

8639 CARLY LN

13903345

1/10/2008

duponbj

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

2007 UTS
OK

Groundwater & Wastewater Services
Septic Project File & Data Review Worksheet

GWS File #: 6531B WASPS App #: 2602

Primary ES assigned to project: DC

Secondary ES assigned to project:

Project Type: New System ☑ Alteration ☐ Repair ☐ Modified Plot Plan ☐ UTS ☑

I. File Review:

Rule or Law	Permit Application			
.1937(d)	Is the Application complete	Yes ☑	No ☐	N/A ☐
.1937(d)	Is there a Site plan/Plat with application	Yes ☑	No ☐	N/A ☐
.1937(d)	Is the Facility shown?	Yes ☑	No ☐	N/A ☐
.1937(d)	Are appurtenances shown	Yes ☑	No ☐	N/A ☐
	Site Evaluation Information			
.1939 (a)(1)	Topography and Landscape Position Recorded?	Yes ☐	No ☐	N/A ☐
.1940 (a-g)	Slope % Recorded?	Yes ☐	No ☐	N/A ☐
.1939 (a)(2)	Texture Class Recorded?	Yes ☐	No ☐	N/A ☐
.1939 (a)(2)	Structure type Recorded?	Yes ☐	No ☐	N/A ☐
.1939 (a)(2)	Consistence Recorded?	Yes ☐	No ☐	N/A ☐
.1939 (a)(2)	Mineralogy Recorded?	Yes ☐	No ☐	N/A ☐
.1939 (a)(3)	Soil Wetness Condition Recorded?	Yes ☐	No ☐	N/A ☐
.1939 (a)(4)	Soil Depth to Rock or Parent Material Recorded When Encountered	Yes ☐	No ☐	N/A ☐
.1939 (a)(5)	Depth to Restrictive Horizons Recorded When Encountered?	Yes ☐	No ☐	N/A ☐
.1939 (a)(6)	Sufficient Available Space Recorded?	Yes ☐	No ☐	N/A ☐
.1937(m)	Are the Profile Locations Shown?			
.1939(a)	Are the S/PS Profiles in system & in repair area?	Yes ☐	No ☐	N/A ☐
& .1945(b)	Number of auger borings made: _____ Were sufficient auger borings made?	Yes ☐	No ☐	N/A ☐
.1939(d), .1955, .1956, .1957	LTAR	Yes ☐	No ☐	N/A ☐
	Improvement Permit/Construction Authorization			
.1937(g) 130A-336(a)	Proposed System Type stated-Initial	Yes ☐	No ☐	N/A ☐
.1945(b)	Proposed System Type stated-Repair	Yes ☐	No ☐	N/A ☐
130A-336 (a)(3)	System location identifiable by setbacks - Initial	Yes ☐	No ☐	N/A ☐
.1937(g) .1945(b)	System components shown – Initial	Yes ☐	No ☐	N/A ☐
.1945(b)	Repair area shown	Yes ☐	No ☐	N/A ☐
.1937 (f)(g)	Does System design match facility, flow & WWcharacteristics?	Yes ☐	No ☐	N/A ☐
.1937 (f)(g)	Is System design consistent with soil/site conditions?	Yes ☐	No ☐	N/A ☐
.1937 (f)(g)	Is the System located in the approved area?	Yes ☐	No ☐	N/A ☐
130A-336(a)	Is the Design flow (gpd) indicated?	Yes ☐	No ☐	N/A ☐

8/14/07

ID 8/7/07
249382

Proj # ~~241234~~

FEE: 100 Chick 1024 Lucas South
DATE: 8/13/07
CRT [ ]

APPLICATION FOR APPROVAL TO USE AN EXISTING ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM
MECKLENBURG COUNTY - GROUNDWATER & WASTEWATER SERVICES
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

GWS -- UES.APP 06/07

2602

FILE #: 6531B

TYPE APPLICATION:

- [X] ADDITION - INCREASE ROOMS/OCCUPANCY/MOBILE HOME SIZE (A / M)
- [ ] ADDITION - RENOVATION OR GARAGE WITH NO MAJOR CHANGES (X)
- [ ] EXCHANGE MOBILE HOME - SAME # BEDROOMS (Y)
- [ ] COMMERCIAL OR INDUSTRIAL (N)

DC

PERSON FILING APPLICATION:
NAME: Daniel Leahy
ADDRESS: 8639 Carly Ln
CITY: Mint Hill
STATE: NC ZIP: 28227
PHONE: 704-573-0528
ALTERNATE PHONE:

PROPERTY OWNER:
NAME: Daniel Leahy
ADDRESS: 8639 Carly Ln
CITY: Mint Hill
STATE: NC ZIP: 28227
PHONE: 704-573-0528
ALTERNATE PHONE:

JOB LOCATION INFORMATION
TAX/PARCEL #: 139-033-45
STREET ADDRESS: 8639 W. Carly Ln
CITY: Mint Hill
STATE: NC ZIP: 28227
SUBDIVISION OR MOBILE HOME PARK NAME:
LOT #:

TOWNSHIP:

- [ ] 0-MECKLENBURG
- [ ] 1-CHARLOTTE
- [ ] 2-DAVIDSON
- [ ] 3-CORNELIUS
- [ ] 4-PINEVILLE
- [ ] 5-MATTHEWS
- [ ] 6-HUNTERSVILLE
- [X] 7-MINT HILL

WATER SUPPLY:

- [X] MUNICIPAL (M)
- [ ] COMMUNITY (C)
- [ ] PRIVATE WELL (P)
- [ ] SHARED WELL (S)
- [ ] OTHER 'SPRINGS' (O)

RESIDENTIAL PROPERTY TYPE:

- [X] HOUSE (H)
- [ ] MODULAR HOME (M)
- [ ] MULTIPLE FAMILY (U)
- [ ] SINGLE MOBILE HOME (S)
- [ ] DOUBLE WIDE (D)
- [ ] OTHER (O)

OCCUPANCY (both fields are required):
NUMBER OF BEDROOMS: 6
NUMBER OF OCCUPANTS: 4

COMMERCIAL / INDUSTRIAL PROPERTY TYPE:
TYPE OF BUSINESS:
EMPLOYEES PER SHIFT:
OF SHIFTS:
INDUSTRIAL WASTES? [ ] YES [ ] NO
UNDERGROUND STORAGE TANKS? [ ] YES [ ] NO

ADDITION TYPE ATTACHED TO EXISTING STRUCTURE:

- [ ] BEDROOM
- [ ] BATHROOM
- [ ] KITCHEN
- [ ] DINING ROOM
- [ ] LIVING ROOM
- [ ] DEN
- [ ] GARAGE
- [ ] SUNROOM
- [ ] PORCH
- [X] DECK
- [ ] OTHER

ADDITION TYPE DETACHED FROM EXISTING STRUCTURE:

- [ ] DETACHED GARAGE
- [ ] DETACHED GARAGE WITH PLUMBING
- [ ] POOL HOUSE
- [ ] SHOP
- [ ] BARN
- [ ] STORAGE SHED
- [ ] DETACHED PORCH / DECK
- [ ] OTHER

*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.

Daniel Leahy
Owner's/Agent's Signature

08-10-07
Date

*The undersigned, an authorized agent of the Mecklenburg County Health Department, certifies that the Department has approved the Request for the Job Location contained in this document. This approval is granted in accordance with the provisions of Laws and Rules for Sanitary Sewage Collection, Treatment and Disposal in effect at the time of issuance of the permit and is subject to the following provisions:

- No work shall be conducted on the septic tank system until an installation, construction, alteration and/or repair approval is granted y this Department.
- This permit is not transferable.

[ ] ADDITION / RENOVATION APPROVAL - VALID 1 YEAR FROM ISSUANCE
[ ] MOBILE HOME EXCHANGE APPROVAL - VALID 6 MONTHS FROM ISSUANCE

ADDITION APPROVED. O.K. TO USE EXISTING SYSTEM.

