


7031 SAMPLE RD

02320102

1/11/2008

duponbj

Groundwater and Wastewater Services File Imaging Project
May 2007
*Barcode Font = IDAutomationHC39M*

Bnis OJ

6001B County Permit Review Worksheet Reviewer KR

| Rule or Law | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Permit Application** | | | | | | | | | | |
| .1937(d) | Is the Application complete | ✓ | | | | | | | | | |
| .1937(d) | Is there a Site plan/Plat with application | ✓ | | | | | | | | | |
| .1937(d) | Is the Facilityshown? | ✓ | | | | | | | | | |
| .1937(d) | Are appurtenances shown | ✓ | | | | | | | | | |
| | **Site Evaluation Information** | | | | | | | | | | |
| .1939 (a)(1) | Topography and Landscape Position Recorded? | ✓ | | | | | | | | | |
| .1940 (a-q) | Slope % Recorded? | ✓ | | | | | | | | | |
| .1939 (a)(2) | Texture Class Recorded? | ✓ | | | | | | | | | |
| .1939 (a)(2) | Structure type Recorded? | ✓ | | | | | | | | | |
| .1939 (a)(2) | Consistence Recorded? | ✓ | | | | | | | | | |
| .1939 (a)(3) | Mineralogy Recorded? | ✓ | | | | | | | | | |
| | Soil Wetness Condition Recorded? | ✓ | | | | | | | | | |
| .1939 (a)(4) | Soil Depth to Rock or Parent Material Recorded When Encountered? | ✓ | | | | | | | | | |
| .1939 (a)(5) | Depth to Restrictive Horizons Recorded When Encountered? | ✓ | | | | | | | | | |
| .1939 (a)(6) | Sufficient Available Space Recorded? | ✓ | | | | | | | | | |
| .1937(m) | Are the Profile Locations Shown? | ✓ | | | | | | | | | |
| .1939(a) & .1945(b) | Are the S/PS Profiles in system & in repair area? | ✓ | | | | | | | | | |
| | Number of auger borings made: | 4 | | | | | | | | | |
| .1939(d), .1955, .1956, .1957 | Were sufficient auger borings made? | ✓ | | | | | | | | | |
| | LTAR | 3R5 | | | | | | | | | |
| | **IP/CA** | | | | | | | | | | |
| G.S. 130A-336(a) & .1937(q) | Proposed System Type stated-Initial | ✓ | | | | | | | | | |
| .1945(b) | Proposed System Type stated-Repair | ✓ | | | | | | | | | |
| G.S. 130A-336(a)(3) | System location identifiable by setbacks - Initial | ✓ | | | | | | | | | |
| .1937(q) & .1945(b) | System components shown - Initial | ✓ | | | | | | | | | |
| .1945(b) | Repair area shown | ✓ | | | | | | | | | |
| .1937 (f)(q) | Does System design match facility, flow & WW characteristics? | ✓ | | | | | | | | | |
| .1937 (f)(q) | Is System design consistent with soil/site conditions? | ✓ | | | | | | | | | |
| .1937 (f)(q) | Is the System located in the approved area? | ✓ | | | | | | | | | |
| G.S. 130A-336(a) | Is the Design flow (gpd) indicated? | ✓ | | | | | | | | | |
| G.S. 130A-336(a) | Number of Bedrooms, employees, seats, etc. indicated? | ✓ | | | | | | | | | |
| .1937(q) | Trench depth indicated? | ✓ | | | | | | | | | |
| .1937(q) | Trench width indicated? | ✓ | | | | | | | | | |
| .1937(q) | Trench length indicated? | ✓ | | | | | | | | | |
| G.S. 130A-336(a)(1) | Proposed/existing well shown? | ✓ | | | | | | | | | |
| G.S. 130A-336(a)(1) | Property line lengths shown? | ✓ | | | | | | | | | |
| G.S. 130A-336(a) | Facility/appurtenance setbacks shown from fixed points? | ✓ | | | | | | | | | |
| | **OP** | | | | | | | | | | |
| .1937(i) | System type as described in table V(a) of rule .1961 | | | | | | | | | | |
| .1937(i) | Conditions for system performance, operation, maintenance, monitoring and reporting. | | | | | | | | | | |

