

10416 GLENMAC RD

11111503

1/9/2008

duponbj

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

Bell - Please call me

Soil & Environmental Consultants, PA

236 LePhillip Court, Suite C • Concord, North Carolina 28025 • Phone: (704) 720-9405 • Fax: (704) 720-9406
www.SandEC.com

When convenient
Thanks
Richard

September 5, 2006
Job #5-1837 S1

James Denson
P.O. Box 2505
Matthews, NC 28106

Re: Soil suitability for ±1-acre tract on Glenmack Rd.- Mecklenburg County, NC

Soil and Environmental Consultants, PA (S&EC) has performed a preliminary soil/site evaluation on a property totaling approximately 1-acre in Mecklenburg County. The property is located on Glenmack Rd. northwest of Mint Hill, NC. At your request the evaluation was performed to evaluate soil areas for subsurface wastewater disposal.

S&EC walked over the property, taking note of the land (slope, drainage patterns, past use, etc.) as well as soil conditions (depth, texture, structure, seasonal wetness, restrictive horizons, etc.) through backhoe pits. From these observations an evaluation of the site relative to subsurface wastewater disposal was developed. The soil/site evaluation criteria used was that contained in 15 A NCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems".

FINDINGS

The subject property is located in eastern Mecklenburg County northwest of Mint Hill The upland soils identified contained a sandy clay loam surface over a clay subsoil. The clay fraction in the subsoil contained expansive clay with massive structure. During wetting and drying cycles the clay exhibits shrinking and swelling behavior which limits the hydraulic performance of the soil. Expansive clay mineralogy is considered unsuitable for subsurface waste disposal systems. Also identified on the property was an area that contained soils depths of 18 inches or more which has the potential of supporting subsurface drip irrigation, and pretreated septic systems (see attached soils map). Depth to restrictive horizons (i.e. soils wetness and rock) determines what kind if any septic system can be supported on the property. The base map used during the evaluation was taken from the Mecklenburg County GIS. The attached soil map was derived from GPS technology and is not a survey.

Once potentially usable areas are identified, the next consideration is the horizontal extent (size) of those areas. The size and configuration of the usable soil area dictate how many systems an area can support. The size of a subsurface septic field is determined by; 1) the design flow (120 gallons/bedroom/day in residences), and 2) long term acceptance rate (LTAR) of the soil (based on the hydraulic conductivity of the soil, a function of the soil's texture, mineralogy, structure, porosity, etc.). The configuration of the soil area must be such that an efficient layout of drain lines (on contour) is possible and not contain unsuitable topography. An additional consideration is the required setbacks for the system from various elements such as wells (100'), streams and

ponds (50') or more depending on watershed regulations, property lines (10'), top of embankment (15'), watershed buffers, etc. (see Attachment 1).

GENERAL WASTEWATER CONSIDERATIONS

The utility of a potential useable soil area for a subsurface system is most accurately determined by an on-ground layout of the proposed system. The total area needed for system and repair areas will depend upon the system type, the layout of that system and the total design flow (factors mentioned above). A typical area needed for a three-bedroom residence is approximately 10,000 to 12,000ft^2 (could be more depending on site features). These estimates reference Laws and Rules for Sewage Treatment and Disposal Systems for North Carolina and use a LTAR of 0.3gpd/ft^2 for conventional septic systems. The required soil area estimates do not include area for a well setback, drive or house envelope. The health department will determine the design LTAR after their evaluation. S&EC will be glad to assist in any system layout or sizing calculations if requested.

A site plan for any lot must ensure that adequate soil area for system and repair is unaffected by site elements (house placement, driveway, wells, patios, decks, etc.). The area ultimately designated by the health department for the septic system and repair must remain undisturbed (no mechanical clearing, excavation, heavy traffic or other significant site disturbing activities) until authorized by the health department. A lot with adequate usable soil area may be rendered unusable as a result of improper site planning and/or disturbance.

This report discusses the general location of potentially usable soils for on-site subsurface wastewater disposal and does not constitute or imply any approval or permit needed by the client from the local heath department. S&EC, PA is a professional consulting firm that specializes in the delineation of soil areas for wastewater disposal and the layout and design of wastewater treatment systems. As a professional consulting firm, S&EC is hired for its professional opinion in these matters. The rules governing wastewater treatment (interpreted and governed by local and state agencies) are ever evolving, and in many cases, affected by the opinions of individuals employed by these governing agencies. Because of this, S&EC, PA cannot guarantee that areas delineated and/or systems designed will be permitted by the governing agencies. As always, we recommend that anyone making financial commitments on a tract be fully aware of individual permit requirements on that tract prior to final action.

