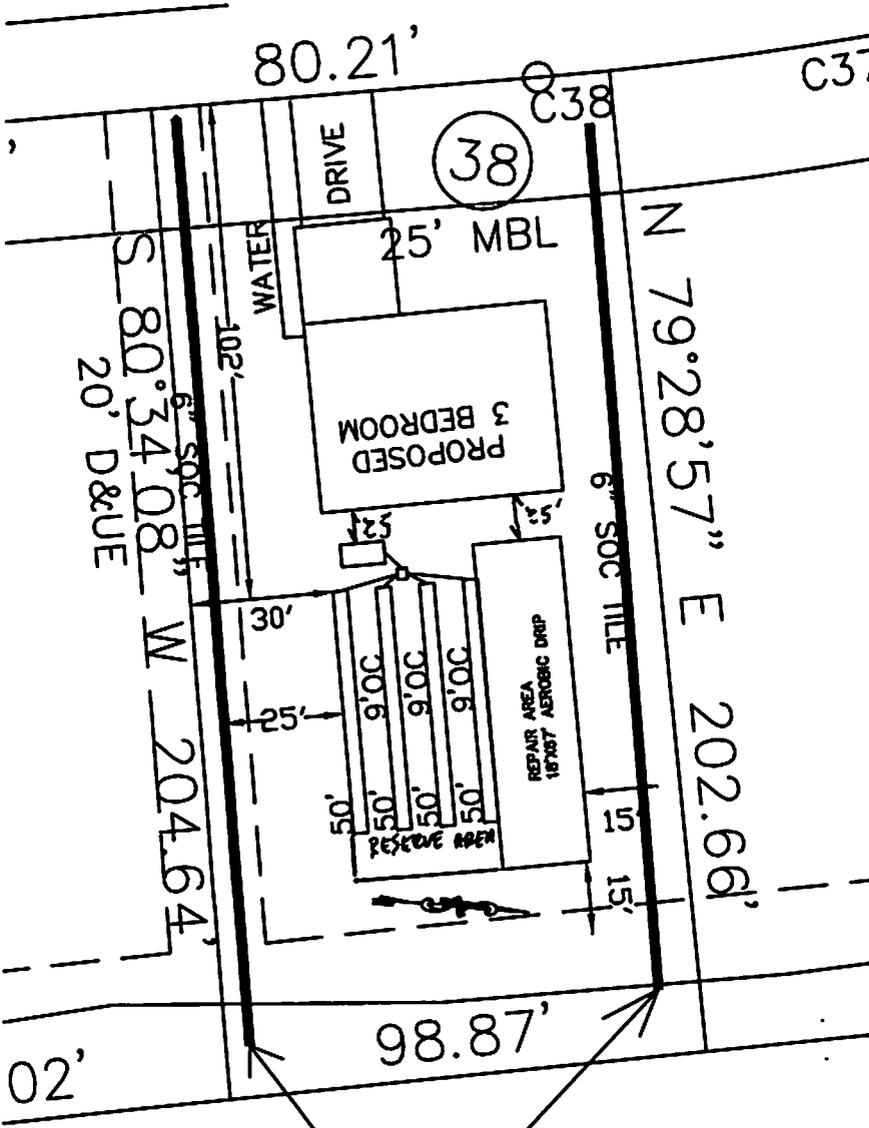
14. There shall be a preconstruction conference with the drainage system installer, wastewater system installer, Haywood Pittman (LSS), and the Onslow County Health Department **PRIOR** to any construction.
15. The Onslow County Health Department and Haywood Pittman shall inspect all phases of the soc tile installation.

PLOT PLAN

Owner: KINGSWOOD
Address: LOT 38
Location: OFF FIVE MILE ROAD

Additional Permit Conditions

1. Do not park or drive on any part of system or repair area.
2. Nitrification trench aggregate shall be covered with straw, untreated paper or other approved materials prior to final cover/backfilling.
3. Do not install system under wet conditions.
4. Adhere to minimum setback requirements as stated in Rule .1950 and .1951 of NC Laws and Rules for Sewage Treatment and Disposal (Article 11, G.S. Chapter 130A) unless otherwise indicated on this permit.
5. Rock used in soil absorption systems shall be clean, washed gravel or crushed stone and graded or sized in accordance with size numbers 3,4,5,57, or 6 of ASTM D-448 (standard sizes of coarse aggregate) which is hereby adopted by reference in accordance with G.S. > 150 B-14(c). Documentation of aggregate size shall be available upon request.
6. All pump tanks shall be tested for water tightness. Septic tanks may be subject to a water tightness test.
7. The septic tank is designed to receive sewage or wastewater under gravity flow. However, if a system subject to the N.C. Plumbing Code is used to pump raw sewage to the septic tank, the sewage shall be reduced to gravity/nonturbulent flow by approved means at the inlet end of the septic tank.
8. An accepted wastewater system may also be installed in accordance with the accepted wastewater system approval (maximum LTAR of 1.0 gpd/ft2).
9. A dedeed and recorded map shall be submitted to the Environmental Health Section of the Onslow County Health Department **PRIOR TO** the issuance of the Construction Authorization.
10. Run lines parallel to contour to accomodate the trench bottoms referenced on the Construction Authorization.
11. An Approved stormwater plan shall be submitted to the Onslow County Health Department **PRIOR TO** issuance of a Construction Authorization.