*System design is incorrect or inconsistent with site conditions, indicate why for each below*

SEPTIC FEE: 200 chk
DATE: 9/7/06
CRT [ ]

# PERMIT APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT / CONSTRUCTION AUTHORIZATION FOR ON-SITE WASTEWATER SYSTEM NEW WELL INSTALLATION OR REPAIR OF EXISTING WELL MECKLENBURG COUNTY GROUNDWATER & WASTEWATER SERVICES

#1424

GWS – RES. APP 07/05

WELL FEE: _____
DATE: _____
CRT [ ]

FILE # 6801B

SEPTIC / TYPE APPLICATION: ☐ NONE ☑ NEW SYSTEM ☐ ALTERATION ☐ REPAIR ☐ MODIFY PLOT PLAN

WELL / TYPE APPLICATION: ☑ NONE ☐ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT

JOB LOCATION INFORMATION:
TAX/PARCEL #: 02320102P0
STREET ADDRESS: Sample Road
CITY: Huntersville
STATE: NC ZIP: 28078
SUBDIVISION OR MOBILE HOME PARK NAME:
LOT #: 63
TOWNSHIP:
☐ 0-MECKLENBURG ☐ 4-PINEVILLE
☐ 1-CHARLOTTE ☐ 5-MATTHEWS
☐ 2-DAVIDSON ☑ 6-HUNTERSVILLE
☐ 3-CORNELIUS ☐ 7-MINT HILL

BUILDING INFORMATION:
TYPE OF BUILDING:
☐ SINGLE MOBILE HOME (S) ☐ MODULAR HOME (M)
☐ DOUBLE WIDE (D) ☐ MULTIPLE FAMILY (U)
☑ HOUSE (H) ☐ OTHER
HEATED SQUARE FOOTAGE: ~5000
* NUMBER OF BEDROOMS: ~~4~~ 5
NUMBER OF OCCUPANTS: 8

FOUNDATION FOR RESIDENCE:
☐ CONCRETE SLAB ☐ BASEMENT WITH PLUMBING
☑ CRAWLSPACE ☐ BASEMENT WITH NO PLUMBING

IF PLANNING TO EXPAND/ALTER THE EXISTING SYSTEM INDICATE THE FOLLOWING CHANGES:
NUMBER OF BEDROOMS TO BE ADDED: NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE:
WILL THERE BE A HOME BUSINESS IN THE RESIDENCE? ☐ YES ☐ NO TYPE:

WATER SUPPLY:
☑ MUNICIPAL (M) ☐ PUBLIC (C) ☐ PRIVATE WELL (P) ☐ SHARED WELL (S) ☐ OTHER 'SPRINGS' (O)

PROPOSED USE OF WELL: ☐ N/A ☐ IRRIGATION ☐ POTABLE ☐ GEOTHERMAL ☐ OTHER

ARE ANY OF THE FOLLOWING LOCATED ON THE PROPERTY? IF SO, PLEASE SHOW LOCATION ON SITE PLAN/PLAT.

| | | | | | |
|---|---|---|---|---|---|
| BURIED CABLES, LANDFILLS, STUMPHOLES | ☐ YES | ☑ NO | WELLS, SPRINGS, OR WATER LINES | ☐ YES | ☑ NO |
| EXISTING WASTEWATER SYSTEMS | ☐ YES | ☑ NO | DESIGNATED WETLANDS | ☐ YES | ☑ NO |
| EASEMENTS OR RIGHT-OF-WAYS | ☐ YES | ☑ NO | GRADING/SOIL REMOVAL PERFORMED | ☐ YES | ☑ NO |