An individual septic system permit will be required for this lot prior to obtaining a building permit. This will involve a detailed evaluation by the local health department to determine system size and layout, well, drive and house location, etc. Only after developing this information can a final determination be made concerning the specifics of system design and site utilization.

RECOMMENDATIONS

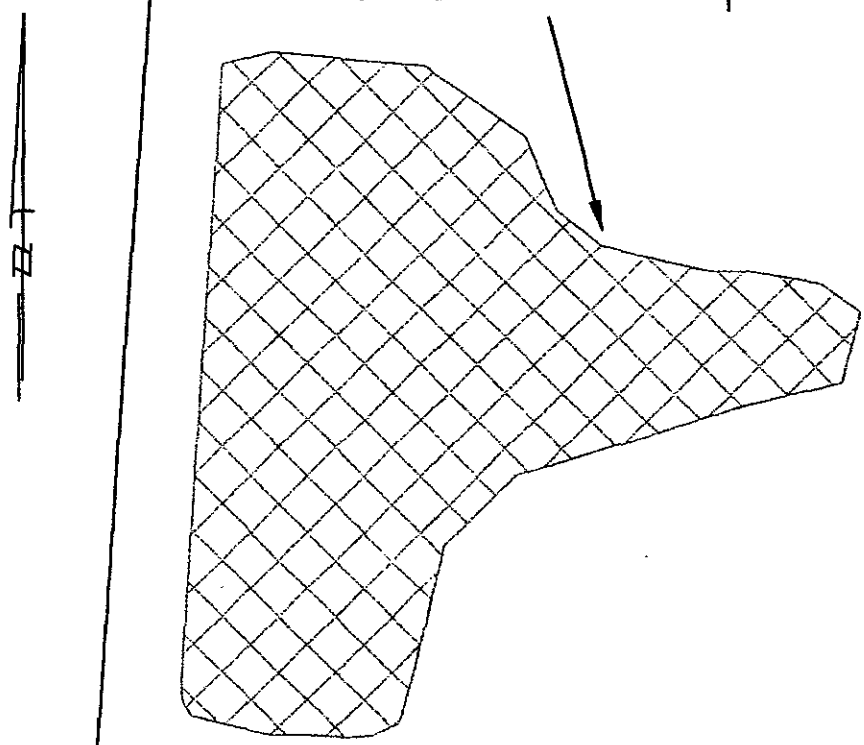
If further pursuit of improvements permits is sought we recommend meeting the Mecklenburg County Health Department onsite to review our soil findings. A backhoe will need to be present onsite during the evaluation.

10416 → Glenmack Road

DRAFT
FOR REVIEW ONLY

Not a Survey

~ 6000 Ft. Sq



GRAPHIC SCALE
1" = 30'

30 0 30 60

LEGEND

Areas contain soils with 18 inches or more of useable material and have potential for subsurface drip irrigation, and pretreated septic systems.

Areas generally considered unsuitable for subsurface waste water disposal systems.

SHEET 1 of 1

SHEET TITLE:
PRELIMINARY SITE/SOILS SUITABILITY SKETCH MAP

PROJECT NAME: Glenmack
- Glenmack -
MECKLENBURG COUNTY, NORTH CAROLINA

S&EC
Soil & Environmental Consultants, PA

C:\Data\B-1837
FILE
1" = 30'
SCALE
BR, EB
FIELD WORK
EB
DRAWN BY
PROJECT MGR.
B-1837
PROJECT NO.

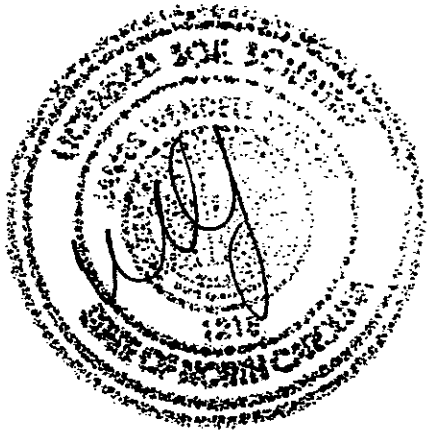
Sincerely,

Wendell Overby
NC Licensed Soil Scientist

Brandon Fulton
Soil Scientist in Training

Eric Bailey
Soil Scientist in Training

Encl: Soil/Site Map
Attachment 1



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

Sheet: 1 of 2
Property ID: 111-115-03
Lot #: 6
File #: 6095B
Code: 3

ACS

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: James Denson
Address: Box 2505, Matthews, N. C., 28106
Proposed Facility: Residence Design Flow (.1949): 480gpd
Location of Site: 10416 Glenmac Drive
Water Supply: [ ] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

Applicant:
Date Evaluated: 9/12/05
Property Size: .55a
Property Recorded:

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 Structure/ Texture	SOIL MORPHOLOGY .1941 Consistence Mineralogy	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 8	0-8	GR/CL	FR/SEXP/SS/SP	>56" TO SOIL WETNESS	24	US	NONE	US
		8-24	ABK/SBK/PR	VFI/EXP/VS/VP					
		24-56	M/CL	FR-FI/SEXP/SS/SP					
2	"	0-9	GR/CL	"	>50" TO SOIL WETNESS	31	"	"	"
		9-31	ABK/SBK/C	VFI/EXP/VS/VP					
		31-50	M/CL	FR/SEXP/SS/SP					
3	"	0-8	GR/CL	"	2.5Y7/1 at 30"	36	"	"	"
		8-36	ABK/SBK/C	VFI/EXP/VS/VP					
		36-56	M/CL	FR/SEXP/SS/SP					

Description	Initial System	Repair System
Available Space (.1945)	US	
System Type(s)		
Site LTAR		

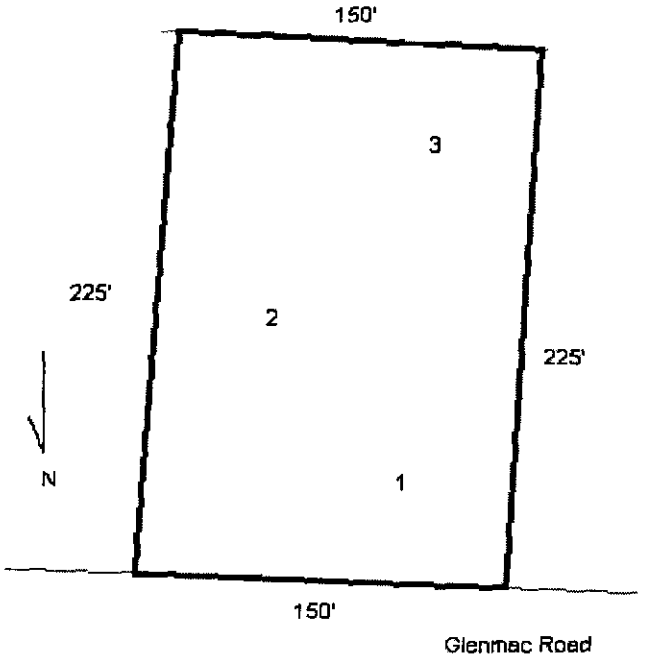
Other Factors (.1946):
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 9/16/2005 W. R. Marlin
Others Present: R. Eudy, J. Wetter

COMMENTS:
Not 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
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		CL-Clay Loam		
FP-Flood Plain		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



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

Sheet: 1 of 2
Property ID # 111-115-03
Lot #: L6, PO 7
File #: 6095B
Code: 2

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: James H. Denson
Address: PO Box 2505, Matthews, N. C. 28106
Proposed Facility: Residence Design Flow (.1949): 480gpd
Location of Site: 10416 Glenmac Road
Water Supply: [ ] Public [x] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

Applicant: Carol Pearsall
Date Evaluated: 8/16/05
Property Size: .75a
Property Recorded:

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
1	LS, 7	0-8	GR/SCL	FR/SEXP/ SS/SP	>33" TO SOIL WETNESS	33	N/A	NONE	US
		8-24	SBK/ABK/C	VFI/EXP/VS/VP					
		24-33	M/C	"					
2	"	0-12	GR/SCL	FR/SEXP/ SS/SP	2.5Y7/1 at 33"	36	"	"	US, IV
		12-24	SBK/SC	FI/SEXP/S/P					
		24-40	SBK/C/SC	"					
3	"	0-8	GR/SCL	FR/SEXP/ SS/SP	"	36	"	"	US, IV
		8-36	SBK/C/SC	FI/SEXP/S/P					.2GPD/FT^2
4	"	0-3	GR/SCL	FR/SEXP/ SS/SP	>19" TO SOIL WETNESS	19	"	"	US
		3-19	SBK/SC	VFI/EXP/VS/VP					

Description	Initial System	Repair System
Available Space (.1945)	US	
System Type(s)		
Site LTAR		

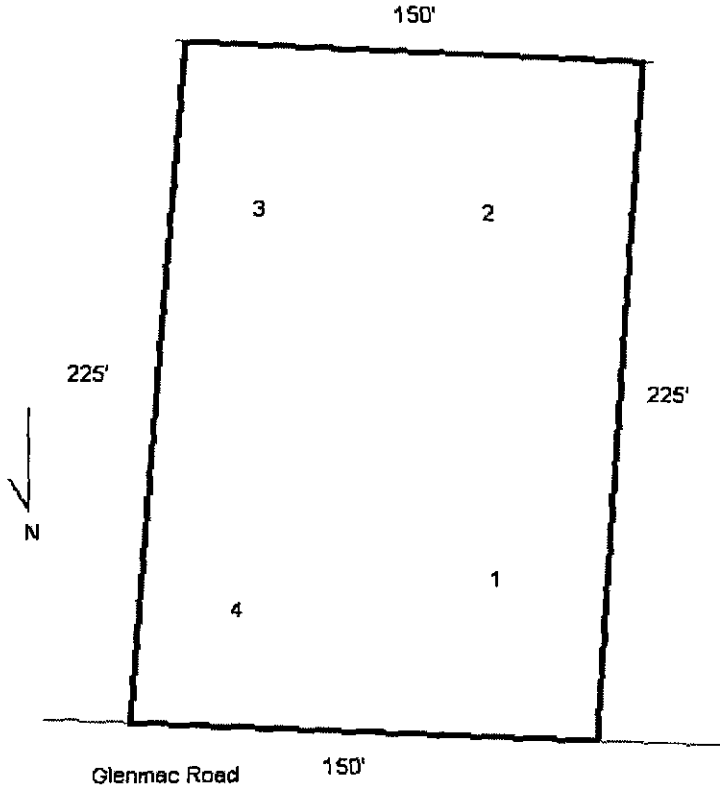
Other Factors (.1946):
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 8/22/2005. W. R. Marlin
Others Present:

COMMENTS:
Not sure if 100% repair applies

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		CL-Clay Loam		
FP-Flood Plain		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
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date: 09/02/05
Receipt #: 36760
Check / Auth #: CHECK 1090
Received By: WALKEVA

Amount: 100.00
Tendered: 100.00
Returned: 0.00

Account Information

Account #: 200000
Contractor: PEARSALL RICHARD A.
Attn:
Address: 1552 STANFORD PLACE
Address:
City/State/Zip: CHARLOTTE, NC 28207

Item	Description	Permit#	Quantity	Unit Price	Total Price
0702	Optional Site Evaluations 10416 GLENMAC ROAD		1	100.00	100.00

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

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

GWS – RES. APP 07/05

SEPTIC FEE: 200 (002 CK 3798)
DATE: 8/9/05
CRT [ ]

9/2/05 $100 gwc

WELL FEE: _____
DATE: _____
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

FILE # [redacted] 60958

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 #: 11111503
STREET ADDRESS: 10416 GLENMAC Rd
CITY: Char lotte
STATE: NC **ZIP:** 28215
SUBDIVISION OR MOBILE HOME PARK NAME:
LOT #: 6
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: 1800
NUMBER OF BEDROOMS: 4
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: JAMES Hugh Denson
ADDRESS: PO Box 2505
CITY: Matthews
STATE: NC ZIP: 28106
HOME PHONE: WORK PHONE:
MOBILE PHONE: FAX:

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: Carol Pearsall
ADDRESS: 1552 STANFORD PL
CITY: Charlotte
STATE: NC ZIP: 28207
HOME PHONE: 7043725225 WORK PHONE: 5623100
MOBILE PHONE: 704 562 3100 FAX:

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 1975
WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? Sept. 15, 2005

*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.

Carol Pearsall
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.

Carol Pearsall
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

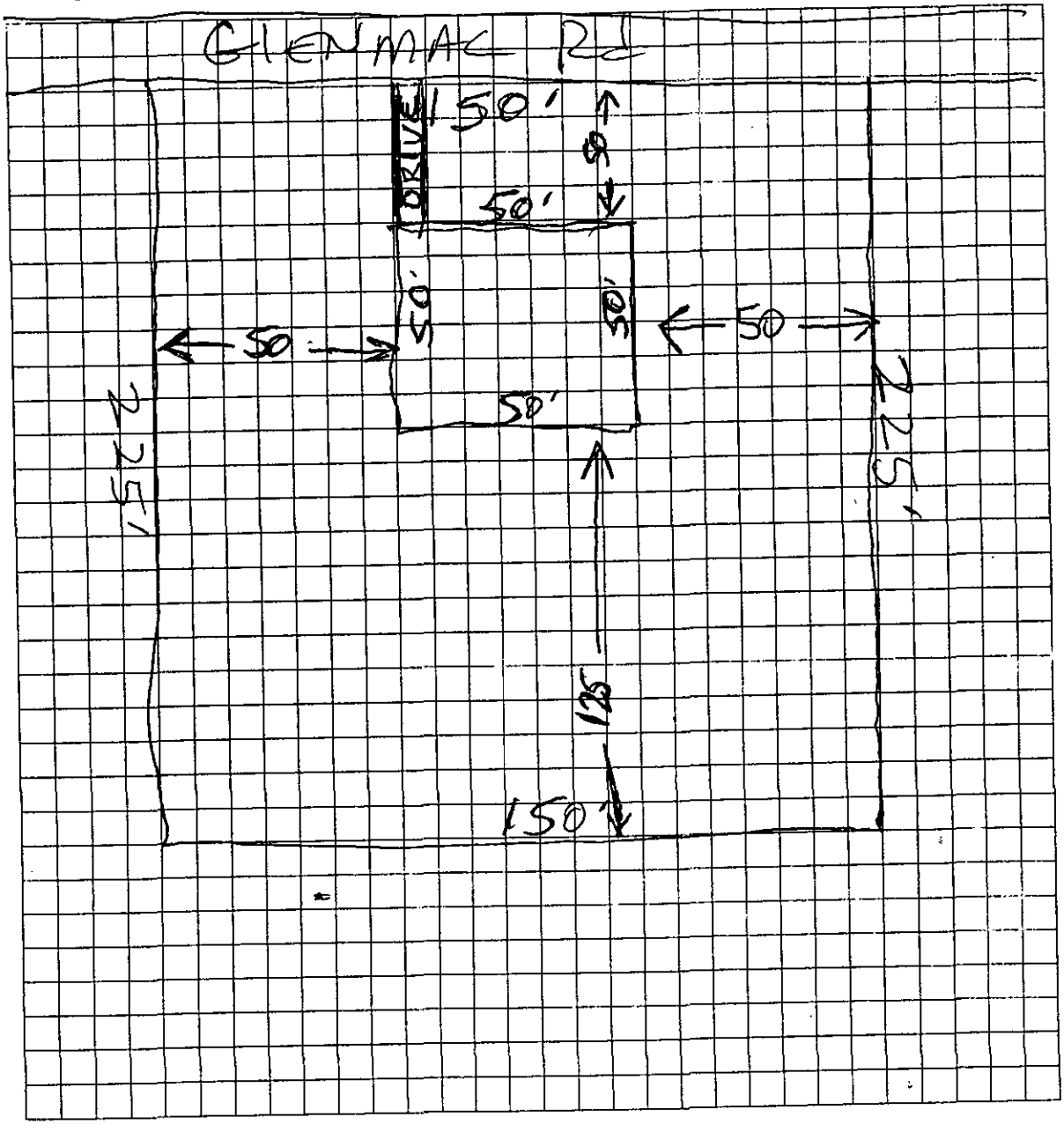
6095B

File # L9556
Approval 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

APPROVED 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.



Owner/Agent Signature	Staff Signature
Date 8.8.05	Date

LBC 12/15/04

111-115-03

RICHARD PEARSALL

REAL ESTATE BROKER

60958

BUS. (704) 965-5558
FAX (704) 335-1824
RPEARSALL@CAROLINA.RR.COM

REALTOR MLS MULTIPLE LISTING SERVICE

Ellis, Loretta

From: posse
Sent: Tuesday, December 01, 2015 2:29 PM
To: WellReg
Subject: Residential Permit Number B2882414

The following residential permit requires Ground Water services:

Date: 01 Dec 15 15:28:47
ePlan Nunber:
Permit Number: B2882414
Permit Status Deferred
Project Number: 360544
Project Name: Diaz Residence
Project Address: 10416 GLENMAC RD CHARLOTTE

Customer Name: SOLODYANKIN MAKSIM V
Customer Phone: 7042228204
Customer Email: kinmax2000@yahoo.com