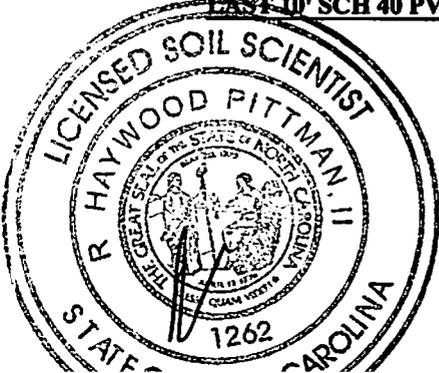
INITIAL

3 BEDROOM
LTAR .6
4-50' CONVENTIONAL LINES
12-18" TB
>6" SOIL COVER REQUIRED OVER SYSTEM AND 5' BEYOND SYSTEM

REPAIR AREA

3 BEDROOM
LTAR .3
AEROBIC DRIP
TS-II PRETREATMENT
6" TB
>6" SOIL COVER REQUIRED OVER SYSTEM AND 5' BEYOND SYSTEM

**OUTLET 6" ABOVE WATER LEVEL
LAST 10' SCH 40 PVC WITH ANIMAL GUARD**

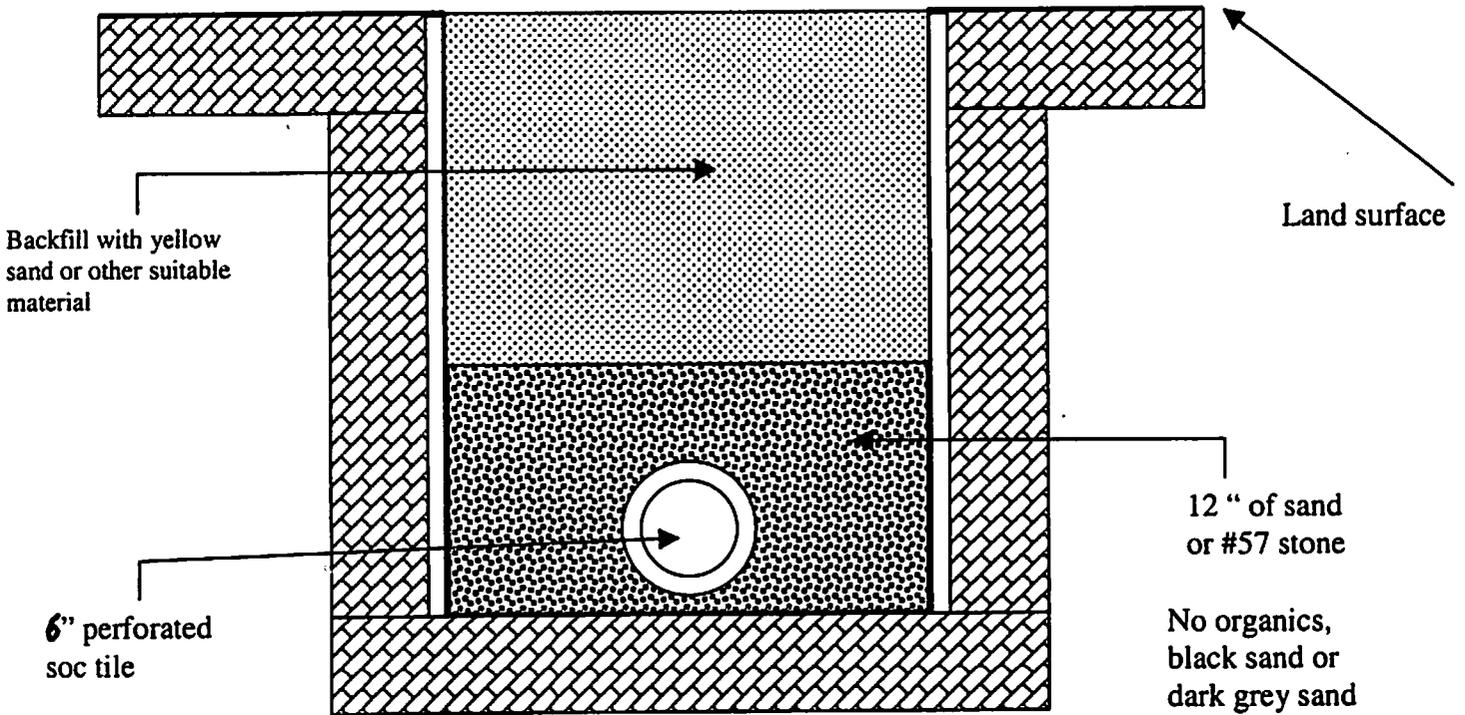