EHS Signature

Date 8/20/07

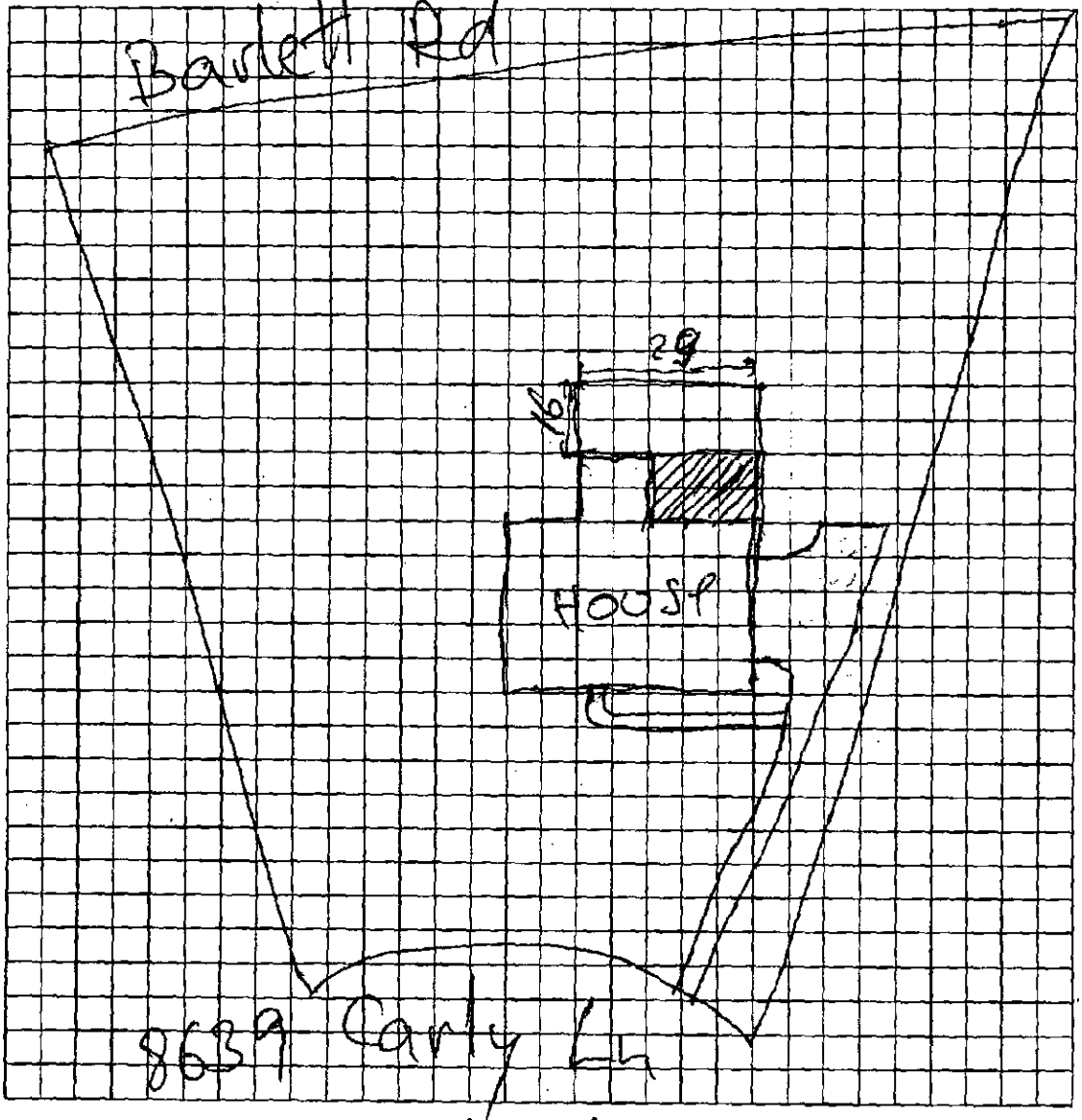
Proj # 247234

File #_____
Date_____

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

PROPOSED PLOT PLAN

A map showing existing and proposed property lines and easements with dimensions, the location of the single family residence, non-single family residence, or other facility, and appurtenances, the site for the proposed well, and the location of existing or proposed sewer lines and/or sewage disposal systems, surface water bodies, aboveground or underground storage tanks. Name all roads adjoining the property. If this a repair indicate the type of repair.



Owner/Agent Signature	David Lodin
Date	8-10-07

LBC 12/15/04

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	08/10/07	**Amount:**	100.00
Receipt #:	52184	**Tendered:**	100.00
Check / Auth #:	CHECK 1026	**Returned:**	100.00
Received By:	POWELPT		

Account Information

Account #: 100000
Contractor: LEAHU, DANIEL
Attn:
Address: 8639 CARLY LN
Address:
City/State/Zip: MINT HILL, NC 28227

Item	Description	Permit#	Quantity	Unit Price	Total Price
0705	MH Exc/Add/Repl w/o System Mod DECK @ 8639 CARLY LN		1	100.00	100.00

Bank of America Advantage

DANIEL LEAHU 07-07 AZ DL# 01116872 1026
IUDITA LEAHU
8639 CARLY LN.
MINT HILL, NC 28227-7040

66-19/530 NC 24

Date 08-10-07

Pay to the order of Mecklenburg County $ 100 00

one hundred 00/100 Dollars

Bank of America

ACH R/T 053000196

Memo Project #247234

David Leahu

⑆053000196⑆ 237005010 253⑈ 1026

---------- Outstanding Balances ----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance

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

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 6531B Permit #: _____ Tax Parcel #: 139-033-45

Property Owner: NUR, INC

Job Location Address: 8639 CARLY LN. LOT 35

City: MINT HILL State: _____ Zip Code: 28227

Operation Permit Issuance Date: 12/7/06 Contractor Name: SID GASKIN

Permitted Design Flow: 720 GPD

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: 1500 gallons

Effluent Pump Model: _____

Drainfield Installation ☐ N/A

Trench Depth: 36 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.) INNOVATIVE

Total line length: 600 feet 25% REDUCTION

# of Lines: 6 @ 100 feet CHAMBER

Depth of Media: N/A inches (Type) III.b,g

Depth of Cover: 12 inches

Distribution Device: PRESSURE MANIFOLD

Bed Installation *(For Repair Installations ONLY.)* ☑ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

Water Supply Source

☑ Municipal ☐ Private Well ☐ Community Well

☐ Other _____

System Installation Setbacks

Distance from Building Foundation: 5 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 7100 feet

Inspection Dates

Tank(s) Inspected: 12/7/06

Excavation Inspected: 12/7/06

Pump & Controls Inspected: 12/7/06

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)

INSTALLED ACCORDING TO PLANS ON FILE SUBMITTED BY LARRY T. & THE CATENA GROUP, 7/17/06

The undersigned has inspected the Septic Tank System described above, and certifies it has been ☐ installed ☐ altered ☐ repaired ☐ as detailed in the plot above ☐ in accordance with the permit issued and meets the provisions of 15A NCAC 18A. 1900, "Laws and Rules for Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. The issuance of this Operation Permit does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 15A NCAC 18A. 1900 in addition to those listed below under "Comments." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the Suspension or Revocation of this permit.

Comments: System Classification & Type: III.b,g, INNOVATIVE, 25% REDUCTION, CHAMBER. 6 LINES INSTALLED @ 100' EACH. INSTALLED ACCORDING TO DESIGN SPECS

DENR Authorized Agent: DAVID CORNELIUS, Signature: _____

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

INSTALLATION APPROVAL for an
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 6531B Permit #: _____ Tax Parcel #: 139-033-45

Property Owner: NVR, INC.

Job Location Address: 8639 CARLY LN. LOT 35

City: MINT HILL State: NC Zip Code: 28227

Installation Approval Issuance Date: 12/5/06

Permission is hereby given to ☑ install ☐ alter ☐ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge, as specified herein at the described location. This approval is granted based upon the application information submitted to our office. All work shall be completed on or before 1/1/2007, after which date this approval shall be null and void. The system shall meet all of the construction requirements of 15A NCAC 18A .1900 which are in effect on the date of granting this approval. An **Operation Permit** must be obtained from the Mecklenburg County Health Department before any system can be covered up or placed into service. The issuance of this permit does not in any way guarantee that the system anticipated to be constructed will operate properly, or relieve any person now of hereafter owning, controlling or using such system from any liability resulting from the failure of the system to operate properly.

***NOTICE: This system shall not be installed while soils are in a wet condition.**

Permitted Design Flow: 720 GPD

Site LTAR: 0.3 GPD/ft² (For new installations only.)

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: 1500 gallons

Drainfield Design ☐ N/A

Trench Depth: 30 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.) INNOVATIVE 25% REDUCTION

Total line length: 600 feet

# of Lines: 6 @ 100 feet

Depth of Media: N/A inches (Type) IIIb/g

Distribution Device: PRESSURE MANIFOLD

Bed Design *(For Repair Installations ONLY.)* ☑ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Distribution Device: _____

Water Supply Source

☑ Municipal ☐ Private Well ☐ Community Well

☐ Other _____

Minimum System Setbacks

Distance from Building Foundation: 5 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 7100 feet

SKETCH OF SYSTEM LAYOUT
(Proposed Layout)

INSTALL ACCORDING TO PLANS ON FILE SUBMITTED BY LARRY THOMPSON & THE CATENA GROUP, 7/17/06.