PROPERTY OWNER:
NAME: FAison - Sample Road, LLC
ADDRESS: 121 W. Trade St., 27th Floor
CITY: Charlotte
STATE: NC ZIP: 28202-5399
HOME PHONE: WORK PHONE: 704 972 2674
MOBILE PHONE: FAX: 972 2676

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:
NAME: STME Tonay Jacobs
ADDRESS: 385 Timber Rd
CITY: Mooresville
STATE: NC ZIP: 28115-7899
HOME PHONE: WORK PHONE: 704-662-8625
MOBILE PHONE: 704 582-9219 FAX: 662-8735

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 2006
WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? 2006

*An Improvement Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

Tonay C Jacobs, LSS 9/7/06
Owner's/Agent's Signature Date

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES DIVISION OF ENVIRONMENTAL HEALTH ON-SITE WASTEWATER SECTION

*A Well Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

Owner's/Agent's Signature Date

MECKLENBURG COUNTY HEALTH DEPARTMENT
GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST., SUITE 211
CHARLOTTE, NC 28202 704-336-5103 / FAX: 704-336-6894

Department of Environment, Health, and Natural Resources
Division of Environmental Health
On-site Wastewater Section

Sheet: 1 of 2
Property ID: PO 023-201-02
Lot #: 63
File #: 6801B
AppID: 1424
Code: 1

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

Owner: Faison- Sample Road LLC
Applicant: S & ME- Toney Jacobs
Address: 121 W. Trade St., 27th Floor, Charlotte, N. C. 28202-5399
Date Evaluated: 12/4/06
Proposed Facility: Residence
Design Flow (.1949): 480gpd
Property Size: .91a
Location of Site: Off Sample Road
Property Recorded:
Water Supply: [ x ] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ x ] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [ x ] Sewage [ ] Industrial Process [ ] Mixed

| PROFILE # | .1940 Landscape Position/ Slope% | Horizon Depth (IN.) | SOIL MORPHOLOGY .1941 .1941 Structure/ Texture | .1941 Consistence Mineralogy | b PROFILE FACTORS .1942 Soil Wetness/ Color | .1943 Soil Depth (IN.) | .1956 Sapro Class | .1944 Restr Horiz | Profile Class & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | LS, 6 | 0-10 | GR/CL | FR/SEXP/SS/SP | >48" TO SOIL WETNESS | 48+ | N/A | NONE | PS, IV |
| | | 10-40 | SBK/C | FI/SEXP/S/P | | | | | .3GPD/FT$^2$ |
| | | 40-48 | SBK/CL | FR/SEXP/SS/SP | | | | | |
| 2 | " | 0-9 | GR/CL | " | " | " | " | " | " |
| | | 9-38 | SBK/C | FI/SEXP/S/P | | | | | |
| | | 38-48 | SBK/CL | FR/SEXP/SS/SP | | | | | |
| 3 | " | 0-10 | GR/CL | " | " | " | " | " | PS, IV |
| | | 10-26 | SBK/C | FI/SEXP/S/P | | | | | .325GPD/FT$^2$ |
| | | 10-26 | SBK/CL | FR/SEXP/SS/SP | | | | | |
| 4 | " | 0-9 | GR/CL | " | " | " | " | " | " |
| | | 9-28 | SBK/C | FI/SEXP/S/P | | | | | |
| | | 28-48 | SBK/CL | FR/SEXP/SS/SP | | | | | |
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| Description | Initial System | Repair System |
|---|---|---|
| Available Space (.1945) | PS | PS |
| System Type(s) | | |
| Site LTAR | .325GPD/FT$^2$ | .325GPD/FT$^2$ |

Other Factors (.1946):
Site Classification (.1948): PROVISIONALLY SUITABLE
Evaluated By: W. R. Marlin, LSS, 12/7/2006, W. R. Marlin
Others Present:

**COMMENTS:**
100% repair

| Landscape Position | Group | Texture | .1955 LTAR |
|---|---|---|---|
| R-Ridge | I | S-Sand | 1.2 - 0.8 |
| SS-Shoulder Slope | | LS-Loamy Sand | |
| LS-Linear Slope | | | |
| FS-Foot Slope | II | SL-Sandy Loam | 0.8 - 0.6 |
| NS-Nose Slope | | L-Loam | |
| HS-Head Slope | | | |
| CC-Concave Slope | III | SI-Silt | 0.6 - 0.3 |
| CV-Convex Slope | | SICL-Silty Clay Loam | |
| T-Terrace | | CL-Clay Loam | |
| FP-Flood Plain | | SCL-Sandy Clay Loam | |
| | IV | SC-Sandy Clay | 0.4 - 0.1 |
| | | SIC-Silty Clay | |
| | | C-Clay | |

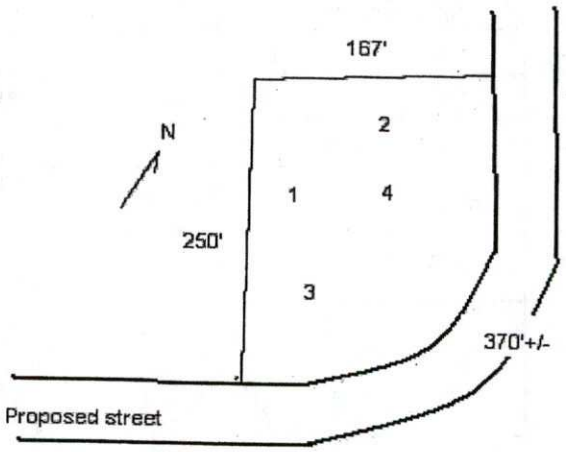
**Structure**
SG-Single Grain
M-Massive
CR-Crumb
GR-Granular
SBK-Subangular Blocky
ABK-Angular Blocky
PL-Platy
PR-Prismatic

**Consistence**
**Moist**
VFR-Very Friable
FR-Friable
FI-Firm
VFI-Very Firm
EFI-Extremely Firm

**Consistence**
**Wet**
NS-Non-Sticky
SS-Slightly Sticky
S-Sticky
VS-Very Sticky
NP-Non-Plastic
SP-Slightly Plastic
P-Plastic
VP-Very Plastic

**Mineralogy**
SEXP-Slightly Expansive
EXP-Expansive

**Sketch of Soil Evaluation Locations**



Department of Environment, Health, and Natural Resources
Division of Environmental Health
On-site Wastewater Section

Sheet: 1 of 2
Property ID: PO 023-201-02
Lot #: 63
File #: 6801B
AppID: 1424
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Type of Wastewater: [ x ] Sewage [ ] Industrial Process [ ] Mixed

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| | | 40-48 | SBK/CL | FR/SEXP/SS/SP | | | | | |
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| | | 38-48 | SBK/CL | FR/SEXP/SS/SP | | | | | |
| 3 | " | 0-10 | GR/CL | " | " | " | " | " | PS, IV .325GPD/FT$^2$ |
| | | 10-26 | SBK/C | FI/SEXP/S/P | | | | | |
| | | 10-26 | SBK/CL | FR/SEXP/SS/SP | | | | | |
| 4 | " | 0-9 | GR/CL | " | " | " | " | " | " |
| | | 9-28 | SBK/C | FI/SEXP/S/P | | | | | |
| | | 28-48 | SBK/CL | FR/SEXP/SS/SP | | | | | |
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| Description | Initial System | Repair System |
|---|---|---|
| Available Space (.1945) | PS | PS |
| System Type(s) | IA | IA |
| Site LTAR | .325GPD/FT$^2$ | .325GPD/FT$^2$ |

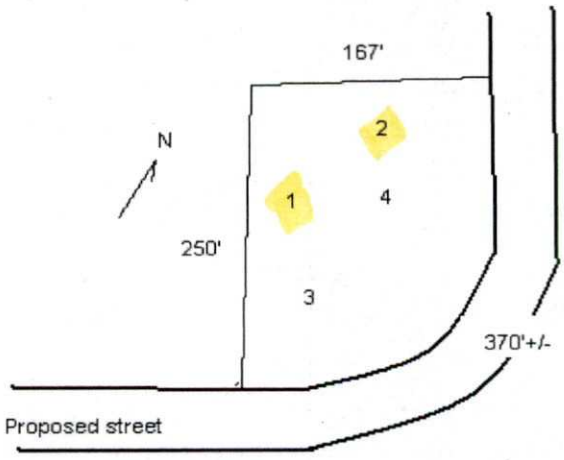
Other Factors (.1946):
Site Classification (.1948): PROVISIONALLY SUITABLE
Evaluated By: W. R. Marlin, LSS, 12/7/2006, WRM
Others Present:

**COMMENTS:**
100% repair

| Landscape Position | Group | Texture | .1955 LTAR | Structure |
|---|---|---|---|---|
| R-Ridge | I | S-Sand | 1.2 - 0.8 | SG-Single Grain |
| SS-Shoulder Slope | | LS-Loamy Sand | | M-Massive |
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| | | SCL-Sandy Clay Loam | | |
| | IV | SC-Sandy Clay | 0.4 - 0.1 | |
| | | SIC-Silty Clay | | |
| | | C-Clay | | |

| Consistence Moist | Consistence Wet | Mineralogy |
|---|---|---|
| VFR-Very Friable | NS-Non-Sticky | SEXP-Slightly Expansive |
| FR-Friable | SS-Slightly Sticky | EXP-Expansive |
| FI-Firm | S-Sticky | |
| VFI-Very Firm | VS-Very Sticky | |
| EFI-Extremely Firm | NP-Non-Plastic | |
| | SP-Slightly Plastic | |
| | P-Plastic | |
| | VP-Very Plastic | |

**Sketch of Soil Evaluation Locations**



Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St, Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

# IMPROVEMENT PERMIT for a RESIDENTIAL ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30001424** GWS File #: **6801B** Tax Parcel #: **023-201-02**

- This IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be **NO** grading, filling, or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. The Construction Authorization is **NOT** transferable. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

**I. This Improvement Permit Shall:** Expire in Five (5) Years **Expiration Date (If Applicable):** 4/10/2012

Type of Installation: Residential - New System Lot Number: 63

Structure Type: HOUSE Size ($ft^2$): 5000 # Bedrooms: 5 # Occupants: 8

Building Foundation: Crawl Space Water Supply: Municipal

**II. Initial System Type:** PPBPS (pressurized) **System Classification:** IVa

Initial System Specifications:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Design Flow (gpd): | 600 | LTAR ($gpd/ft^2$): | 0.325 | Septic Tank Size (gal): | 1500 | Pump Tank Size (gal): | 1500 |
| Trench Width (ft): | 3 | Trench Spacing (ft): | 9 | Absorption Area ($ft^2$): | 924 | Total Trench Length (ft): | 308 |
| Maximum Trench Depth (in): | 30 | Depth of Media (in): | N/A | Distribution Device: | Manifold (LPP Distri | | |

**III. Repair System Type:** PPBPS (pressurized) **System Classification:** IVa

Repair System Specifications:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Design Flow (gpd): | 600 | LTAR ($gpd/ft^2$): | 0.325 | Septic Tank Size (gal): | 1500 | Pump Tank Size (gal): | 1500 |
| Trench Width (ft): | 3 | Trench Spacing (ft): | 9 | Absorption Area ($ft^2$): | 924 | Total Trench Length (ft): | 308 |
| Maximum Trench Depth (in): | 30 | Depth of Media (in): | N/A | Distribution Device: | Manifold (LPP Distri | | |

**IV. Permit Conditions/Comments:**

*(Please See the Following Page for Permit Conditions.)*

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment, and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until an INSTALLATION APPROVAL is granted by the Department.
- The septic system installer shall be a registered septic contractor with Mecklenburg County Health Department.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

DENR Authorized Agent: Jeremy Michelone

Signature: Jeremy Michelone, R.S.

Date Issued: 4/10/2007

Owner/Legal Agent: Jacob Presley
Print Name

Signature: JPresley

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St, Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

## IMPROVEMENT PERMIT for a RESIDENTIAL ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30001424** GWS File #: **6801B**

**IV. Permit Conditions/Comments:**

- This type of septic system requires an inspection once every 3 years by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- This type of septic system requires a Certified Operator to maintain the system. A system maintenance contract with a Certified Operator must be on file prior to issuance of an Operation Permit.
- All components of the septic system must be installed in accordance with the required setbacks listed on the corresponding plot plan.

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until an INSTALLATION APPROVAL is granted by the Department.
- The septic system installer shall be a registered septic contractor with Mecklenburg County Health Department.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

DENR Authorized Agent: Jeremy Michelone

Signature: Jeremy Michelone, R.S.

Date Issued: 4/10/2007

Owner/Legal Agent: Jacob Presley
Print Name

Signature: Jacob Presley

S&ME

GWS Septic System Design Review

GWS File #: 6801B

| | Approved | Disapproved |
|---|---|---|
| Design Review: TCT 4-9-07 | ☒ | ☐ |
| Field Review: 4/5/07 | ☒ | ☐ |

*Projects are not considered "APPROVED" until both sections above are completed and indicate an APPROVED status.

Date: March 27, 2007

To: Mr. Jeremy Michelone, R.S.
Mecklenburg County Env. Health Dept.

From: Jacob B. Presley, LSS
Toney C. Jacobs, LSS

RE: Request for an Improvement Permit for Lot 63 at The Retreat at Latta Plantation off of Sample Road.
MCHD File #6801B

FCD Development , LLC, is requesting an Improvement Permit for the above referenced lot. Mr. W.R. Marlin has evaluated the soils (see attached MCHD soil sheets) and S&ME, Inc. has flagged the system and repair on the lot. The septic lines have been located by S&ME and are shown on the attached maps. The attached sketch and specifications are not an Improvement Permit and are intended only to assist the MCHD in permitting the referenced lot off of Sample Rd.

We understand that a building permit cannot be issued until your office issues an Authorization to Construct (ATC). The buyer will apply for the ATC. If the buyer's house pad does not fit in the "building envelope" shown on the Improvement Permit, we understand that the proposed system may have to be modified prior to your office issuing the ATC. **No grading shall take place on the lot prior to obtaining the ATC from the MCHD.**

Please review the attached system sketch and design specifications for the Improvement Permit. Any additions or revisions you feel are necessary can be made on the Improvement Permit. Please call if you have questions or comments.

## Design Specifications for Lot 63 off of Sample Rd. ✓ TCT
## MCHD File # 6801B

| | |
|---|---|
| Daily Design Flow: | 600 gpd |
| Number Bedrooms: | 5 bdr. |
| Basement or Crawlspace: | Crawl Space |
| Septic Tank Size: | 1500 gal |
| Pump Tank Size: | 1500 gal |
| **Primary System Loading Rate:** | **0.325 gpd/ft$^2$** ✓ |
| **Primary System:** | **LP PPBPS** |
| Number and length of laterals: | 1 line @ 58 ft. endfed<br>1 line @ 124 ft. centerfed (2 lines @ 62 ft.)<br>1 line @ 126 ft. centerfed (2 lines @ 63 ft.) |
| Total ft. of primary system: | 308 ft. (308 ft. required) |
| Number of T&J Panels: | 1 line @ 58 ft., 13 panels<br>2 lines @ 62 ft., 14 panels each (28 total) ✓<br>2 lines @ 63 ft., 15 panels each (30 total) ✓<br>Total of 71 panels |
| Flow Rate through system: | 35.5 gpm – use 5/32 in. holes with 3 ft. head pressure |
| Pump Requirements: | to be calculated by installer when specific house and pump tank locations are available |
| Dosing Volume: | approx. 256 gal. – (3.6 gal per panel)*<br>2.35 doses/day |
| Depth of effluent pumped per dose: | calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.) |
| Check Valve: | yes |
| Siphon break hole: | yes |

| | |
|---|---|
| Repair System Loading Rate: | 0.3 gpd/$ft^2$ |
| Repair System: | LP PPBPS |
| Total ft. of repair | 334 ft. (334 ft. required) |

Notes: Before placement of cap block, one panel on each line, near the center of the field should be observed filling to make certain that it does not overflow the top chamber into the air chambers. If overflow occurs, reduce floats by 25 gallons and reset until no overflow is observed.

| PPBPS Design Worksheet | | | | | | | File #: | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Tax #: | |
| **System Requirements** | | | | | | | Address: | Lot 63 Sample Rd. |
| Design Flow | 600 | gpd | | | | | | |
| LTAR | 0.325 | gpd/ft.^2 | | | | | Consultant: | Jacob Presley - S&ME, Inc. |
| Linear footage | 615 | ft. (conventional) | | | | | Phone: | 336-288-7180 |
| Linear footage | 308 | ft. (50% Reduction) | | | | | | |
| | | | | | | | Reviewed By: | T. THOMASON |
| **Design Layout** | | | | | | | Date: | 4-9-07 ✓ |
| Laterals | Length (ft) | # Panels | Calculated | | | | | |
| Line # 1 | 58 | 13 | 13.38 | | | | | |
| Line # 2 | 62 | 14 | 14.31 | | | | | |
| Line # 3 | 62 | 14 | 14.31 | | | | | |
| Line # 4 | 63 | 15 | 14.54 | | | | | |
| Line # 5 | 63 | 15 | 14.54 | | | | | |
| Line # 6 | 0 | 0 | 0.00 | | | | | |
| Line # 7 | 0 | 0 | 0.00 | | | | | |
| Line # 8 | 0 | 0 | 0.00 | | | | | |
| Line # 9 | 0 | 0 | 0.00 | | | | | |
| Totals | **308** | **71** | 71.08 | | | | | |

| T & J Panels | |
|---|---|
| Linear Feet | # Panels |
| 20 | 5 |
| 30 | 7 |
| 40 | 9 |
| 50 | 11 |
| 60 | 14 |
| | |
| 70 | 16 |

| **Absorption Area** | | |
|---|---|---|
| Length (ft) | Width (ft) | Area (ft^2) |
| 308 | 3 | 924 |

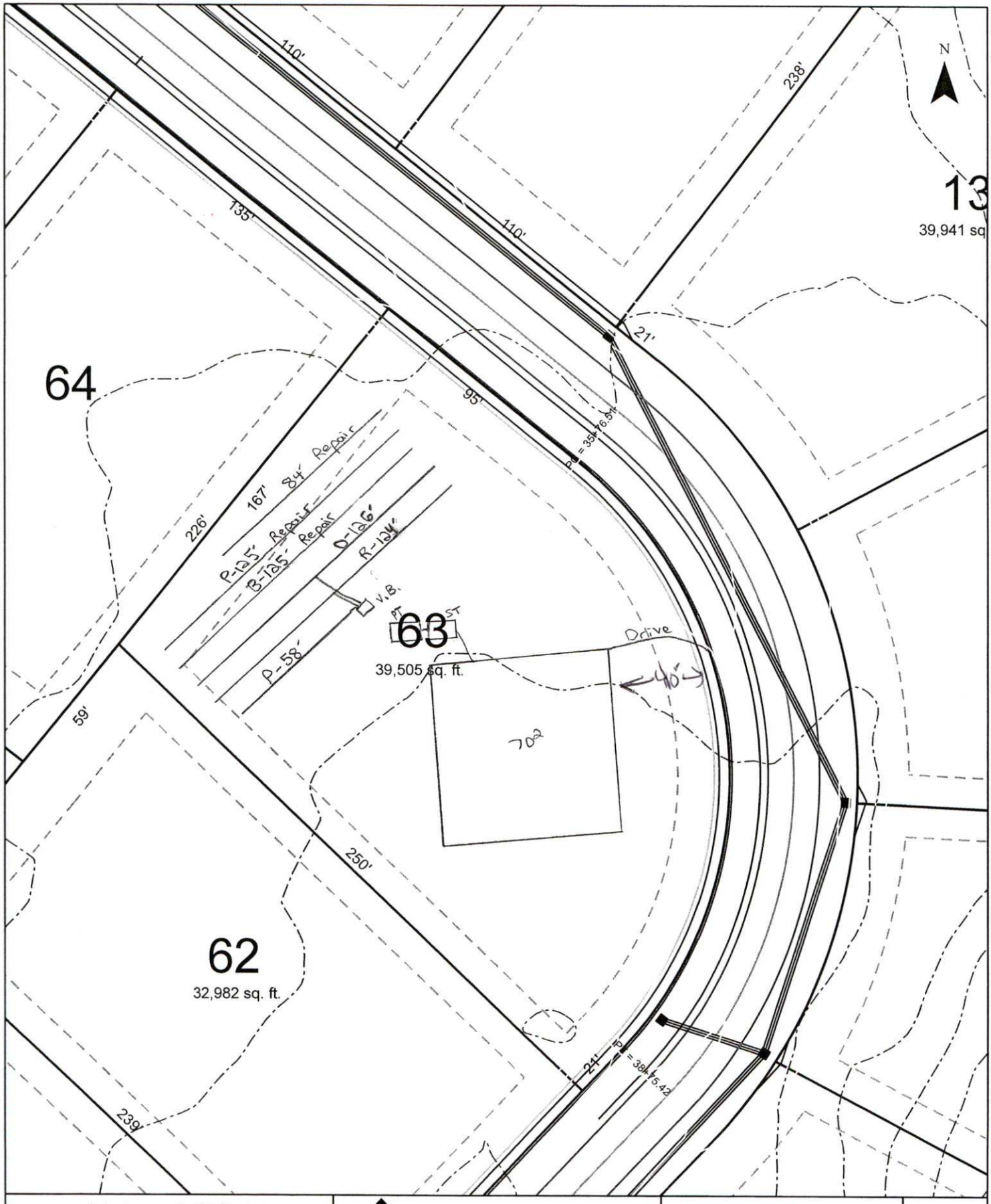
| | | | |
|---|---|---|---|
| **System Pressure Head** | 3 | ft. | Value selected by system designer (must be between 2-5 ft.) |
| **Orifice Diameter** | 5/32 | in. | Size selected by system designer (1/8 in. minimum) |
| **Flow Rate per Orifice** | 0.5 | gpm | Determined from orifice flow design table (use table from Flow Rate tab) |
| **Total System Flow Rate** | 35.5 | gpm | Total number of panels required multiplied by the orifice flow rate |
| **System Dose Volume** | 255.60 | gal. | Total number of panels required multipled by 3.6 gal./panel |
| **Doses Per Day** | 2.35 | cycles | Number of dose cycles per day based on daily design flow |
| **Pump Run Time** | 7.20 | min. | System dose volume divided by the total system flow rate |
| **Pump Tank Volume / Inch** | 29 | gal./in. | 1,000 gal. Pump tank, volume is approximately 21 gallons per inch. 1,500 gal. pump tank, volume is approximately 29 gallons per inch |
| **Pump Tank Drawdown** | 8.81 | in. | Depth of effluent pumped per dose cycle. |

Cells with blue shading require user input

Cells with yellow shading are automatically calculated.

**Comments:**

1. Install system using 3 ft. wide trenches.
3. System design requires effluent pump for distribution.
4. 100% Repair area is required.




| | | | |
|---|---|---|---|
| Scale: 1 inch equals 50 feet | S&ME | Faison-Sample Road, LLC | FIGURE |
| Drawn by: JBP | | Lot 63 | 1 |
| Reviewed by: Jeremy P. Michelone, RS | | Mecklenburg County, NC | |
| Date: February, 2007 | ENVIRONMENTAL SERVICES · ENGINEERING · TESTING | S&ME Project #1588-05-091 | |