APPROX SCALE 1"=40'

**DRAINAGE SHALL BE INSTALLED AND INSPECTED
PRIOR TO CA ISSUANCE**

ECA 2009-00122

Detail for Groundwater Lowering Devices



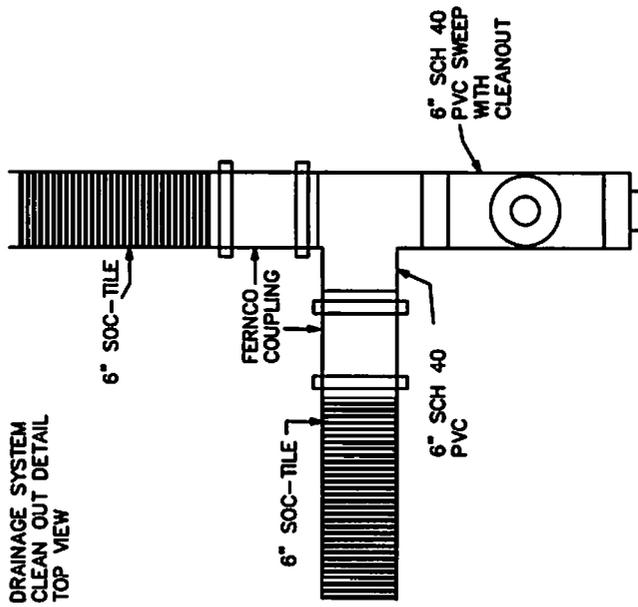
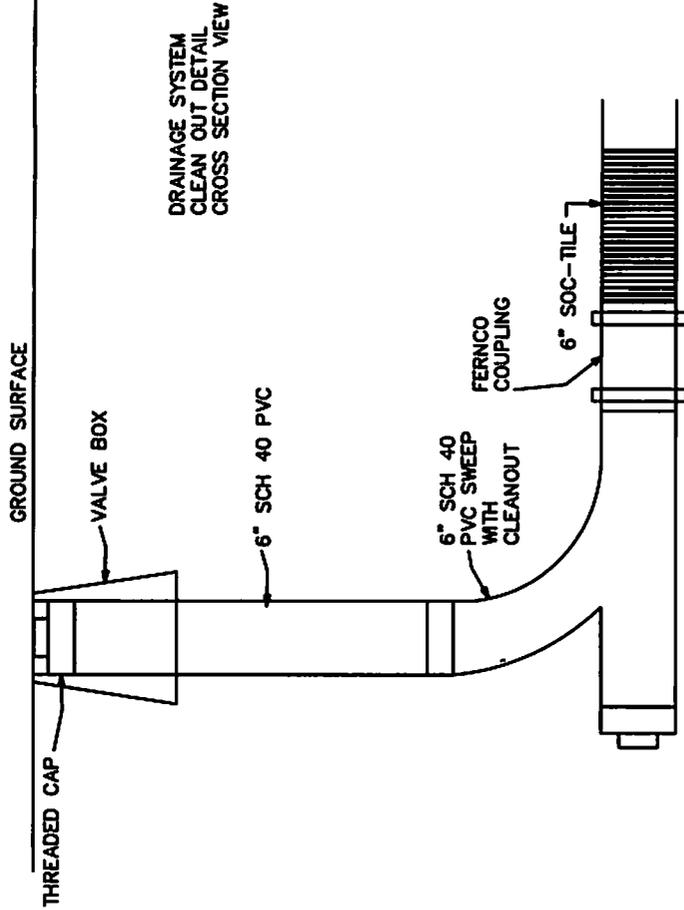
Notes:

*Last 10 feet shall be of schedule 40 PVC

*Outlet shall be atleast 6 inches above the bottom of drainage ditch and shall be protected by an animal guard