Comments: System Classification & Type: IIIb/g, INNOVATIVE, 25% REDUCTION. INSTALL 6 LINES @ 100' EACH, 1500 gal SEPTIC & PUMP, PRESSURE MANIFOLD. TYPE IIIa REPAIR.

DENR Authorized Agent: DAVID CORNELIUS Signature: _____

Hillsboro Manufacturing

Qty: 2,100

Unit: ea

Material: Cast Iron

Finish: Machined

Weight: 1500 lbs

Lead Time: 12 wks

Price: $0.73 ea

Total: $1,533.00

Ship To: Hillsboro Manufacturing, Dock 3, 1500 Industrial Way, Hillsboro, OR 97124

Special Instructions: Inspect per drawing rev C. Notify receiving 24 hrs before delivery.

Requested By: J. Martinez

Approved By: _____

Date: 3/14/24

Valley Fabrication Co.

Attn: Purchasing Dept.

Fax: 503-555-0192

Phone: 503-555-0187

Date: 3/12/24

Qty: 1500

Unit: ea

Material: Steel Plate

Finish: Powder Coat

Weight: 1500 lbs

Lead Time: 8 wks

Price: $0.42 ea

Total: $630.00

Ship To: Hillsboro Manufacturing, Dock 3, 1500 Industrial Way, Hillsboro, OR 97124

Special Instructions: Inspect per drawing rev C. Notify receiving 24 hrs before delivery.

Requested By: J. Martinez

Approved By: _____

Date: 3/14/24

6531B

Residential Subsurface Wastewater Treatment and Disposal System Design

for

Lot 35 – Stonebridge at Mint Hill
8639 Carly Lane
Mint Hill, North Carolina

Tax Parcel # 139-033-45
Mecklenburg County File # 6531B
July 17, 2006

APPROVED ON 7-19-06 TREVOR

Prepared for:

NVR, Inc.
10815 David Taylor Drive, Ste. 100
Charlotte, NC 28262

Prepared by:

Larry Thompson, RS, PWS, SSIT
The Catena Group, Inc.
410-B Millstone Drive
Hillsborough, NC 27278
Phone: 704-301-4881
Fax: 704-888-1496



CC: Mr. David Cornelius, RS
Mecklenburg County Environmental Health

Approved For Release
2001/08/27 : CIA-RDP78-04718A000100010001-1

Details

In an application for an Improvement Permit filed with the Mecklenburg County Health Department (MCHD) by NVR, Inc., the subject property was proposed to be developed with a single family 6-bedroom residence served by a municipal water supply. Based upon this information, a soil and site evaluation was conducted by the MCHD where the lot was determined to be "Provisionally Suitable" for the installation of a subsurface wastewater treatment and disposal system in accordance with the *Laws and Rules for Sewage Treatment, and Disposal Systems* 15A NCAC 18A .1900 (North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section).

The Catena Group, Inc. (TCG) has been contacted to help facilitate the issuance of an Improvement Permit by the MCHD for a 6-bedroom residence with an in-ground swimming pool. Given this information, TCG has determined that a sufficient amount of "Suitable" Group IV soils are located on the property which would allow for the Type III septic system with a Type IV pressure dosed pre-fabricated porous block panel system (repair). It is the desire of the owner that the MCHD consider reclassifying this lot as "Suitable", allowing for the issuance of a Construction Authorization, based upon the following proposal.

Location

The subject property is located in Stonebridge Subdivision (Lot 35 – 8639 Carly Lane) in the town of Mint Hill, North Carolina. From NC 51, travel south on NC 218 approximately 0.9 mile, turn left onto SR 3109 (Bartlett Road). Stonebridge is the first subdivision on the right after crossing the I-485 overpass. Turn right onto Stonebridge Way and left onto Carley Lane. 8639 Carly Lane will be located on your left in the cul-de-sac.

References

Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A, Section .1900, Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, May 2006.

Onsite Wastewater Treatment and Disposal Systems; EPA 625/R-00/008 Design Manual, February 2002.

Innovative Wastewater System Approval: IWWS-95-3-R3; North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, April 18, 2002.

Innovative Wastewater System Approval: IWWS-93-1-R4; North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, November 1, 2005.

Plans and Specifications

Septic Tank

- The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and 1500 gallons in capacity.
- The septic tank will be fitted with an approved effluent filter and riser for easy access and periodic maintenance.
- It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tank has had time to properly cure and is free of cracks or other structural deficiencies.

Pump Tank

- The pump tank shall be State approved, of one-piece construction, watertight, structurally sound and 1500 gallons in capacity. Again, it is the responsibility of the septic tank contractor to thoroughly inspect each pump tank prior to accepting delivery.
- The pump tank shall have access risers that extend, at a minimum, 6 inches above finished grade and must have less than 36 inches of fill over its top once finished grade has been established (a reinforced concrete tank will be required if finished soil cover is 36 inches or greater in depth).
- The pump and alarm controls shall be provided with manual circuit disconnects within a watertight, corrosion resistant, Nema 4X rated control panel. The control panel must be securely mounted outside, adjacent to the pump tank riser and at a minimum of 12 inches above finished grade. Pump and float control wiring should be long enough to reach from the tank to the control panel without splicing, routed through wire conduit, and sealed at the openings within the pump tank as well as the control panel enclosure. It is paramount that the conduit is properly sealed to prevent the escape of flammable gases from the pump tank. Furthermore, there must be two electrical circuits for the pump tank controls: one for the pump and one for the alarm controls.
- The pump tank shall have a properly functioning high water alarm incorporated into the control panel. The alarm circuit shall be supplied separate from any pump overload and short circuit devices. The alarm shall be both audible and visible by the system users.
- The float switch for the high water alarm should be mounted at a location slightly above the "pump on" elevation for the pump float control switch. The high water alarm float switch shall not be set more than 3 inches above this elevation.
- Pump float(s) shall be mounted so that the effluent at the end of a pump cycle is above the top of the effluent pump. The septic contractor must determine pump draw down and set the float switch accordingly.
- Float switch tie downs must be made of a corrosion resistant material (do not use electrical tape or metal hose clamps to secure these switches). Floats should be

mounted on a separate "float tree" rather than the pump supply line (see pump tank detail).

- The pump must be placed on two 4-inch concrete blocks to allow for some settling of solid particulates within the pump tank.

Pump Tank Effluent

- The pump discharge piping shall be fitted with a pressure effluent filter. The filter must be equivalent to the GAG Sim Tech Filter, Boyne City, Michigan, 49712, and telephone: 1-888-999-3290. This device provides a very high degree of filtration and is highly recommended.

Pipe and Fittings

- All discharge piping, supply lines, valves and disconnects should be made of PVC.
- All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
- The supply line from the pump tank to the pressure manifold shall be 2 inch Schedule 40 PVC (approximate length of supply line is 160 feet).

Pressure Manifold (Septic Drain Field)

- The pressure manifold shall be contained within an adequately sized box/vault that is designed to allow for drainage of effluent that may accumulate in it during flushing and head pressure adjustments. The box should be placed upon a gravel base.
- A gate valve shall be provided at the Pressure Manifold box to allow for final pressure adjustment (2 foot of head pressure as per design).
- There shall be 6 taps (Sch. 80 PVC - direct thread or saddle), ½ inch in diameter, each to have a true union ball valve that will allow for future removal/replacement.
- The connecting pipe between the Pressure Manifold taps and the 4-inch single wall corrugated pipe shall be constructed of PVC.

Septic Drain Field Installation

- The drain field has been previously laid out on-site utilizing metal stemmed flags. Once this area has been approved by the MCHD, the property owner/builder should mark this area and isolate it as much as possible from construction traffic. Prior to the system installation, the septic contractor shall contact the MCHD and the system designer for a preconstruction conference at which time the drainfield area will be re-verified.
- Under no circumstances shall any construction take place within the drainfield area while the soil is in a wet condition. If the installer has doubts as to whether or not the drainfield area is dry enough to begin construction, the Mecklenburg County Health Department should be contacted for permission to proceed with the installation.
- The specified system is a Type III Innovative, specifically the **Infiltrator chamber nitrification trench system**.

- The drain field consists of (6) lateral trenches to be constructed 3 foot wide by 100 feet in length.
- The maximum trench depth for this system shall be 36 inches.
- The laterals are to be installed on contour with the land, keeping the individual trench bottoms level from beginning to end.
- The trenches should be left open for the final inspection by the MCHD.

Proper Operation Check

- After all components of the waste water disposal system have been installed and connected, the system shall be checked for proper operation.
- With the electrical power turned off, fill the pump tank with water until the liquid rises to a level high enough to activate the high water alarm float. Turn on the electrical power. The alarm, alarm light and pump should activate at this time. Turn off the electrical power once these checks have been performed and prepare to set the head pressure at the manifold box.

Pressure Head Adjustment

- A 2-foot section of pipe (standpipe) shall be threaded into the "pressure head check tap" and the pump activated once again. The gate valve should be adjusted so that the water exiting this 2-foot section of pipe is barely trickling out of it. Once the 2-feet of head pressure has been properly set, the pump can be turned off and the standpipe removed. A male threaded plug should be used to replace the standpipe.
- Turn the pump on again and allow it to run through the remainder of the cycle. The pump float switch will automatically turn the pump off if it is operating properly. Make sure that the effluent pump is completely submerged in the remaining water, making adjustments to the float switch(es) as needed. This completes the checks for proper operation of the pump, alarm and float switches.

Final Landscaping

- The drainfield shall be shaped to shed rainwater and be free from low spots.
- The entire area of the drainfield should be planted with grass as soon as possible to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

Utility Conflicts

- 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. If there are any questions regarding preferred routes, contact the MCHD as soon as possible.

Maintenance

In General

- The minimum inspection/maintenance frequency for a Type III system is once every 5 years by the local health department. However, it is recommended that the homeowner contract with a reputable subsurface system operator to perform an annual maintenance inspection to ensure that the system is operating properly.
- The septic and pump tanks shall be pumped every 4 years or when the solids within the septic tank reach an elevation that is equivalent to 1/3 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.
- 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.
- All piping and valves should be inspected annually for damage and corrections/repairs made immediately.
- The pump and float controls/switches should be inspected annually to assure proper operation
- The drain field area should be maintained to prevent over growth of vegetation. Any damp areas, leakages or malfunctions should be addressed immediately.
- Divert gutter downspouts and surface water runoff away from the septic and pump tanks.

Suggestions to the Homeowner

- As previously mentioned, if you plan to use a garbage disposal in your home you should plan to have your septic and pump tanks cleaned out annually. The ground up garbage adds large amounts of solids into a septic tank that tend to degrade at a very slow rate.
- Grease, cooking oils, coffee grounds and non-degradable solids (disposable diapers, cigarettes and solid paper wastes) should never be put into a septic tank.
- Used motor oil or any oily liquids should not be disposed of in a septic tank.
- Be aware of the amount of water that you are using in your home. Water saving fixtures and devices can be installed on sinks, toilets and showers to reduce the volume of wastewater that you are sending to your drain field.
- Run dishwashers and washing machines only when you have a full load.
- Use liquid detergents. Powdered detergents have binding agents in them that tend to solidify in the wastewater disposal system.
- Repair leaky faucets and toilets. Small drips equal large volumes of water over time and can over burden your drain field.
- Do not use chemical additives in your system. Studies have indicated that they do not increase the biological activity that naturally occurs in the septic system and in some cases certain additives have been found to be detrimental to the life of a system.

Design Specifics

Daily Design Flow:	✓720 GPD – 6 bedroom house
Septic Tank Size:	✓1500 gallons (2 compartments)
Pump Tank Size:	✓1500 gallons
Effluent Loading Rate:	✓Design = 0.3 GPD per sq. ft. (25 percent reduction proposed)
Supply Length and Diameter:	Approx. 160 feet of 2 inch Sch. 40 PVC (please see note at the bottom of this page.)
Number and Size of Taps (Manifold):	✓(6) ½ inch taps (Sch. 80 PVC)
Septic Drain Lines:	✓(6) 3' W x 100' L x 36" D
Septic Dosing Volume:	✓350 gallons per dose
Flow Rate Through System:	✓32.88 gallons per minute
Total Dynamic Head:	27.0 (may vary, please see note at the bottom of this page)
Pressure Head:	✓2 feet
Pump Requirements:	✓34.88 GPM at 27.0 feet of head (added 2 GPM for vapor lock) ok ANTI-SIPHON HOLE
Depth of Water Pumped:	14" (assuming 29 gallons per inch) check with individual tank manufacturer for exact gallons per inch (1 cu. ft. of water equals 7.5 gal.)
Pump Run:	10 ~~12~~ minutes $\frac{350\ GAL}{34.88\ GPM}$ = 10 MIN.
Check Valve:	Yes
Vapor Lock Hole:	Yes (A vapor lock hole can reduce vibrations in the discharge pipe upon start up and shut down)

$\frac{350\ GAL}{29\ GAL/IN^2}$ 12 IN.

(*) Please note that supply line and elevation head measurements are approximate. It is the contractor's responsibility to confirm these values based upon the actual house and plumbing location. If there is a discrepancy, contact the system designer prior to beginning construction.

1½" SCH 80 TAP @ 2' = 5.48 GPM

5.48 GPM × 6 = 32.88 GPM

DELTA LAND SERVICES, INC.
033 FLORENCE AVENUE, SUITE 100
HARLOTTE, NORTH CAROLINA 28212
(704) 536-6190

BARTLETT ROAD
(S.R. #3109)
80' PUBLIC R/W

C2

C3

158.

100'
100'
100'
100'
100'
100'

10'

9'

9'

Pressure Manifold

PPBS

Repair Area

2" SCH 40 PVC Supply Line ±

305.15'

SCALE: 1"=30'

Stonebridge at Mint Hill
LOT 35

REPOSED Pool

Pump Tank →

Septic Tank →

N 10°03'10" W 202.42'

64.85

35.00

64.00

S 10°12'50" W

N/F
M. DORIS HOKE
DB 5593 PG 241

C1

LANE EAST
E R/W (PROPOSED)

N 49°46'13.10" W

LOT 36
RECORDED

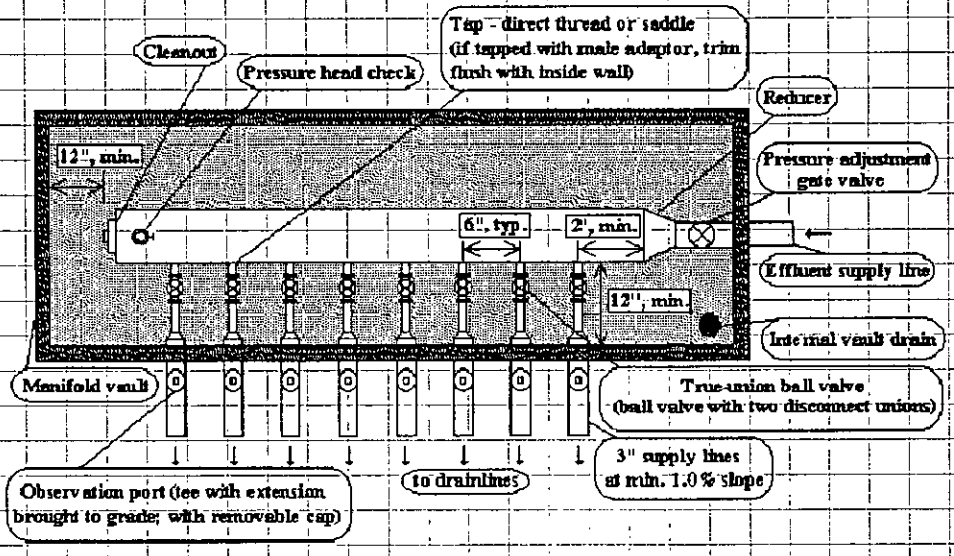
CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C1	65.00	171.33	125.07	N27°29'13"W	151°01'29
C2	2891.33	385.52	385.52	N61°46'22"E	0°23'42
C3	452.38	91.27	91.12	N55°[illegible]39"E	11°33'45

The Catena Group
410-B Millstone Drive
Hillsborough, NC 27278

File Number: 6531B
Location: Lot 35 – Stonebridge
Date: July 17, 2006

Lot 35 – Stonebridge at Mint Hill
Recommended Pressure Manifold Design

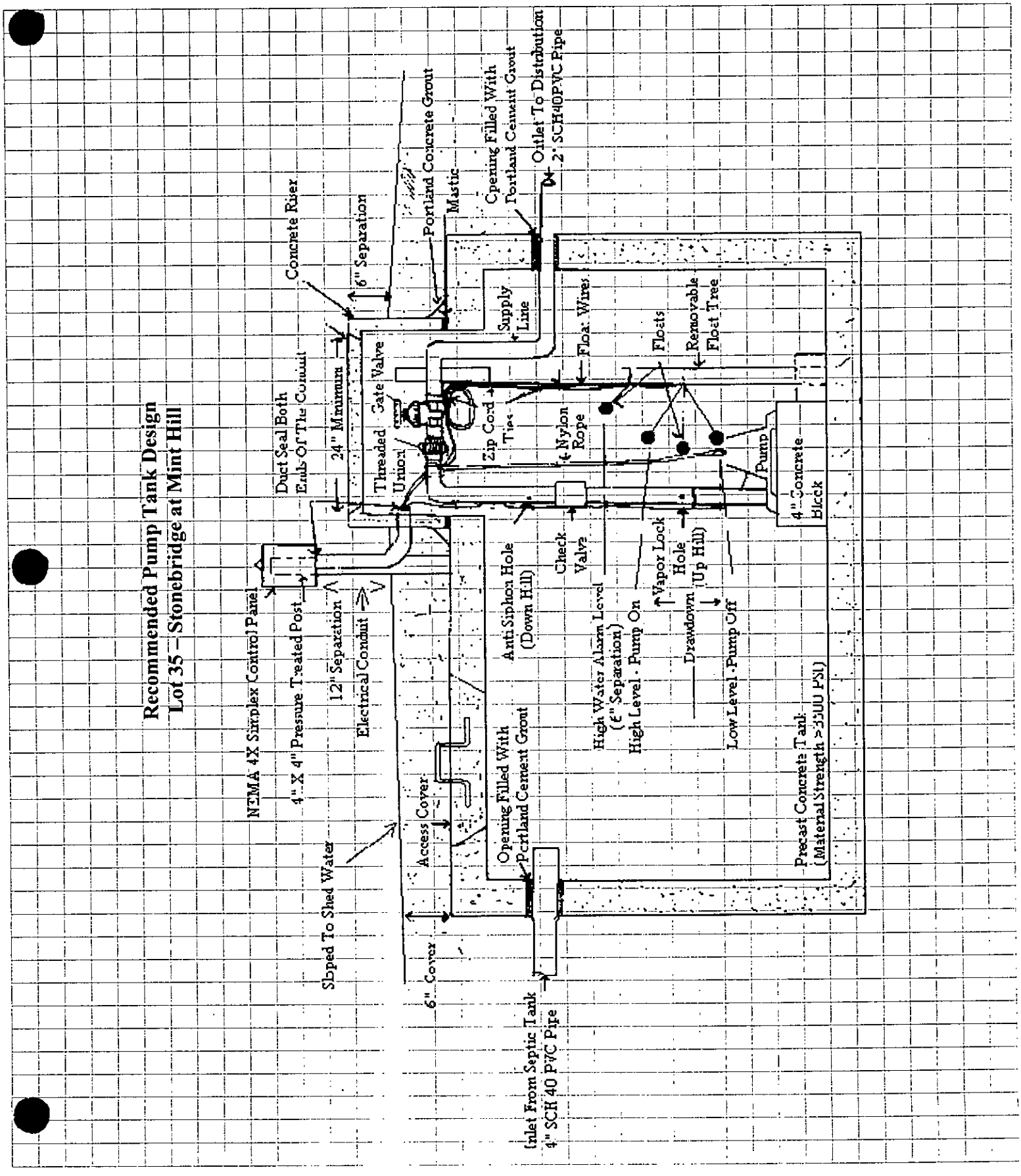


The Catena Group
410-B Millstone Drive
Hillsborough, NC 27278

Permit Number: 6531B

Location: Lot 35 – Stonebridge

Date: July 17, 2006



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

Sheet: 1 of 2
Property ID: 139-033-45
Lot #: 35
File #: 6531B
Code: 1

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

[redacted]er: NVR, Inc.
Applicant: Kim Stanley
Address: 10815 David Taylor Drive, Suite 100, Charlotte, NC 28262
Date Evaluated: 6/2/2006
Proposed Facility: Residence
Design Flow (.1949): 720 gpd
Property Size: 1.328a
Location of Site: 8639 Carly Lane
Property Recorded:
Water Supply: [x] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [x] 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	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1P	LS,10	0-18	GR/SCL	FR/SS/SP/SEXP	>48" TO SOIL WETNESS	48+	NA	NA	PS, IV
		18-48	SBK/C	FI/S/P/SEXP					.3 GPD/FT^2
2P	"	0-12	GR/SL	VFR/SS/SP/SEXP	"	34	S	"	"
		12-34	SBK/C	FI/S/P/SEXP					
[redacted]		34-48	M/SAP	L					
3P	"	0-10	GR/SL	VFR/SS/SP/SEXP	"	48+	NA	"	"
		10-48	SBK/C	FI/S/P/SEXP					
4P	"	0-7	GR/SL	VFR/SS/SP/SEXP	"	"	"	"	PS, IV
		7-48	SBK/ABK/C	FI/S/P/SEXP					.275 GPD/FT^2
5P	"	0-10	GR/SL	VFR/SS/SP/SEXP	"	"	"	"	PS, IV
		10-48	SBK/C	FI/S/P/SEXP					.3 GPD/FT^2

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
[redacted]m Type(s)		
Site LTAR	.3 GPD/FT^2	.3 GPD/FT^2

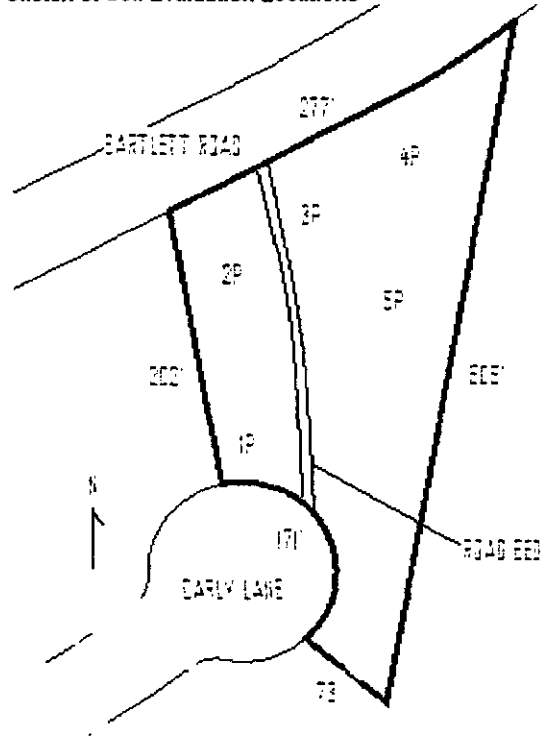
Other Factors (.1946):
Site Classification (.1948): Provisionally Suitable
Evaluated By: Chris Sherrill, RS, LSS, 6/2/06
Others Present: Kim Stanley

COMMENTS: 100% Repair Area

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
LS-Linear Slope				CR-Crumb
FS-Food Slope	II	SL-Sandy Loam	0.8 - 0.6	GR-Granular
NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
CC-Concave Slope	III	SI-Silt	0.6 - 0.3	PL-Platy
CV-Convex Slope		SICL-Silty Clay Loam		PR-Prismatic
T-Terrace				
FP-Flood Plain		CL-Clay Loam		
		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



Project #192874

FILE COPY	
FILED FOR REGISTRATION	DOC. # 1012302
8/4/06	TIME 11:46 am
20859	PAGE 879
N-S	REC FEE 20.00
JUDITH A. GIBSON, REGISTER OF DEEDS MECKLENBURG COUNTY, NC	

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

WASTEWATER TREATMENT AND DISPOSAL SYSTEM DESIGN AGREEMENT: 15A NCAC 18A .1948 AND ANY OF THE FOLLOWING RULES: .1956; .1957(a); .1957(b); or .1957(c); OR .1969

BR 1035

FILE # 6531B

PARCEL # 13903345

The undersigned, NVR Inc. DBA Ryan Homes, owner of property located at 9639 Carly Ln, (the "site") and described in an instrument recorded in Book 44 at Page 521, Mecklenburg Public Registry, hereby acknowledges that the undersigned applied to the Mecklenburg County Health Department (the 'Department") for a permit to install a septic tank sewage disposal system on the site; that the Department evaluated the site for suitability for such a system in accordance with the regulations promulgated by the North Carolina Commission for Health Services as 15A NCAC 18A .1900 et seq.; that the Department originally classified the site as "unsuitable" pursuant to the standards set forth in the regulations; that the undersigned requested that the Department reclassify the site as "provisionally suitable" in light of the particular septic tank system proposed by the undersigned; that the Department considered various studies, data, and other information which indicate to the Department that the septic tank system proposed by the undersigned is allowed by the rules; and that the Department therefore reclassified the site as "provisionally suitable" and issued an appropriate permit for such proposed septic tank system.

The undersigned further acknowledges that the proper design, construction, operation and maintenance of such septic tank system is the responsibility of the designer, owner, developer, installer, or user of the system, as applicable, and that neither the Department nor its officials, employees, or agents warrant or guarantee that the said system installed pursuant to the permit issued by the Department will function in a satisfactory manner for any given period of time or that the Department, its officials, employees or agents assume any liability for any damages of any kind which are caused, or which may be caused, by a malfunction of such system.

The undersigned further acknowledges that the following conditions will apply to the site:

This instrument was prepared by: NVR INC DBA Ryan Homes

Mail after recording to: 10815 David Taylor Dr Ste 100 Charlotte NC 28262

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 #: **30000879** GWS File #: **6531B** Tax Parcel #: **139-033-45**

- 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):** 7/21/2011

Type of Installation: Residential - New System Lot Number: 35

Structure Type: HOUSE Size (ft^2): 3500 # Bedrooms: 6 # Occupants: 4

Building Foundation: Crawl Space Water Supply:

II. Initial System Type: Pump to Innovative or Experimental **System Classification:** IIIb

Initial System Specifications:

Design Flow (gpd): 720 LTAR (gpd/ft^2): 0.3 Septic Tank Size (gal): 1500 Pump Tank Size (gal): 1500

Trench Width (ft): 3 Trench Spacing (ft): 9 Absorption Area (ft^2): 1800 Total Trench Length (ft): 600

Maximum Trench Depth (in): 36 Depth of Media (in): N/A Distribution Device: Pressure Manifold

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

Repair System Specifications:

Design Flow (gpd): 720 LTAR (gpd/ft^2): 0.3 Septic Tank Size (gal): 1500 Pump Tank Size (gal): 1500

Trench Width (ft): 3 Trench Spacing (ft): 9 Absorption Area (ft^2): 1200 Total Trench Length (ft): 400

Maximum Trench Depth (in): 36 Depth of Media (in): N/A Distribution Device: Pressure Manifold

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: David Cornelius

Signature: DC RS

Date Issued: 7/21/2006

Owner/Legal Agent: Patrice Garner

Print Name

Signature: Patrice Garner

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 #: **30000879** GWS File #: **6531B**

IV. Permit Conditions/Comments:

- This type of septic system requires an inspection once every 5 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.
- All components of the septic system must be installed in accordance with the required setbacks listed on the corresponding plot plan.
- Install according to plans on file submitted by Larry Thompson and the Catena Group, 7/17/06.

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:

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- This IMPROVEMENT PERMIT is transferable.

DENR Authorized Agent: David Cornelius

Signature: David Cornelius, RS

Date Issued: 7/21/2006

Owner/Legal Agent: Patrice Garner
Print Name

Signature: Patrice Garner

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

Sheet: 1 of 2
Property ID: 139-033-45
Lot #: 35
File #: 6531B
Code: 1

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: NVR, Inc.
Applicant: Kim Stanley
Address: 10815 David Taylor Drive, Suite 100, Charlotte, NC 28262
Date Evaluated: 6/2/2006
Proposed Facility: Residence
Design Flow (.1949): 720 gpd
Property Size: 1.328a
Location of Site: 8639 Carly Lane
Property Recorded:
Water Supply: [x] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [x] 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	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1P	LS,10	0-18	GR/SCL	FR/SS/SP/SEXP	>48" TO SOIL WETNESS	48+	NA	NA	PS, IV
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2P	"	0-12	GR/SL	VFR/SS/SP/SEXP	"	34	S	"	"
		12-34	SBK/C	FI/S/P/SEXP					
		34-48	M/SAP	L					
3P	"	0-10	GR/SL	VFR/SS/SP/SEXP	"	48+	NA	"	"
		10-48	SBK/C	FI/S/P/SEXP					
4P	"	0-7	GR/SL	VFR/SS/SP/SEXP	"	"	"	"	PS, IV
		7-48	SBK/ABK/C	FI/S/P/SEXP					.275 GPD/FT^2
5P	"	0-10	GR/SL	VFR/SS/SP/SEXP	"	"	"	"	PS, IV
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Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)		
Site LTAR	.3 GPD/FT^2	.3 GPD/FT^2

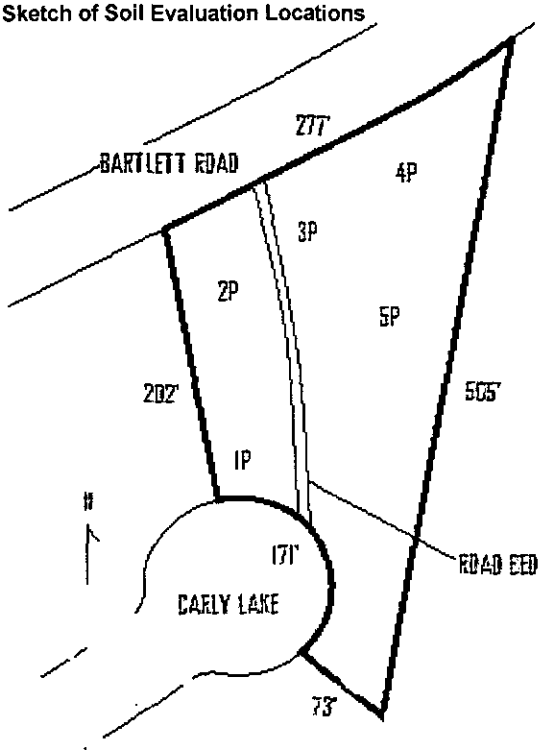
Other Factors (.1946):
Site Classification (.1948): Provisionally Suitable
Evaluated By: Chris Sherrill, RS, LSS 6/2/06
Others Present: Kim Stanley

COMMENTS: 100% Repair Area

Landscape Position	Group	Texture	.1955 LTAR	Structure
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NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
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CV-Convex Slope		SICL-Silty Clay Loam		PR-Prismatic
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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



#879

GWS – RES. APP 12/04

SEPTIC FEE: 200.00
DATE: 5/26/06
CRT [ ] x33575JKA

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

FILE # 6531B

WELL FEE: _____
DATE: _____
CRT [ ]

SEPTIC / TYPE APPLICATION: ☐ NONE ☒ NEW SYSTEM EXISTING SYSTEM: ☐ EXPANSION/ALTERATION ☐ REPAIR

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

JOB LOCATION INFORMATION:

TAX/PARCEL #: ~~139-03-225~~ 139-033-45
STREET ADDRESS: 8639 Carly Lane
CITY: Mint Hill
STATE: NC ZIP: 28227
SUBDIVISION OR MOBILE HOME PARK NAME: Stonebridge of Mint Hill
LOT #: 35
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: 3,500
NUMBER OF BEDROOMS: 4,5, or 6
NUMBER OF OCCUPANTS: 4

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: NVR, INC.
ADDRESS: 10815 David Taylor Dr., Ste 100
CITY: Charlotte
STATE: NC ZIP: 28262
HOME PHONE: WORK PHONE: 704-548-3534
MOBILE PHONE: FAX:

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: Kim Stanley
ADDRESS: PO Box 176
CITY: Stanfield
STATE: NC ZIP: 28163
HOME PHONE: 704-753-9639 WORK PHONE:
MOBILE PHONE: 704-791-6852 FAX: 704-785-8721

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 10/14/05
WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? Sept. 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.

Kim Stanley 5/25/06
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.

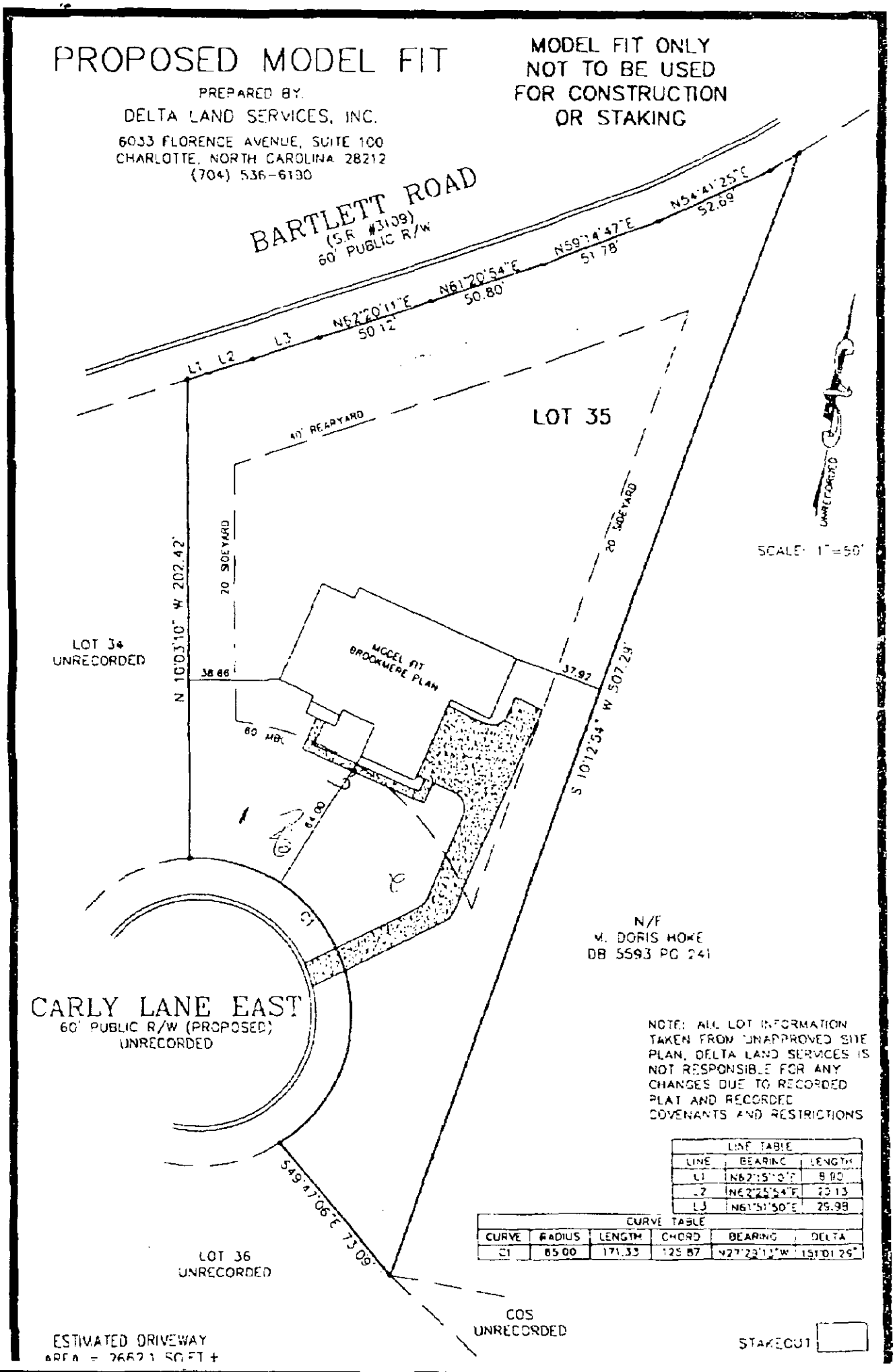
Owner's/Agent's Signature Date

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

PROPOSED MODEL FIT

MODEL FIT ONLY
NOT TO BE USED
FOR CONSTRUCTION
OR STAKING

PREPARED BY:
DELTA LAND SERVICES, INC.
6033 FLORENCE AVENUE, SUITE 100
CHARLOTTE, NORTH CAROLINA 28212
(704) 536-6130



NOTE: ALL LOT INFORMATION TAKEN FROM UNAPPROVED SITE PLAN, DELTA LAND SERVICES IS NOT RESPONSIBLE FOR ANY CHANGES DUE TO RECORDED PLAT AND RECORDED COVENANTS AND RESTRICTIONS

LINE TABLE

LINE	BEARING	LENGTH
L1	N62°15'10"E	8.90
L2	N62°25'54"E	22.13
L3	N61°51'50"E	25.98

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C1	65.00	171.33	125.87	N27°23'11"W	151°01'29"

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

05318

PERMIT TO CONDUCT MAJOR REPAIR AND/OR ABANDON A WATER SUPPLY WELL

Permit#: 10001494 **Tax Parcel #:** 139-033-45
Property Owner: NVR
Job Location Address: 8639 CARLY LN WEST
City/ETJ: CHARLOTTE **State:** NC **Zip Code:** 28227
Permit Issuance Date: 10/2/2006
Use of Well:
Type of Facility Served by Well: House
Sewage System Type: None

Type of Repair/Abandonment

- ( ) Major Repair Before Placing the Well in Service
- ( ) Major Repair Before Temporary Abandonment
- ( ) Temporary Abandonment
- (•) Permanent Abandonment

Area of Regulated Groundwater Usage Restrictions Apply: YES

If Yes, see requirements in Specific Conditions of This Permit.

General Conditions of This Permit:

- The Water Supply Well repair and abandonment must meet all requirements set forth in the *Mecklenburg County Groundwater Well Regulations* and any other applicable rules and laws.
- A North Carolina Certified Well Contractor must perform the well construction activities.
- Repair of any Water Supply Well with the well head terminating below ground surface (buried seal) shall include extending the well casing at least twelve inches above the surface.
- This Permit shall be VALID for a period not to exceed 12 months from the date of issuance.

Specific Conditions of This Permit (Check all that apply):

- [ ] Grout must be placed the full extent of the casing.
- [ ] Initial water sample to taken and analyzed for (check all that apply):
  - [ ] Volatile Organic Compounds (VOC's)
  - [ ] Semi-volatile Compounds
  - [ ] Metals (Specify in Other Conditions)
  - [ ] Pesticides
  - [ ] Herbicides
  - [ ] Other (See Below)

Other Conditions of This Permit:

No additional abandonment requirements prescribed per ARGU review. DFT.

DAVID GORNELIUS, RS
Authorized Agent: Print Name

Signature:

Allison Price, DL Mullis Well
Owner/Legal Agent: Print Name

Allison Price
Signature:

653B

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

PERMIT TO CONDUCT MAJOR REPAIR AND/OR ABANDON A WATER SUPPLY WELL

Permit#: 10001494 **Tax Parcel #:** 139-033-45
Property Owner: NVR
Job Location Address:8639 CARLY LN WEST
City/ETJ:CHARLOTTE **State:** NC **Zip Code:** 28227
Permit Issuance Date: 10/2/2006
Use of Well:
Type of Facility Served by Well: House
Sewage System Type: None

Type of Repair/Abandonment

- ○ Major Repair Before Placing the Well in Service
- ○ Major Repair Before Temporary Abandonment
- ○ Temporary Abandonment
- ◉ Permanent Abandonment

Area of Regulated Groundwater Usage Restrictions Apply: YES

If Yes, see requirements in Specific Conditions of This Permit.

General Conditions of This Permit:

- The Water Supply Well repair and abandonment must meet all requirements set forth in the *Mecklenburg County Groundwater Well Regulations* and any other applicable rules and laws.
- A North Carolina Certified Well Contractor must perform the well construction activities.
- Repair of any Water Supply Well with the well head terminating below ground surface (buried seal) shall include extending the well casing at least twelve inches above the surface.
- This Permit shall be VALID for a period not to exceed 12 months from the date of issuance.

Specific Conditions of This Permit (Check all that apply):

☐ Grout must be placed the full extent of the casing.
☐ Initial water sample to taken and analyzed for (check all that apply):

- ☐ Volatile Organic Compounds (VOC's)
- ☐ Semi-volatile Compounds
- ☐ Metals (Specify in Other Conditions)
- ☐ Pesticides
- ☐ Herbicides
- ☐ Other (See Below)

Other Conditions of This Permit:
No additional abandonment requirements prescribed per ARGU review. DFT.

DAVID CORNELIUS, RS
Authorized Agent: Print Name

Signature:

Owner/Legal Agent: Print Name

Signature:

#1494

GWS – RES. APP 12/04

[redacted]

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

[redacted]

FILE # 6531B

SEPTIC / TYPE APPLICATION: ☐ NONE ☐ NEW SYSTEM EXISTING SYSTEM: ☐ EXPANSION/ALTERATION ☐ REPAIR

WELL / TYPE APPLICATION: ☐ NONE ☐ NEW WELL ☐ MAJOR REPAIR ☒ ABANDONMENT Dennis first

JOB LOCATION INFORMATION:

TAX/PARCEL #: 13903345
STREET ADDRESS: 8639 Carly Lane West
CITY: Charlotte
STATE: NC ZIP: 28227
SUBDIVISION OR MOBILE HOME PARK NAME: Stonebridge
LOT #: 35
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: w/ public water
NUMBER OF BEDROOMS:
NUMBER OF OCCUPANTS:

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: NVR
ADDRESS: 10815 David Taylor #100
CITY: Charlotte
STATE: NC ZIP: 28227
HOME PHONE: WORK PHONE: 7042485119
MOBILE PHONE: FAX:

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: DL Mullis Well Drilling
ADDRESS: 9200 Surface Rd
CITY: Charlotte
STATE: NC ZIP: 28227
HOME PHONE: WORK PHONE: 7045455694
MOBILE PHONE: FAX: 704545 9449

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

*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.

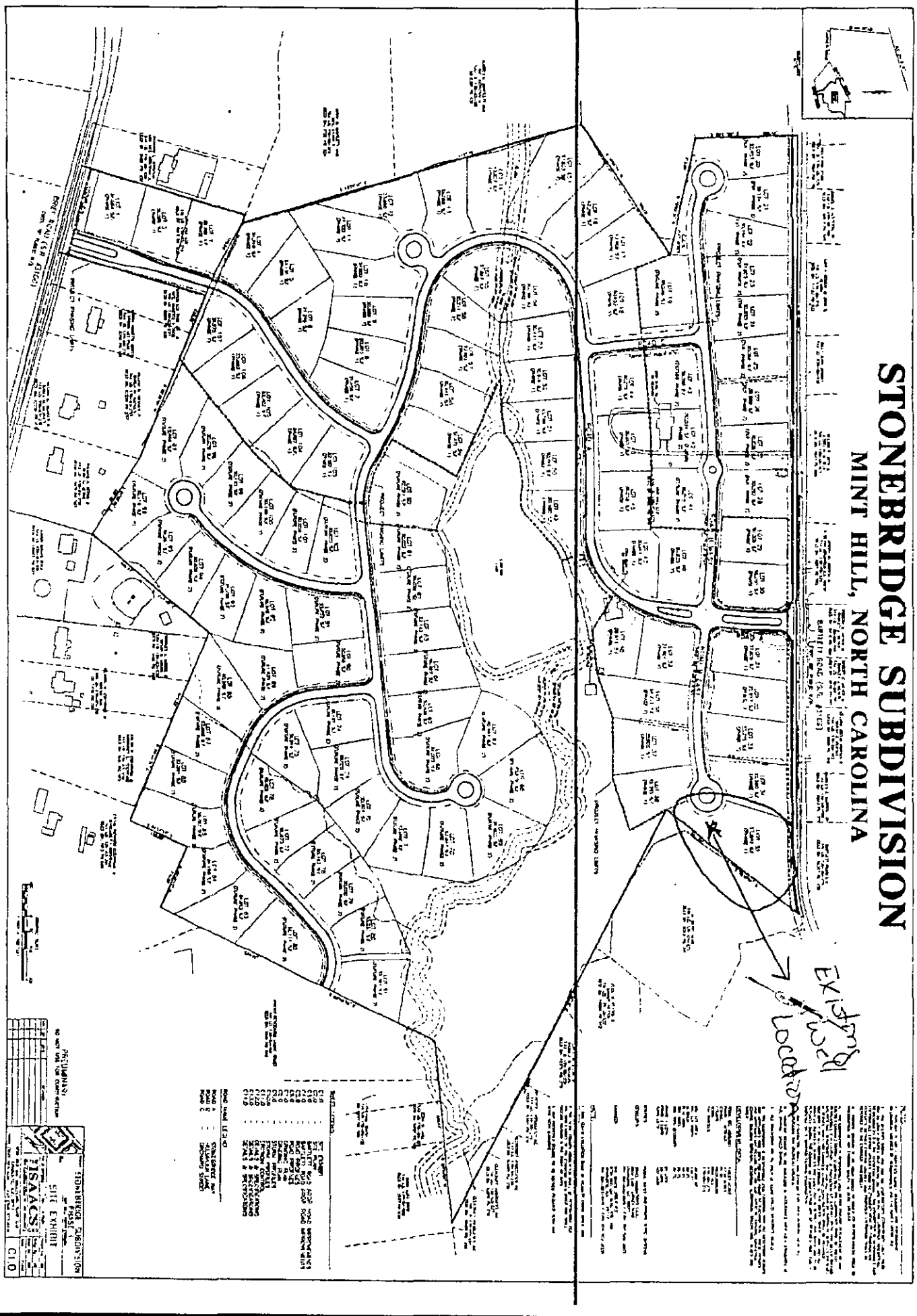
Owner's/Agent's Signature Date

*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.

Deanna Davidson for DL Mullis 9/26/06
Owner's/Agent's Signature Date

)RTH CAROLINA DEPARTMENT OF
VIRONMENT & NATURAL RESOURCES DIVISION
ENVIRONMENTAL HEALTH ON-SITE

MECKLENBURG COUNTY HEALTH DEPARTMENT
GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST., SUITE 211
CHARLOTTE, NC 28202


STONEBRIDGE SUBDIVISION
MINT HILL, NORTH CAROLINA
Existing Well Location
PRELIMINARY
NOT FOR CONSTRUCTION
SITE EXHIBIT
ISAACS
C1.0

2007 UTS OK

Groundwater & Wastewater Services
Septic Project File & Data Review Worksheet

GWS File #: 6531B WASPS App #: 2602

Primary ES assigned to project: DC

Secondary ES assigned to project: _____

Project Type: New System ☑ Alteration ☐ Repair ☐ Modified Plot Plan ☐ UTS ☑

I. File Review:

Rule or Law	Permit Application			
.1937(d)	Is the Application complete	Yes ☑	No ☐	N/A ☐
.1937(d)	Is there a Site plan/Plat with application	Yes ☑	No ☐	N/A ☐
.1937(d)	Is the Facility shown?	Yes ☑	No ☐	N/A ☐
.1937(d)	Are appurtenances shown	Yes ☑	No ☐	N/A ☐
	Site Evaluation Information			
.1939 (a)(1)	Topography and Landscape Position Recorded?	Yes ☐	No ☐	N/A ☐
.1940 (a-g)	Slope % Recorded?	Yes ☐	No ☐	N/A ☐
.1939 (a)(2)	Texture Class Recorded?	Yes ☐	No ☐	N/A ☐
.1939 (a)(2)	Structure type Recorded?	Yes ☐	No ☐	N/A ☐
.1939 (a)(2)	Consistence Recorded?	Yes ☐	No ☐	N/A ☐
.1939 (a)(2)	Mineralogy Recorded?	Yes ☐	No ☐	N/A ☐
.1939 (a)(3)	Soil Wetness Condition Recorded?	Yes ☐	No ☐	N/A ☐
.1939 (a)(4)	Soil Depth to Rock or Parent Material Recorded When Encountered	Yes ☐	No ☐	N/A ☐
.1939 (a)(5)	Depth to Restrictive Horizons Recorded When Encountered?	Yes ☐	No ☐	N/A ☐
.1939 (a)(6)	Sufficient Available Space Recorded?	Yes ☐	No ☐	N/A ☐
.1937(m)	Are the Profile Locations Shown?			
.1939(a)	Are the S/PS Profiles in system & in repair area?	Yes ☐	No ☐	N/A ☐
& .1945(b)	Number of auger borings made: _____ Were sufficient auger borings made?	Yes ☐	No ☐	N/A ☐
.1939(d), .1955, .1956, .1957	LTAR	Yes ☐	No ☐	N/A ☐
	Improvement Permit/Construction Authorization			
.1937(g) 130A-336(a)	Proposed System Type stated-Initial	Yes ☐	No ☐	N/A ☐
.1945(b) 130A-336 (a)(3)	Proposed System Type stated-Repair System location identifiable by setbacks - Initial	Yes ☐	No ☐	N/A ☐
.1937(g) .1945(b)	System components shown – Initial	Yes ☐	No ☐	N/A ☐
.1945(b)	Repair area shown	Yes ☐	No ☐	N/A ☐
.1937 (f)(g)	Does System design match facility, flow & WWcharacteristics?	Yes ☐	No ☐	N/A ☐
.1937 (f)(g)	Is System design consistent with soil/site conditions?	Yes ☐	No ☐	N/A ☐
.1937 (f)(g)	Is the System located in the approved area?	Yes ☐	No ☐	N/A ☐
130A-336(a)	Is the Design flow (gpd) indicated?	Yes ☐	No ☐	N/A ☐

130A-336(a)	Number of Bedrooms, employees, seats, etc. indicated?	Yes ☐	No ☐	N/A ☐
.1937(g)	Trench depth indicated?	Yes ☐	No ☐	N/A ☐
.1937(g)	Trench width indicated?	Yes ☐	No ☐	N/A ☐
.1937(g)	Trench length indicated?	Yes ☐	No ☐	N/A ☐
130A-336(a)(1)	Proposed/existing well shown?	Yes ☐	No ☐	N/A ☐
130A-336(a)(1)	Property line lengths shown?	Yes ☐	No ☐	N/A ☐
130A-336(a)	Facility/appurtenance setbacks shown from fixed points?	Yes ☐	No ☐	N/A ☐
	Operation Permit			
.1937(i)	System type as described in table V(a) of rule .1961	Yes ☐	No ☐	N/A ☐
.1937(i)	Conditions for system performance, operation, maintenance, monitoring and reporting.	Yes ☐	No ☐	N/A ☐

II. WASPS Review:

Construction authorization issued	Yes ☐	No ☐	N/A ☐
Installation approval issued	Yes ☐	No ☐	N/A ☐
Operation permit issued	Yes ☐	No ☐	N/A ☐
Other related documentation	Yes ☐	No ☐	N/A ☐

Items requiring correction/modification: _____

Comments:

_____

_____

_____

_____

_____

IA issued date: _____

OP issued date: _____

Review performed by: ICR Date performed: 8-21-07