*Ensure atleast 0.3% fall on the soc tile trench

CLEANOUT DETAIL



JOHN L. PIERCE & ASSOCIATES, P.A. (C-1888)
 405 JOHNSON BLVD., JACKSONVILLE, NC 28541
 PHONE: (910)346-9800 FAX: (910)346-1210
 DATE: JUNE 25, 2009 SCALE: 1"=30'
 F.B. # _____ P. # _____ JOB # 29321

THIS IS TO CERTIFY THAT THIS MAP IS A TRUE REPRESENTATION OF THE PROPERTY HEREON AS COMPLETED BY ACTUAL SURVEY OF THE PREMISES AND THAT THERE ARE NO ENCROACHMENTS ACCORDING TO THE BEST OF MY KNOWLEDGE, EXCEPT AS SHOWN. THE MAP OF THIS PRELIMINARY SURVEY IS 1:10,000+.

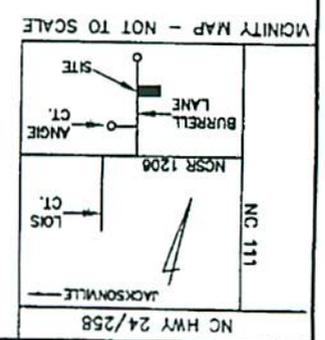
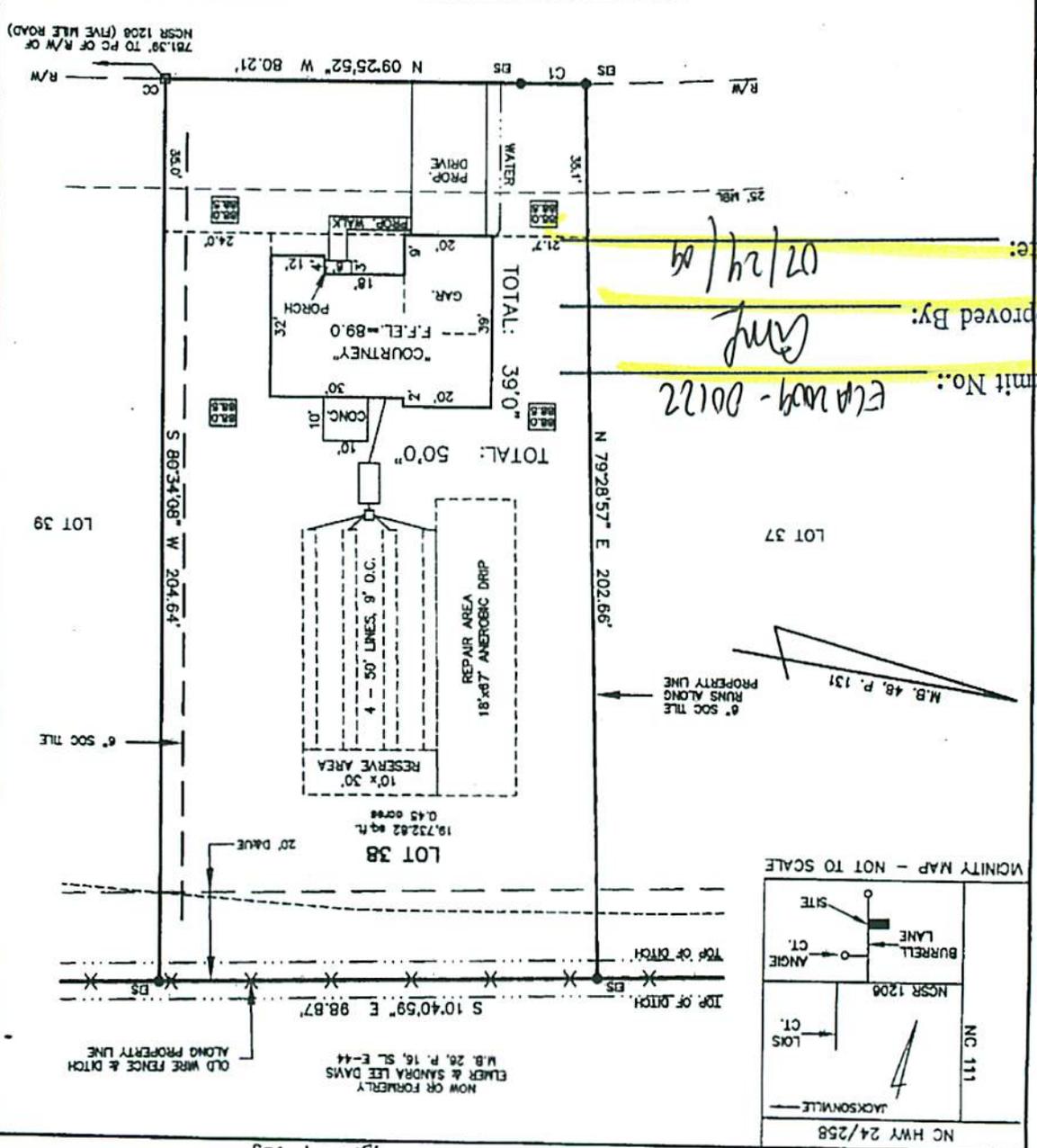
JOHN L. PIERCE
 PROFESSIONAL SURVEYOR
 1000 RICHMOND ST. S.W.
 ATLANTA, GA 30331
 (404) 525-1100

REF: M.B. 57, P. 184, SL. M-1028 PRELIMINARY PLOT PLAN 112 BURRELL LANE

| CURVE TABLE | | | |
|-------------|---------------|--------------|-------|
| CURVE | CHORD BEARING | CHORD RADIUS | ARC |
| C1 | N09°58'27"W | 14.79 | 14.79 |
| ARC | | | |

LEGEND:
 EIS = EXISTING IRON STAKE
 MBL = MINIMUM BUILDING LINE
 R/W = RIGHT OF WAY

BURRELL LANE 50' R/W



SFR
 3 ASI

Date: 02/24/09
 Approved By: [Signature]
 Permit No.: ECR009-00122

BR-C4 908

SEPTIC TANK INSPECTION CHECKLIST (Type II-IV)

Name: Kingswoods, Section II
 Address: Lot # 38

Location: OFF FIVE-MILE ROAD

Date of Construction Authorization 02/26/09 (If after January 1, 1999, Septic Tank with filter required)

| SEPTIC TANK | | INITIAL DATE | NITRIFICATION LINES | | INITIAL DATE |
|--|-----------------|----------------|---|------------------------|----------------|
| Manufacture Date | <u>5-11-09</u> | <u>EM</u> | Trench Type: | <u>CONU</u> | <u>EM</u> |
| State ID Number | <u>STB11</u> | <u>9-30-09</u> | Trench Width: | <u>3'</u> | <u>9-30-09</u> |
| Capacity | <u>PPS 1020</u> | | Trench Length: | <u>50' x 4'</u> | |
| Tee/Approved Filter | | | Trench Bottom Depth | | |
| Baffle | | | Trench Grade | | |
| Sealant | | | Rock Depth & Quality (3, 4, 5, 57, 6) | | |
| Tank Penetration Seal | | | Aggregate Cover | <u>rubric</u> | |
| Riser if Applicable | | <u>NA</u> | Warranty (if applicable) | | <u>NA</u> |
| PUMP TANK | | | Dams/Stepdowns/Drop box, etc. | | |
| Manufacture Date | | | Pressure Lateral: | | |
| State ID Number | | | Hole Spacing: | | |
| Capacity | | | Hole Size: | | |
| Waterproof/Sealant | | | Turn-ups/Protectors | | |
| Riser | | | DISTRIBUTION SYSTEM | | <u>EM</u> |
| Water tightness Test (Note Reading Below) | | | Distribution Method: | <u>D Box</u> | <u>9-30-09</u> |
| PUMP | | | Serial Dist. | | <u>NA</u> |
| Check Valve/Gate valve | | | Pressure Manifold | | |
| Anti-siphon Hole (Size) | | | Pipe (Material and Grade) | | |
| Float Switches | | | Valves | | |
| Electrical Components | | | SUPPLY LINE | | |
| Rate (gpm) | | | Location | | |
| Pump Manufacturer: | | | Pipe (Material) | | |
| Pump Model Number: | | | Pipe Size | | |
| Pump Removal Method | | | Hydrostatic Leak Test: | | |
| GREASE TRAP | | | LANDSCAPING | | |
| Manufacture Date | | | Surface Drain | | |
| State ID Number | | | Subsurface Drain | <u>CON/02/20/09 ok</u> | <u>EM</u> |
| Capacity | | | Depth of Cover: Tank: <u>0"</u> Drainfield: <u>20"</u> | | <u>10-1-09</u> |
| Tee/Approved Filter | | | Finish Grade/Stabilize (if applicable) | | |
| | | | Permanent Markers | | |
| | | | OTHER | | <u>EM</u> |
| | | | System Setbacks | | <u>9-30-09</u> |
| | | | Legal Documents | | <u>NA</u> |
| | | | Mound Approved (Texture, Interface, Location, Length, Depth, Width) | | |
| Contractor: <u>SOL-TILE INSTALLED BY TOMMY BRYAN Landworks</u> | | | | | |

Revised 6-20-07

COMMENTS: