

2400 CASSIDY DR

00329121

8/15/08

marliwr

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

Groundwater & Wastewater Services
Septic Project File & Data Review Worksheet

GWS File #: 10348 WASPS App #: 2772

Primary ES assigned to project: Phil Walker

Secondary ES assigned to project:

Project Type: New System ☑ Alteratic ☐

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 applic	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 Positi	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 Mate 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 Record	Yes ☑	No ☐	N/A ☐
.1937(m)	Are the Profile Locations Shown?	Yes ☑	No ☐	N/A ☐
.1939(a)	Are the S/PS Profiles in system & repair area?	Yes ☑	No ☐	N/A ☐
& .1945(b)	Number of auger borings made: Were sufficient auger borings mac	Yes ☑	No ☐	N/A ☐
.1939(d), .1955, .1956, .1957	LTAR	Yes ☑	No ☐	N/A ☐
	Improvement Permit/Construct			
.1937(g) 130A-336(a)	Proposed System Type stated-Initi	Yes ☑	No ☐	N/A ☐
.1945(b)	Proposed System Type stated-Rep	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 ☐

Property Deeded before 1983. No 100% Repair required

Hope this deed copy is ok. Phil

Property Deeded before 1983. No 100% Repair required

Hope this deed copy is ok.

Phil o



Groundwater & Wastewater Services
Septic Project File & Data Review Worksheet

GWS File #: 10348 WASPS App #: 2772

Primary ES assigned to project: Ph. to Walker

Secondary ES assigned to project:

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

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 ☐
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.1939 (a)(2)	Structure type Recorded?	Yes ☑	No ☐	N/A ☐
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.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: 4 Were sufficient auger borings made?	Yes ☑	No ☐	N/A ☐
.1939(d), .1955, .1956, .1957	LTAR .25	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 ☐
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.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 ☐

Comments:

Items requiring correction/modification: _____

IA issued date: _____

OP issued date: _____

Review performed by: _____

Date performed: 8.14.07

S&EC

Soil & Environmental Consultants, PA

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

www.SandEC.com

Site visit approved Philip J. Walker PS 10/23/07

September 18, 2007
Job #5-2024S1

Cindy Kerber
20224 Northpoint Drive
Cornelius, NC 28031

Re: Soil suitability for 2.4 acres on Cassidy Drive PIN# 00329121 - Mecklenburg County, NC

Soil and Environmental Consultants, PA (S&EC) has performed a preliminary soil/site evaluation on a property totaling approximately 2.4-acres in Mecklenburg County. The property is located on Cassidy Drive off Grey Road near Davidson, 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 hand auger borings. 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 northern Mecklenburg County east of Davidson. The upland soils identified were most similar to the Pacolet and Helena soil series. Pacolet soils have a sandy loam surface over clay subsoil. Pacolet soils are generally suitable for supporting subsurface septic systems. Unfortunately only a small portion of the property contained Pacolet-like soils. Helena soils have limited potential to support subsurface septic systems due to shallow depths to evidence of soil wetness (2 chroma mottles). In addition Helena soils contain expansive clay textures that are not suitable for subsurface septic systems (depending on depth encountered). Much of the property contained usable soil depths of 18 inches or greater with potential to support subsurface drip or pretreatment type 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. A small portion of the lot contained 24 inches or more of usable material. These soils have potential to support LPP or conventional (shallow and at-grade) systems provided sufficient area exists. The attached soil map is not a survey. Borings were approximated via GPS technology. The soil area indicated on the map was not flagged in the field.

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 usability of a potential usable 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 four-bedroom residence is approximately 14,000 to 16,000ft^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. Its our understanding the property may be expempt from the requirement for a repair area (i.e. lot recording before 1983).

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

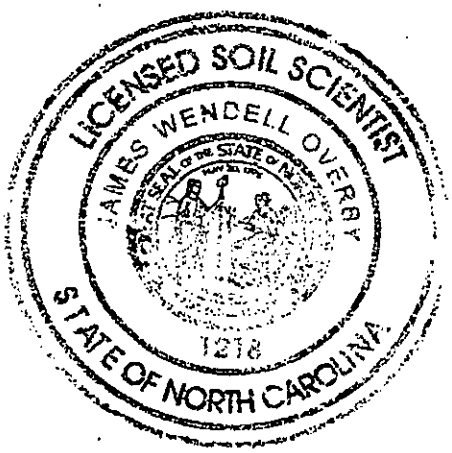
If further pursuit of improvements permits is sought we recommend meeting the Health Department onsite to review our soil findings. Additional work may be required such as septic system layouts and designs depending on results of our meeting with the county. Based on our findings the lot has potential to support a subsurface septic system. The number of bedrooms desired as well as the loading rate as determined by the county will determine the usability of the property. We look forward to chance of working with you in the future.

Sincerely,

Wendell Overby
NC Licensed Soil Scientist

Brandon Fulton
Soil Scientist in Training

Encl: Soil/Site Map
Attachment 1



Cassidy Dr.

Project No. 5-2024

layout for a 4 bedroom home

LINE # / TBM / INSTR. 1	FLAG COLOR	BS	HI	FS	ELEVATION	Oct-07 FLAGGED LINE LENGTH
		3.8			100.0	
			103.8			
			SYSTEM			
1	Red			1.90	101.9	45
2	Pink			2.40	101.4	65
3	Blue			3.20	100.6	110
4	Yellow			4.40	99.4	110
5	Orange			5.00	98.8	110
6	Red			5.70	98.1	110
7	Pink			6.50	97.3	65
					Total	**615**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	INNOVATIVE TYPE	DISTRIBUTION
* System	615	0.25	Innovative	25%	P. Manifold

Repair Exempt

Notes:

** TBM located ground beside pine stump see map
**TBM is assumed to be 100'
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS and FS indicate rod readings
**18" trench bottom
**An innovative system may be used to balance manifold

Cassidy Dr
SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/Tap	gpd	Trench Area	Line LTAR
1	Red	101.9	45	SCH 80 1/2	5.48	40.96	135	0.30
2	Pink	101.4	65	SCH 40 1/2	7.11	53.14	195	0.27
3	Blue	100.6	110	SCH 40 3/4	12.5	93.43	330	0.28
4	Yellow	99.4	110	SCH 40 3/4	12.5	93.43	330	0.28
5	Orange	98.8	110	SCH 40 3/4	12.5	93.43	330	0.28
6	Red	98.1	110	SCH 40 3/4	12.5	93.43	330	0.28
7	Pink	97.3	65	SCH 40 1/2	7.11	53.14	195	0.27
	total	feet =	615	gal/min =	64.22			

Des. Flow	480
Pump Run=	7.47
soil LTAR	0.25
Innovative LTAR	0.33

Attachment 1

.1950 Location of Sanitary Sewage Systems

(c) Every sanitary sewage treatment and disposal system shall be located at least the minimum horizontal distance from the following:

(1)	any private water supply source including a well or spring	100 feet
(2)	any public water supply source	100 feet
(3)	streams classified as WS-I	100 feet
(4)	water classified as S.A.	100 feet from mean high water mark
(5)	Other coastal waters	50 feet from mean high water mark
(6)	any other stream, canal, marsh, or other surface waters	50 feet
(7)	any Class I or Class II reservoir	100 feet from normal pool elevation
(8)	any permanent storm water retention pond	50 feet from flood pool elevation
(9)	any other lake or pond	50 feet from normal pool elevation
(10)	any building foundation	5 feet
(11)	any basement	15 feet
(12)	any property line	10 feet
(13)	top of slope of embankments or cuts of 2 feet or more vertical height	15 feet
(14)	any water line	10 feet
(15)	drainage systems:	
	(A) Interceptor drains, foundation drains and storm water diversions	
	(i) upslope	10 feet
	(ii) sideslope	15 feet
	(iii) downslope	25 feet
	(B) Groundwater lowering ditched and devices	25 feet
(16)	any swimming pool	15 feet
(17)	any other nitrification field (except repair area)	20 feet

(b) Ground absorption, sewage treatment and disposal systems may be located closer than 100 feet from a private well supply, except springs and uncased wells located downslope and used as a source of drinking water, repairs, space limitations and other site-planning considerations but shall be located the maximum feasible distance and, in no case, less than 50 feet.

(c) Nitrification fields and repair areas shall not be located under paved areas or areas subject to vehicular traffic. If effluent is to be conveyed under areas subject to vehicular traffic, ductile iron or its equivalent pipe shall be used. However, pipe specified in Rule .1955 (e) may be used if a minimum of 30 inches of compacted cover is provided over the pipe.

Note: Systems over 3000 GPD or an individual nitrification fields with a capacity of 1500 GPD or more have more restrictive setback requirements, see .1950 (a) (17) (d) for specifics.

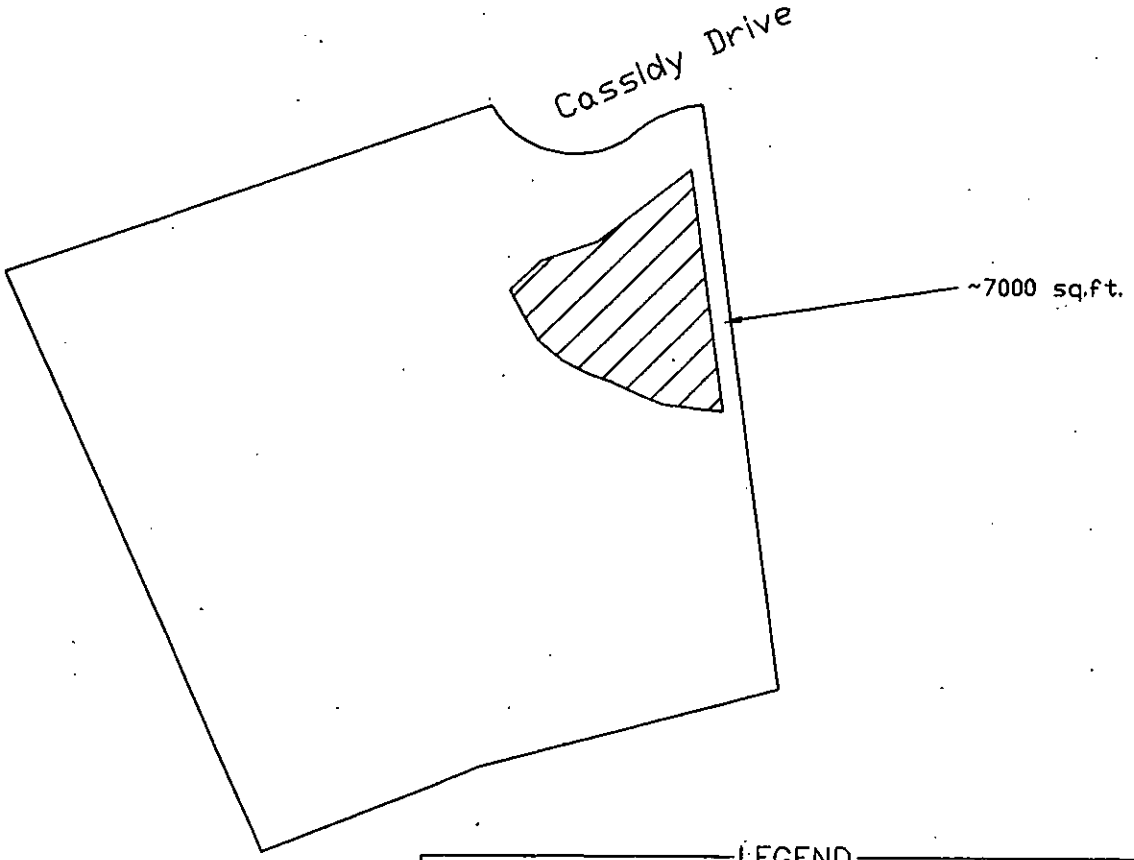
DRAFT
FOR REVIEW ONLY

**SUITABLE FOR PRELIMINARY PLANNING PURPOSES ONLY. ALL LOTS WILL REQUIRE APPROVAL BY THE COUNTY HEALTH DEPARTMENT ON A LOT BY LOT BASIS. THIS MAP SHOULD BY USED AS A GENERAL GUIDE, SOME ADJUSTMENTS WILL BE NECESSARY IN THE FIELD DUE TO SOIL VARIABILITY AND TOPOGRAPHIC IRREGULARITIES.
THIS MAP ONLY REFLECTS EXISTING SOIL SUITABILITY FOR ON-SITE SEPTIC TANK SYSTEMS. SOME OTHER CONSIDERATIONS THAT AFFECT SITE SUITABILITY THAT SHOULD BE CONSIDERED IN DEVELOPMENT DESIGN ARE:

1) 10' SETBACK FROM PROPERTY LINE
2) 100' SETBACK FROM ANY WELL
3) 50' SETBACK FROM STREAMS, PONDS OR LAKES.

See accompanying S&EC report.

LICENSED SOIL SCIENTIST
JAMES WENDELL OVERBY
1218
STATE OF NORTH CAROLINA





GRAPHIC SCALE
1" = 100'

100 0 100 200

LEGEND

Areas contain soils with 24 inches or more of usable material and has potential to support At grade/Shallow conventional and Low Pressure Pipe (LPP) septic systems.

Areas generally considered unsuitable due to expansive clay and unsuitable topography.

PROJECT NO. 5-2024.81
PROJECT MGR. BF
DRAWN BY BF
FIELD WORK BF
SCALE 1" = 100'
FILE Y:\JOBS\5-2024

Soil & Environmental Consultants, PA
226 Lowery Ct. STE C • Concord, North Carolina 28025 • Phone (704)795-0483 • Fax (704) 795-0486

S&EC

PROJECT NAME: CASSIDY DRIVE
OWNER
- CASSIDY DRIVE -
MECKLENBURG COUNTY, NORTH CAROLINA
SEPTEMBER 2024

SHEET TITLE
PRELIMINARY SOIL EVALUATION SEPTIC MAP

SHEET 1 OF 1

10/31/2007 14:00 7047209406 S AND EC PAGE 34

DRAFT
FOR REVIEW ONLY

**SUITABLE FOR PRELIMINARY PLANNING PURPOSES ONLY. ALL LOTS WILL REQUIRE APPROVAL BY THE COUNTY HEALTH DEPARTMENT ON A LOT BY LOT BASIS. THIS MAP SHOULD BY USED AS A GENERAL GUIDE, SOME ADJUSTMENTS WILL BE NECESSARY BY THE FIELD [illegible]

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1) 10' SETBACK FROM PROPERTY LINE
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3) 50' SETBACK FROM STREAMS, PONDS OR LAKES.

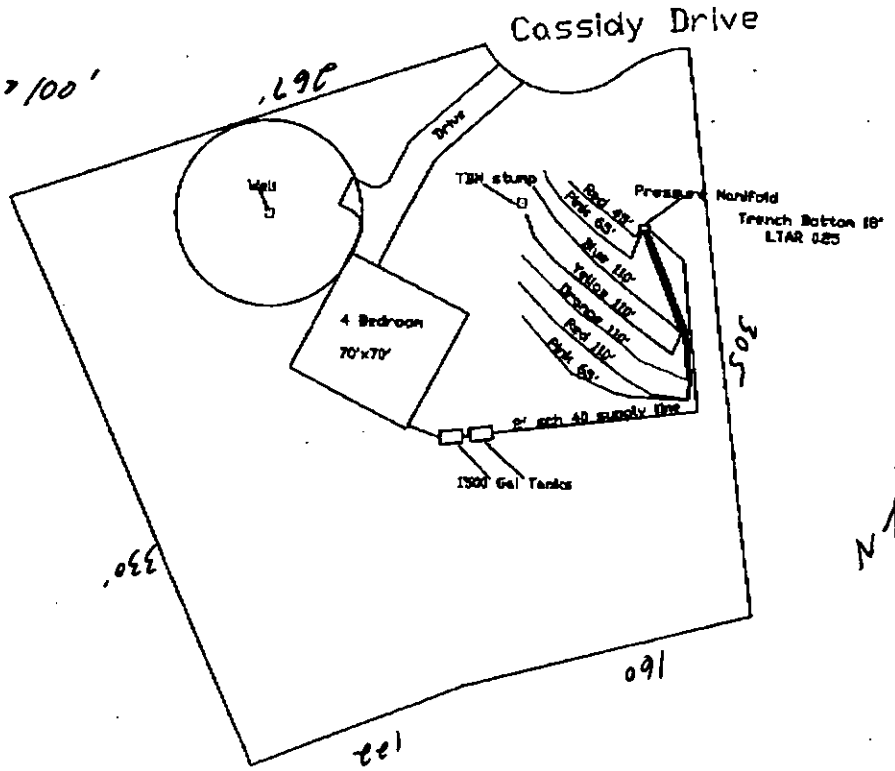
See accompanying S&EC report.

Not A Survey

COMMENTS

Scale 1" = 100'
LTAR 0.25

1500 ST
1500 PT
Pressure manifold distribution w/ various tap sizes
615 TLF
Keep the septic system >100' from proposed well
Shallow conventional system. Additional soil cover may be required
Maintain 12" soil cover over drainfield



GRAPHIC SCALE
1" = 100'

100 0 100 200

Soil & Environmental Consultants, PA

S&EC

PROJECT NAME: CASSIDY DRIVE -

PRELIMINARY SITE PLAN FOR IMPROVEMENT PERMIT

SHEET 1 of 1

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 #: **30002772** GWS File #: **18348** Tax Parcel #: **003-291-21**

- 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):** 11/1/2012

Type of Installation: Residential - New System Lot Number: 13

Structure Type: HOUSE Size (ft^2): 4000 # Bedrooms: 4 # Occupants: 4

Building Foundation: Water Supply: Private Well

II. Initial System Type: Conventional **System Classification:** IIIb

Initial System Specifications:

Design Flow (gpd):	480	LTAR (gpd/ft^2):	0.25	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	1500
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1920	Total Trench Length (ft):	640
Maximum Trench Depth (in):	18	Depth of Media (in):	12	Distribution Device:	Pressure Manifold		

III. Repair System Type: Innovative **System Classification:** IIIb

Repair System Specifications:

Design Flow (gpd):	480	LTAR (gpd/ft^2):	0.25	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	1500
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1440	Total Trench Length (ft):	480
Maximum Trench Depth (in):	18	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: Philo Walker

Signature: Philo S. Walker RS

Date Issued: 11/1/2007

Owner/Legal Agent: _____
Print Name

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

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

Permit #: 30002772 GWS File #: 18348

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.
- Additional soil cover, as specified on the plot plan, required over the drain field must be inspected and approved prior to issuance of an Operation Permit.
- 100% repair area is not required for this property. However, the maximum feasible area shall be allocated for a repair area.
- This type of repair system requires the installation of a pump tank and all associated components. This type of system will require routine inspections by our office. The system owner is responsible for all fees associated with these inspections.
- This type of repair system requires periodic inspections 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 located at least 100 ft. (50 ft. minimum) from all private wells.
- ADDITIONAL SOIL COVER MAY BE REQUIRED. 12" SOIL COVER OVER DRAINFIELD SHALL BE MAINTAINED

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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DENR Authorized Agent: Philo Walker

Signature: Philo Walker RS

Date Issued: 11/1/2007

Owner/Legal Agent: _____
Print Name

Signature: _____

Walker, Philo

From: kerberc@bellsouth.net
Sent: Monday, November 05, 2007 1:46 PM
To: Walker, Philo
Subject: 2400 Cassidy Dr survey

Attachments: Cassidysurvey2.jpg; Cassidysurvey3.jpg


Cassidysurvey2.jpg
(2 MB)


Cassidysurvey3.jpg
(2 MB)

Hi

Per our conversation, here is a copy of the survey for the 2400 Cassidy Dr property. It's a huge piece of paper so I tried to scan it in two parts. The recording date is Dec. 28th 1982 by R.B. Pharr. When we recently had the survey done on the property they also did it and noted that our survey was on "MB 20-33" if that means anything to you.

Let me know as soon as we get approval.

Thanks!!
Cindy Kerber
704 655-9085

DEWBERRY NOWINSKI

MECKLENBURG COUNTY, N.C.

Date December 28, 1981
Scale 1" = 100'

50 100 200 300

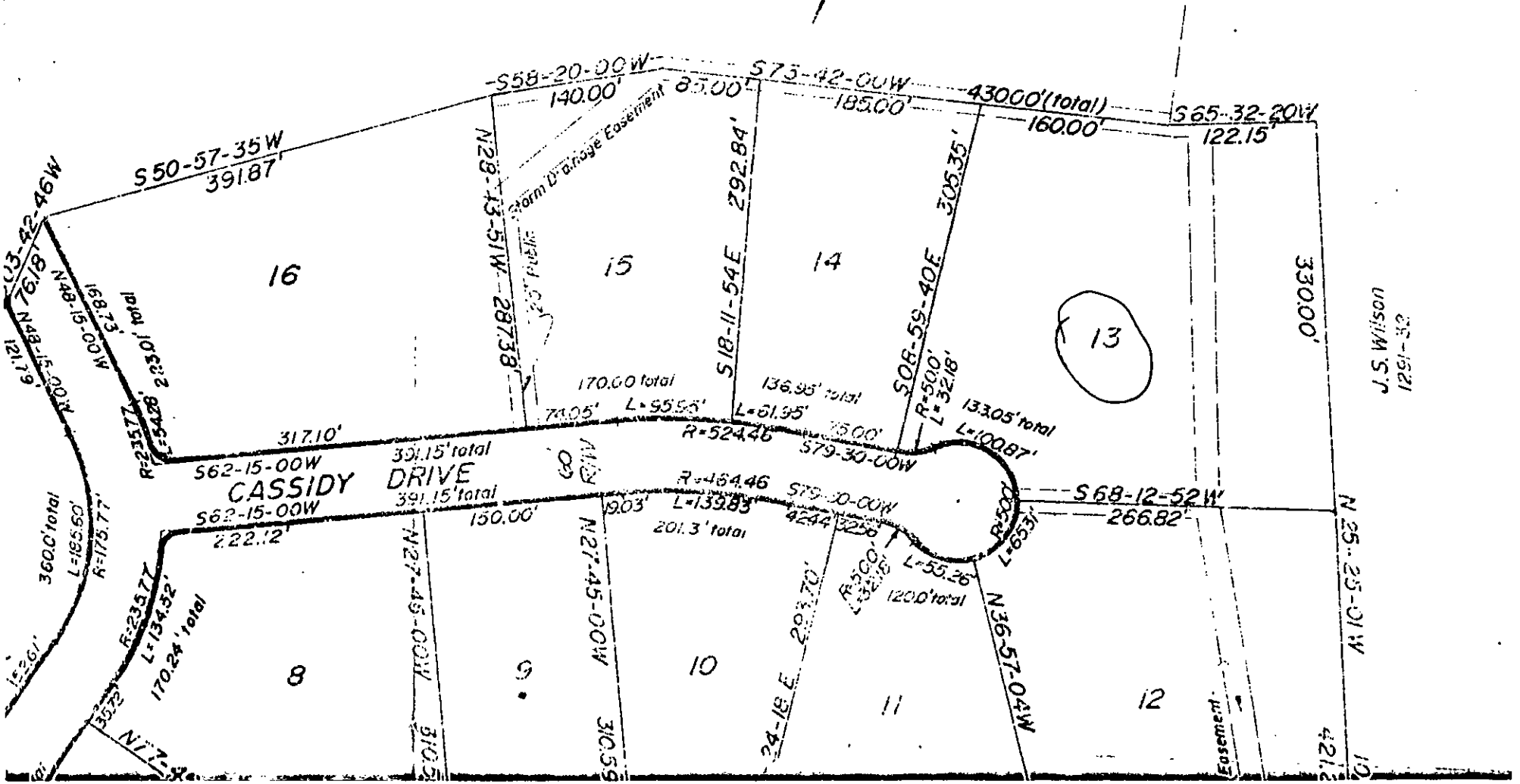
R. B. Pharr & Associates
Registered Surveyors
Charlotte, N.C.

PROPERTY OF JOHN A. TATE ET AL
MAP 1

Iron stakes at all lot corners unless otherwise indicated.

All street intersections are subject to a 20' Radius; However all distances to street corners are to the intersection of street lines.

MB 20-33



, ... on the 20th day of
Dec. 1982, with
a maximum linear error of closure of 1:10,000
and a maximum angular error of angular closure
of 75sec per Angle

Signed R. B. Pharr
R. B. Registered Surveyor

NORTH CAROLINA REGISTERED 6748 LAND SURVEYOR R. B. PHARR

I, Shirley L. Johnson, notary public in and for the county of Mecklenburg and state of North Carolina do hereby certify that R.B. Pharr, N. C. Reg. Surveyor, personally appeared before me this day and acknowledged the due execution of the foregoing certificate and upon his oath swore to the truth of the statement set forth herein.

Witness my hand and notarial seal this 28th day of Dec. 1982

Shirley L. Johnson
Notary Public

My Commission Expires May 29 1985

MECKLENBURG COUNTY, N.C.

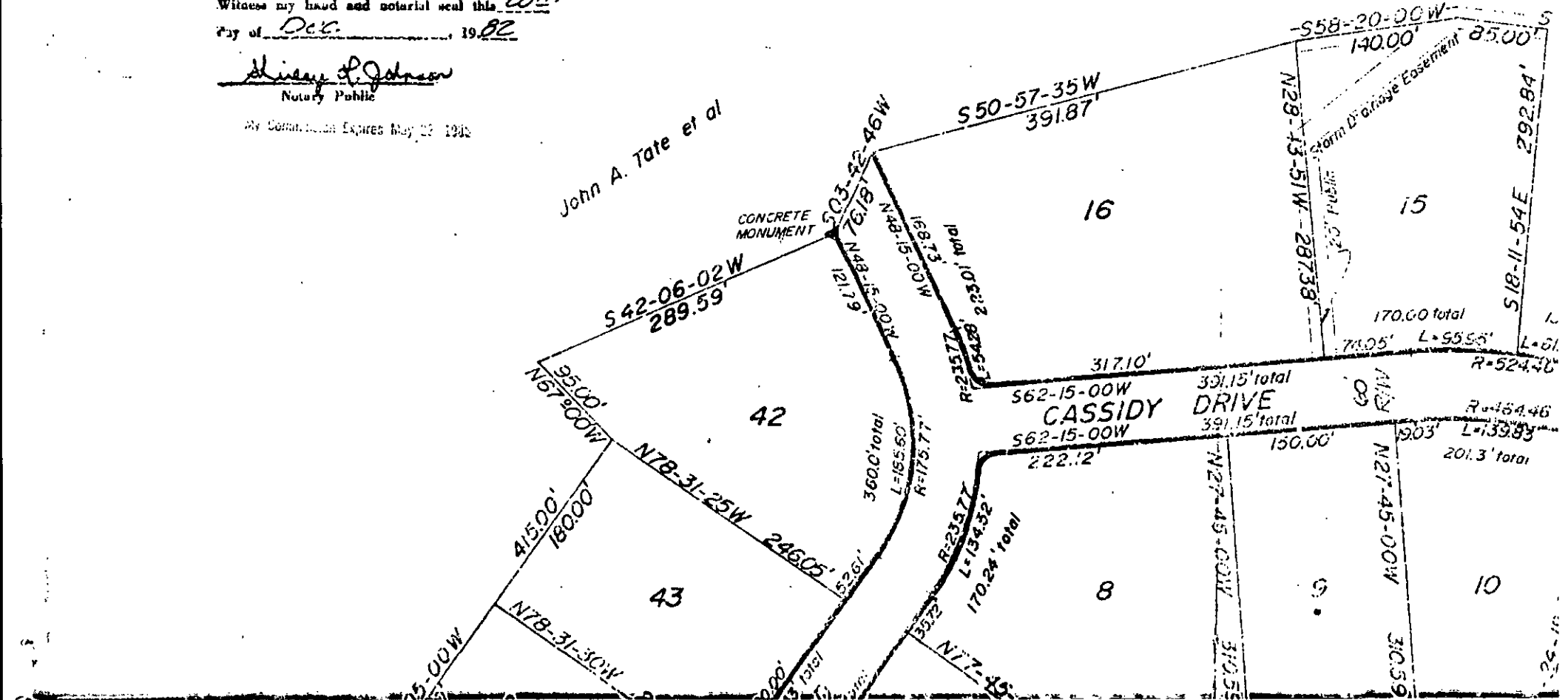
Date December 28, 1981
Scale 1" = 100'

0 50 100 200 300

R. B. Pharr & Associates
Registered Surveyors
Charlotte, N.C.

PROPERTY OF JOHN A. TATE ET A

MAP 1



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

Sheet: 1 of 2
Property ID: 003-291-21
Lot #: 13, B1
File #: 18348
Code: 2
APP ID 2112

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Mark Bozzone C/o Vinwood Development LLC
Applicant: Jeff Watson
Address: 103 Brillant Ave., #12, Pittsburgh, Pa., 15215
Date Evaluated: 11/2/05
Proposed Facility: Residence
Design Flow (.1949): 480gpd
Property Size: .5a inv.
Location of Site: 2410 Cassidy Drive
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] 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	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 8	0-4	GR/SCL	FR/SEXP/SS/SP	>41" TO SOIL WETNESS	41	N/A	NONE	PS, IV
		4-23	SBK/C	FI/SEXP/S/P					.25GPD/FT^2
		23-41	SBK/SCL	FR/SEXP/SS/SP					
2	LS, 6	0-5	GR/SCL	"	2.5Y7/1 at 30"	32	"	"	US, IV
		5-32	SBK/C	FI/SEXP/S/P					.1GPD/FT^2
			ADDITIONAL	INVESTIGATION	10/10/2007				
3	"	0-6	GR/SCL	FR/SEXP/SS/SP	2.5Y7/1 AT 33"	33+	N/A	NONE	US, IV
		6-33	SBK/SC	FI/SEXP/S/P					.25GPD/FT^2
4	"	0-6	GR/SCL	FR/SEXP/SS/SP	2.5Y7/1 AT 37"	37+	"	"	PS, IV
		6-37	SBK/SC	FI/SEXP/S/P					.25GPD/FT^2
					SITE LTAR .25GPD/FT^2	WRM	10/11/07	WRM	
					B. FULTON PRESENT AT	TIME OF	INV.		

Description	Initial System	Repair System
Available Space (.1945)	US	
System Type(s)		
Site LTAR	.25GPD/FT^2	

Other Factors (.1946):
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 11/4/2005. WRM
Others Present:

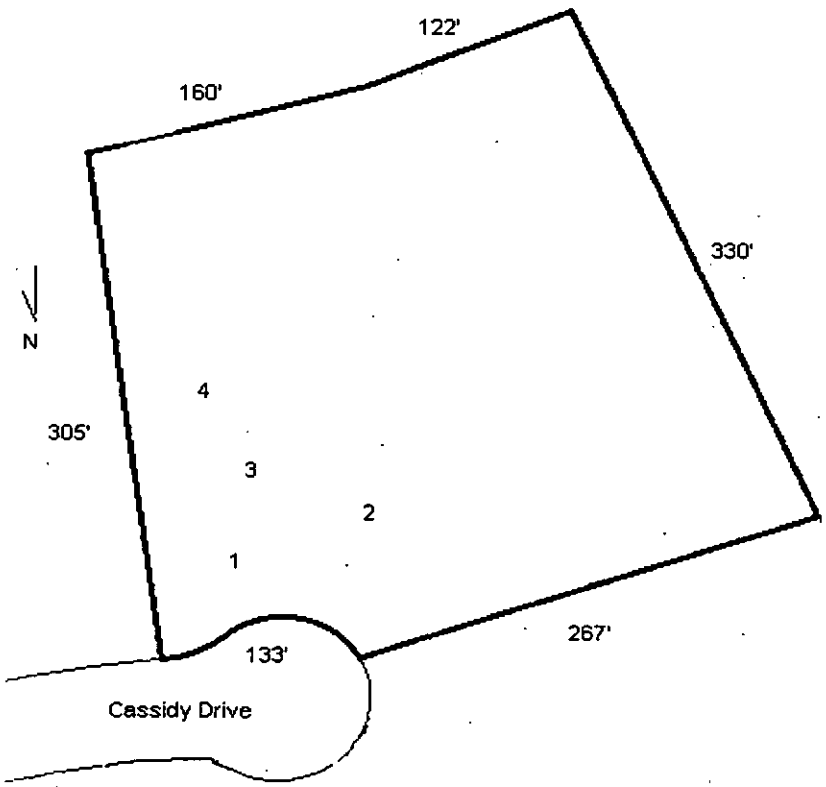
COMMENTS:

Does not require 100% repair, recommend surface diversion along 305' property line

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: 003-291-21
Lot #: 13, B1
File #: 18348
Code: 2

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Mark Bozzone C/o Vinwood Development LLC
Applicant: Jeff Watson
Address: 103 Brillant Ave., #12, Pittsburgh, Pa., 15215
Date Evaluated: 11/2/2005
Proposed Facility: Residence
Design Flow (.1949): 480gpd
Property Size: .5a inv.
Location of Site: 2410 Cassidy Drive
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] 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	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 8	0-4	GR/SCL	FR/SEXP/SS/SP	>41" TO SOIL WETNESS	41	N/A	NONE	PS, IV
		4-23	SBK/C	FI/SEXP/S/P					.25GPD/FT^2
		23-41	SBK/SCL	FR/SEXP/SS/SP					
2	LS, 6	0-5	GR/SCL	"	2.5Y7/1 at 30"	32	"	"	US, IV
		5-32	SBK/C	FI/SEXP/S/P					.1GPD/FT^2
			ADDITIONAL	INVESTIGATION	10/10/2007				
3	"	0-6	GR/SCL	FR/SEXP/SS/SP	2.5Y7/1 AT 33"	33+	N/A	NONE	US, IV
		6-33	SBK/SC	FI/SEXP/S/P					.25GPD/FT^2
4	"	0-6	GR/SCL	FR/SEXP/SS/SP	2.5Y7/1 AT 37"	37+	"	"	PS, IV
		6-37	SBK/SC	FI/SEXP/S/P					.25GPD/FT^2
					SITE LTAR .25GPD/FT^2	WRM	10/11/07		
					B. FULTON PRESENT AT	TIME OF	INV.		

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)	IIIb	IIIb
Site LTAR	.25GPD/FT^2	0.25

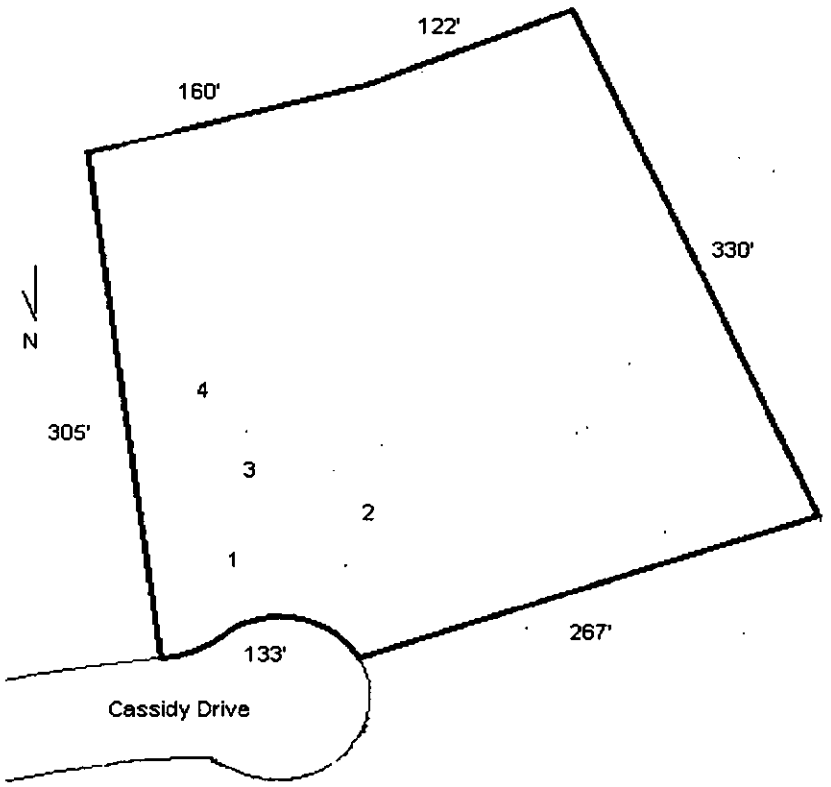
Other Factors (.1946):
Site Classification (.1948): PS PHILO WALKER 10/23/07
Evaluated By: W. R. Marlin, LSS, 11/4/2005,
Others Present:

COMMENTS:
Does not require 100% repair, recommend surface diversion along 305' property line

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



FILE NUMBER: # 18348 BM APPLICATION NUMBER: 2772

Revised On: August 31, 2007

SEPTIC FEE: 200.00
DATE: 10/1/07

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

WELL FEE: _____
DATE: _____

1. SEPTIC / TYPE APPLICATION: ☐ NONE ☑ NEW SYSTEM ☐ ALTERATION ☐ REPAIR ☐ MODIFIED PLOT PLAN

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

3. JOB LOCATION INFORMATION:
TAX PARCEL NUMBER: 003-291-21
STREET ADDRESS: 2400 Cassidy Dr.
CITY: Davidson
STATE: NC ZIP: 28031
SUBDIVISION NAME:
LOT #: 13 LOT SIZE (acres): 2.4 acres
TOWNSHIP:
☐ 0-MECKLENBURG ☐ 3-CORNELIUS ☐ 6-HUNTERSVILLE
☐ 1-CHARLOTTE ☐ 4-PINEVILLE ☐ 7-MINT HILL
☑ 2-DAVIDSON ☐ 5-MATTHEWS

4. BUILDING INFORMATION:
BUILDING TYPE:
☐ SINGLE MOBILE HOME ☐ MODULAR HOME
☐ DOUBLE WIDE ☐ MULTIPLE FAMILY
☑ HOUSE ☐ OTHER _____
HEATED SQUARE FOOTAGE: min. 4000
NUMBER OF BEDROOMS: 4
NUMBER OF OCCUPANTS: 4
FOUNDATION TYPE:
☐ CONCRETE SLAB ☐ BASEMENT WITH PLUMBING
☐ CRAWL SPACE ☐ BASMENT WITH NO PLUMBING

5. IF PLANNING TO EXPAND OR ALTER THE EXISTING SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION: ☐ N/A
NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. WATER SUPPLY: ☐ MUNICIPAL ☐ PUBLIC WELL ☑ PRIVATE WELL ☐ SHARED WELL ☐ SPRING

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

8. PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE *(1-MOST DESIRED 5-LEAST DESIRED)*:

	☐ ANY TYPE	☐ CONVENTIONAL	☐ ACCEPTED	☐ INNOVATIVE	☐ ALTERNATIVE	☐ OTHER or other
8A. RANK:		* 1			2	3

9. DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.

BURIED CABLES, LANDFILLS, STUMPHOLES	☐ YES ☑ NO	GRADING/SOIL REMOVAL PERFORMED	☐ YES ☑ NO
EXISTING WASTEWATER (SEPTIC) SYSTEMS	☐ YES ☑ NO	JURISDICTIONAL WETLANDS	☐ YES ☑ NO
WELLS, SPRINGS, OR WATER LINES	☐ YES ☑ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	☐ YES ☑ NO
EASEMENTS OR RIGHT-OF-WAYS (easement is old creek bed not used)	☑ YES ☐ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	☐ YES ☑ NO

10. PROPERTY OWNER:
NAME: John + Cindy Kerber
ADDRESS: 20224 Northport Dr.
CITY: Cornelius
STATE: NC ZIP: 28031
HOME PHONE: 704 655-9085 WORK PHONE:
MOBILE PHONE: 704 621-7925 FAX:

11. OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:
NAME:
ADDRESS:
CITY:
STATE: ZIP:
HOME PHONE: WORK PHONE:
MOBILE PHONE: FAX:

12. WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? May 2006
13 WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? ASAP - end of oct.

14. SEPTIC SYSTEM PERMIT APPLICATION SIGNATURE SECTION:
If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for either 60 months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

Cindy Kerber 10/1/07
Property Owner's or Owner's Legal Representative Signature Date

15. WELL PERMIT APPLICATION SIGNATURE SECTION:
If the information in this application is falsified, changed, or the site is altered, then the Well Permit shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for a period of 12 months from the date of issuance.

X
Property Owner's or Owner's Legal Representative Signature Date

☑ SURVEY PLAT TO SCALE SUBMITTED ☐ SCALED SITE PLAN SUBMITTED ☐ UN-SCALED SITE PLAN SUBMITTED

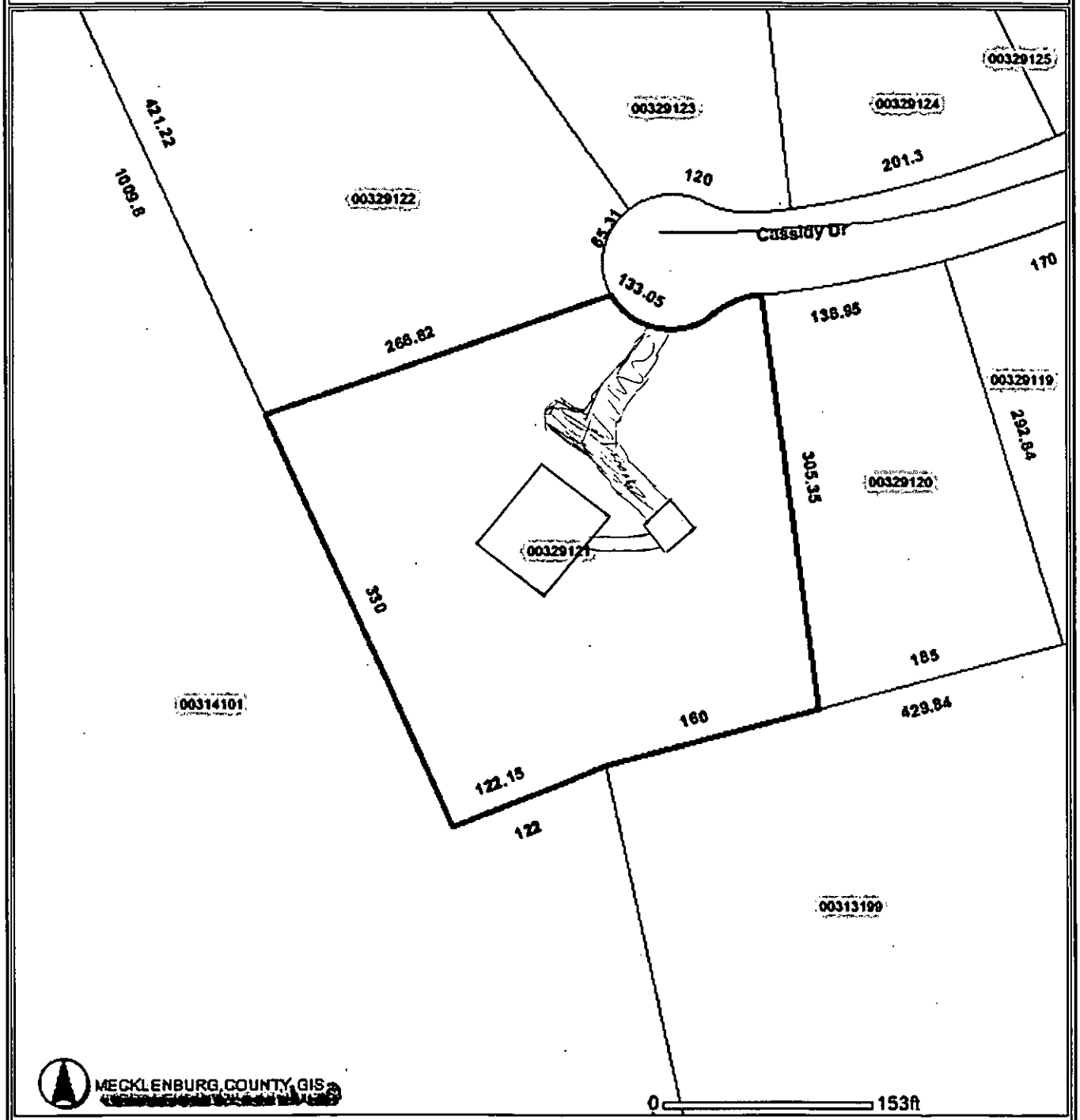
MECKLENBURG COUNTY-GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST., SUITE 211, CHARLOTTE, NC 28202 PHONE: (704) 336-5103 FAX: (704) 336-6894

Mecklenburg County, North Carolina

POLARIS

Property Ownership Land Records Information System

Date Printed: Wed Oct 19 10:15:34 EDT 2005



This map is prepared for the inventory of real property within Mecklenburg County and is compiled from recorded deeds, plats, tax maps, surveys, planimetric maps, and other public records and data. Users of this map are hereby notified that the aforementioned public primary information sources should be consulted for verification. Mecklenburg County and its mapping contractors assume no legal responsibility for the information contained herein.

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

Sheet: 1 of 2
Property ID: 003-291-21
Lot #: 13, B1
File #: 18348
Code: 2

A cs

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Mark Bozzone C/o Vinwood Development LLC
Applicant: Jeff Watson
Address: 103 Brillant Ave., #12, Pittsburgh, Pa., 15215
Date Evaluated: 11/2/05
Proposed Facility: Residence
Design Flow (.1949): 480gpd
Property Size: .5a inv.
Location of Site: 2410 Cassidy Drive
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] 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	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 8	0-4	GR/SCL	FR/SEXP/SS/SP	>41" TO SOIL WETNESS	41	N/A	NONE	PS, IV
		4-23	SBK/C	FI/SEXP/S/P					.25GPD/FT^2
		23-41	SBK/SCL	FR/SEXP/SS/SP					
2	LS, 6	0-5	GR/SCL	"	2.5Y7/1 at 30"	32	"	"	US, IV
		5-32	SBK/C	FI/SEXP/S/P					.1GPD/FT^2

Description	Initial System	Repair System
Available Space (.1945)	US	
System Type(s)		
Site LTAR	.25GPD/FT^2	

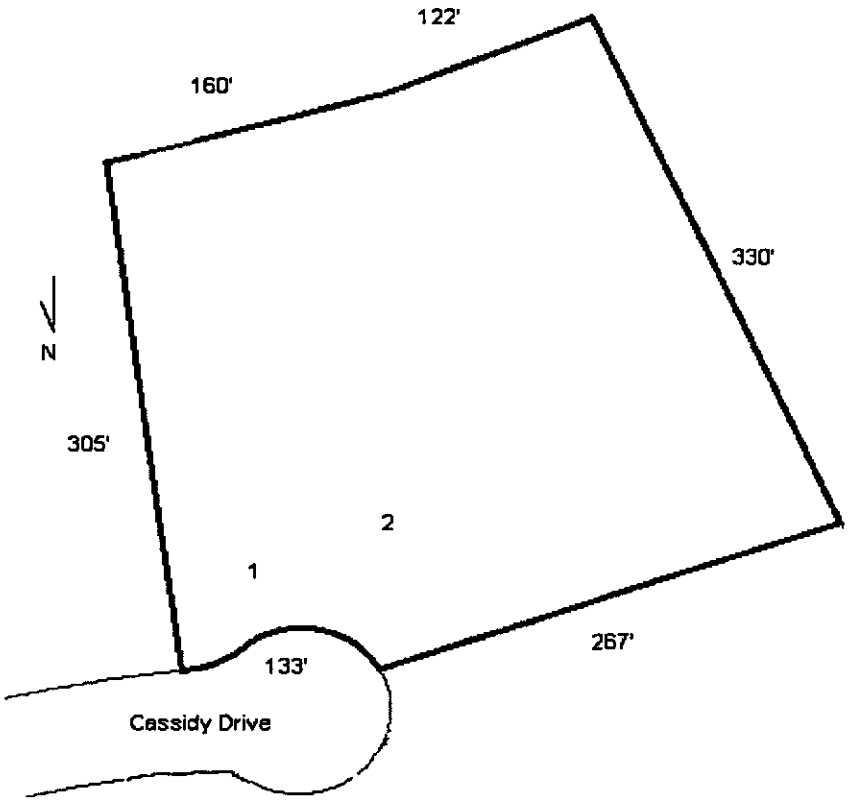
Other Factors (.1946):
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 11/4/2005. W. R. Marlin
Others Present:

COMMENTS:
Does not require 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



GWS – RES. APP 07/05

SEPTIC 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 # 18348

WELL FEE:
DATE:
CRT [ ]

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 #: 00329121
STREET ADDRESS: 2400 Cassidy Drive
CITY: Davidson
STATE: NC ZIP: 28036
SUBDIVISION OR MOBILE HOME PARK NAME: Grayland Hills
LOT #: 13
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: 2612
NUMBER OF BEDROOMS: 4
NUMBER OF OCCUPANTS: 3

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: Mark Bozzone % Vinwood Development LLC
ADDRESS: 103 Brilliant Avenue #A
CITY: Pittsburgh
STATE: PA ZIP: 15215
HOME PHONE: WORK PHONE: 412 782 3988
MOBILE PHONE: FAX:

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: Jeff Watson
ADDRESS: 8232 Ballymore Court
CITY: Huntersville
STATE: NC ZIP: 28078
HOME PHONE: 704-894-9765 WORK PHONE: 704-895-2084
MOBILE PHONE: 704-906-4491 FAX: 704-895-2087

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 7/1/1974 + 5/14/2003
WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? November 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.

Jeff Watson 10/19/05
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

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

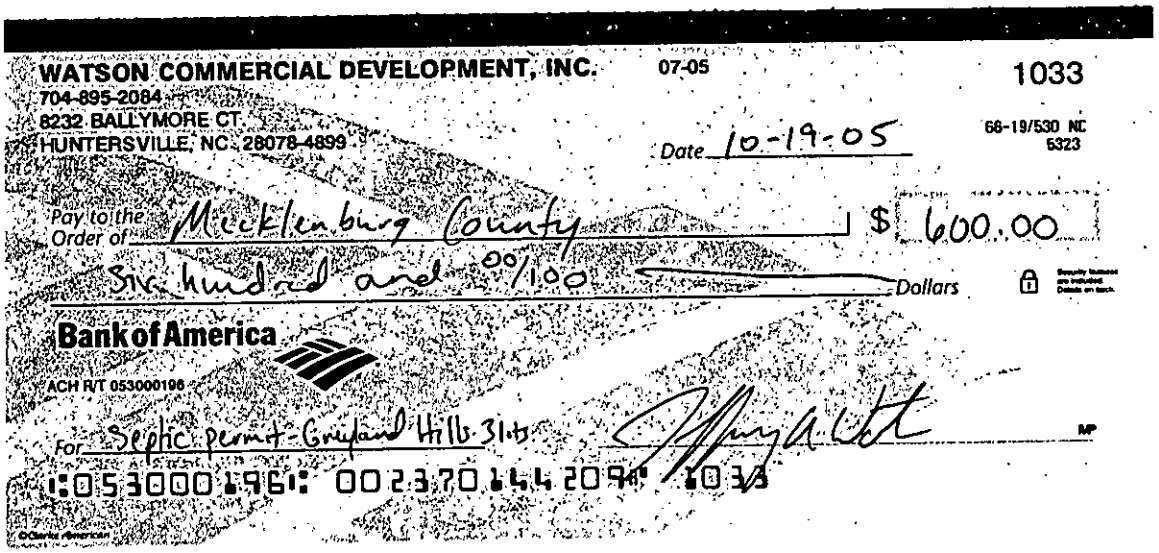
Receipt Information

Date:	10/19/05	**Amount:**	200.00
Receipt #:	37618	**Tendered:**	200.00
Check / Auth #:	CHECK 1033	**Returned:**	200.00
Received By:	POWELPT		

Account Information

Account #: 200000
Contractor: WATSON COMMERCIAL DEVELOPM
Attn: JEFF WATSON
Address: 8232 BALLYMORE CT
Address:
City/State/Zip: HUNTERSVILLE, NC 28078

Item	Description	Permit#	Quantity	Unit Price	Total Price
0701	Improvment Permit App-Residen 2400 CASSIDY DR		1	200.00	200.00


WATSON COMMERCIAL DEVELOPMENT, INC. 07-05
704-895-2084
8232 BALLYMORE CT.
HUNTERSVILLE, NC 28078-4899
1033
Date 10-19-05
68-19/530 NC 5323
Pay to the Order of Mecklenburg County $ 600.00
Six hundred and 00/100 Dollars
Bank of America
ACH R/T 053000196
For Septic permit-Grayland Hills 31-15
⑆053000196⑆ 0023701444 2094 1033

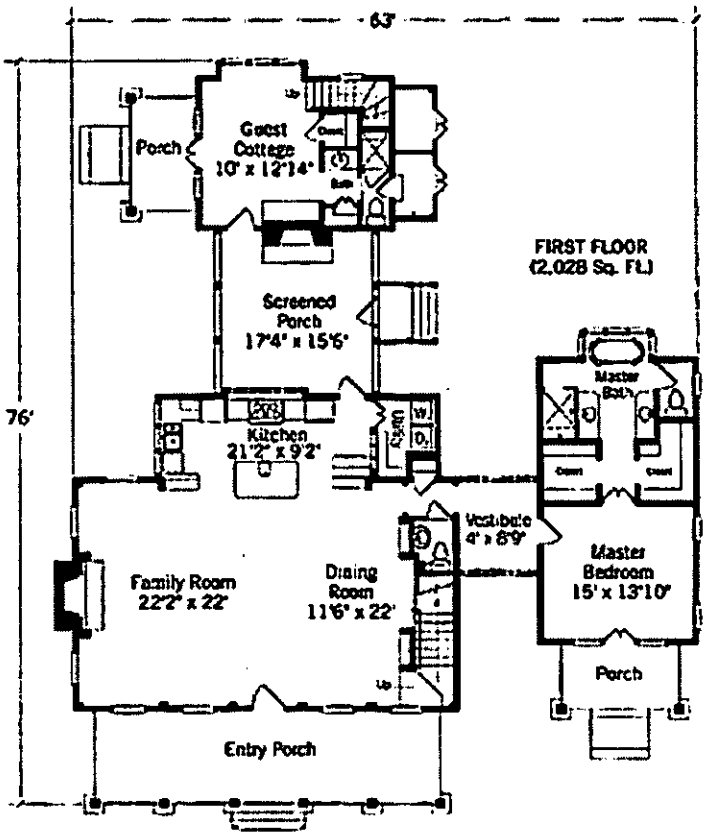
Outstanding Balances

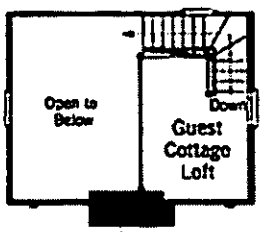
Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
8.00					

Specifications

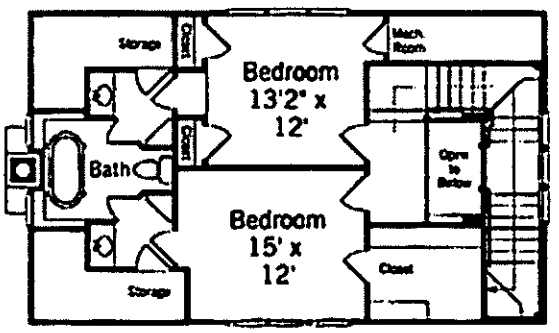
Title: Cottage Of The Year
Floors: 2
Bedrooms: 4
Master Location: Ground Floor
Baths: 3 Full / 1 Half
Heated Area : 2612 sq ft.
Dimensions: 63 feet W X 76 feet D X H
First Floor Ceiling Height: 10 feet
Second Floor Ceiling Height: 9 feet
Exterior:
Roof Pitch:
Foundation: Pier & Beam
Garage Location: Attached







SECOND FLOOR
(584 Sq. Ft.)



MECKLENBURG COUNTY
Health Department

November 8, 2005

Jeff Watson
8232 Ballymore Court
Huntersville, NC 28078

Re: Application for improvement permit for
Property Site: 2400 Cassidy Drive
Health Department file number: **18348**

Dear Property Owner or Owner's Agent:

The Mecklenburg County Health Department, Environmental Health Division on **November 7, 2005** evaluated the above-referenced property at the site designated on the site plan that accompanied your improvement permit application. According to your application the site is to serve a four-bedroom residence, with a design wastewater flow of 480 gallons per day. The evaluation was done in accordance with the laws and rules governing wastewater systems in North Carolina General Statute 130A-333 and related statutes and Title 15A, Subchapter 18A, of the North Carolina Administrative Code, Rule .1900 and related rules.

Based on the criteria set out in Title 15A, Subchapter 18A, of the North Carolina Administrative Code, Rules .1940 through .1948, the evaluation indicated that the site is **UNSUITABLE for** a ground absorption sewage system. Therefore, your request for an improvement permit is **DENIED.** A copy of the site evaluation is enclosed. The site is unsuitable based on the following:

- ☐ Unsuitable soil topography and/or landscape position (Rule .1940)
- ☐ Unsuitable soil characteristics (structure or clay mineralogy) (Rule .1941)
- ☐ Unsuitable soil wetness condition (Rule .1942)
- ☒ Unsuitable soil depth (Rule .1943)
- ☐ Presence of restrictive horizon (Rule .1944)
- ☒ Insufficient space for septic system and repair area (Rule .1945)
- ☐ Unsuitable for meeting required setbacks (Rule .1950)
- ☐ Other (Rule .1946)

These severe soil or site limitations could cause premature system failure, leading to the discharge of untreated sewage on the ground surface, into surface waters, directly to ground water or inside your structure.

The site evaluation included consideration of possible site modifications, and modified, innovative or alternative systems. However, the Health Department has determined that none of the above options will overcome the severe conditions on this site. A possible option might be a system designed to dispose of sewage to another area of suitable soil or off-site to additional property.

For the reasons set out above, the property is currently classified **UNSUITABLE,** and an improvement permit shall not be issued for this site in accordance with Rule .1948 (c).

However, the site classified as **UNSUITABLE** may be classified as **PROVISIONALLY SUITABLE** if written documentation is provided that meets the requirements of Rule .1948(d). A copy of this rule is enclosed. You may hire a consultant to assist you if you wish to try to develop a plan under which your site could be reclassified as **PROVISIONALLY SUITABLE.**

You have a right to an informal review of this decision. You may request an informal review by the soil scientist or environmental health supervisor at the local health department. You may also request an informal review by the
N. C. Department of Environment and Natural Resources regional soil specialist. A request for informal review must be made in writing to the local health department.

You also have a right to a formal appeal of this decision. To pursue a formal appeal, you must file a petition for a contested case hearing with the Office of Administrative Hearings, 6714 Mail Center, Raleigh, NC 27699-6714. To get a copy of a petition form, you may write the Office of Administrative Hearings or call the office at (919) 733-0926 or from the OAH web site at www.oah.state.nc.us/form.htm. The petition for a contested case hearing must be filed in accordance with the provision of North Carolina General Statutes 130A-24 and 150B-23 and all other applicable provisions of Chapter 150B. N. C. General Statue 130A-335(g) provides that your hearing would be held in the county where your property is located.

Please note: If you wish to pursue a formal appeal, you must file the petition form with the Office of Administrative Hearings **WITHIN 30 DAYS OF THE DATE OF THIS LETTER.** The date of this letter is **November 8, 2005**. Meeting the 30-day deadline is critical to your right to a formal appeal. Beginning a formal appeal within 30 days will not interfere with any informal review that you might request. Do not wait for the outcome of any informal review if you wish to file a formal appeal.

If you file a petition for a contested case hearing with the Office of Administrative Hearings, you are required by law (N.C. General Statute 150B-23) to send a copy of your petition to the North Carolina Department of Environment and Natural Resources. Send the copy to: Office of General Counsel, N. C. Department of Environment and Natural Resources, 1601 Mail Service Center, Raleigh, NC. 27699-1601. Do **NOT** send the copy of the petition to your local health department. Sending a copy of your petition to the local health department will **NOT** satisfy the legal requirement in N.C. General Statute 150B-23 that you send a copy to the Office of General Counsel, NCDENR.

You may call or write the local health department if you need any additional information or assistance.

Sincerely,

Jeremy Michelone, R.S.
Authorized Agent - DENR

Encl: (2)

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

Sheet: 1 of 2
Property ID: 003-291-21
Lot #: 13, B1
File #: 18348
Code: 2
App ID 2772

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Mark Bozzone C/o Vinwood Development LLC
Applicant: Jeff Watson
Address: 103 Brillant Ave., #12, Pittsburgh, Pa., 15215
Date Evaluated: 11/2/05
Proposed Facility: Residence
Design Flow (.1949): 480gpd
Property Size: .5a inv.
Location of Site: 2410 Cassidy Drive
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] 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	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 8	0-4	GR/SCL	FR/SEXP/SS/SP	>41" TO SOIL WETNESS	41	N/A	NONE	PS, IV
		4-23	SBK/C	FI/SEXP/S/P					.25GPD/FT^2
		23-41	SBK/SCL	FR/SEXP/SS/SP					
2	LS, 6	0-5	GR/SCL	"	2.5Y7/1 at 30"	32	"	"	US, IV
		5-32	SBK/C	FI/SEXP/S/P					.1GPD/FT^2
			ADDITIONAL	INVESTIGATION	10/10/2007				
3	"	0-6	GR/SCL	FR/SEXP/SS/SP	2.5Y7/1 AT 33"	33+	N/A	NONE	US, IV
		6-33	SBK/SC	FI/SEXP/S/P					.25GPD/FT^2
4	"	0-6	GR/SCL	FR/SEXP/SS/SP	2.5Y7/1 AT 37"	37+	"	"	PS, IV
		6-37	SBK/SC	FI/SEXP/S/P					.25GPD/FT^2
					SITE LTAR .25GPD/FT^2	WRM	10/11/07		
					B. FULTON PRESENT AT	TIME OF	INV.		

Description	Initial System	Repair System
Available Space (.1945)	US	
System Type(s)		
Site LTAR	.25GPD/FT^2	

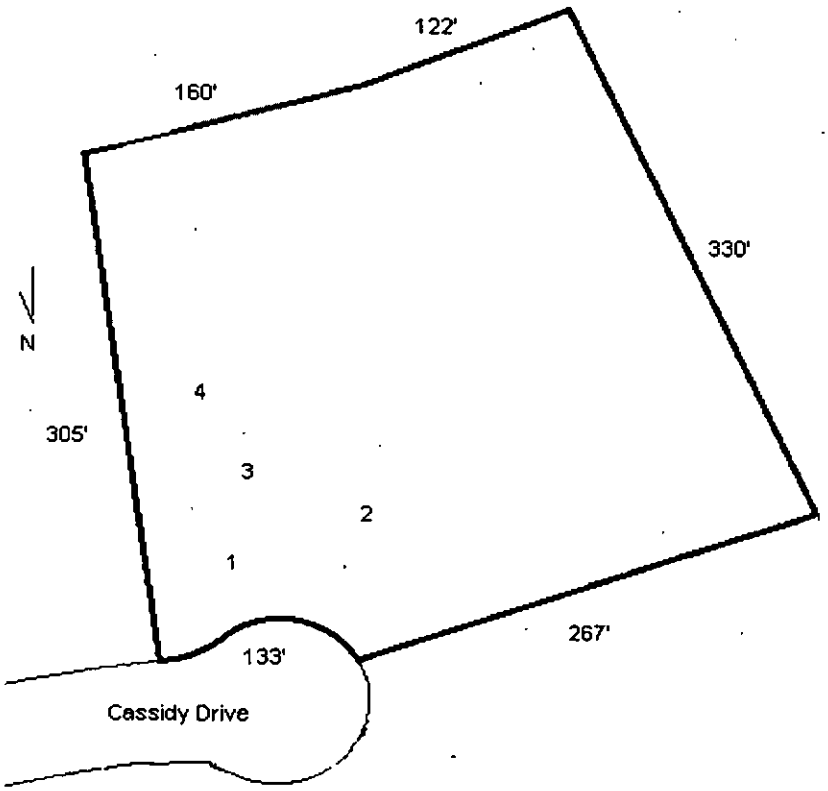
Other Factors (.1946):
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 11/4/2005.
Others Present:

COMMENTS:
Does not require 100% repair, recommend surface diversion along 305' property line

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

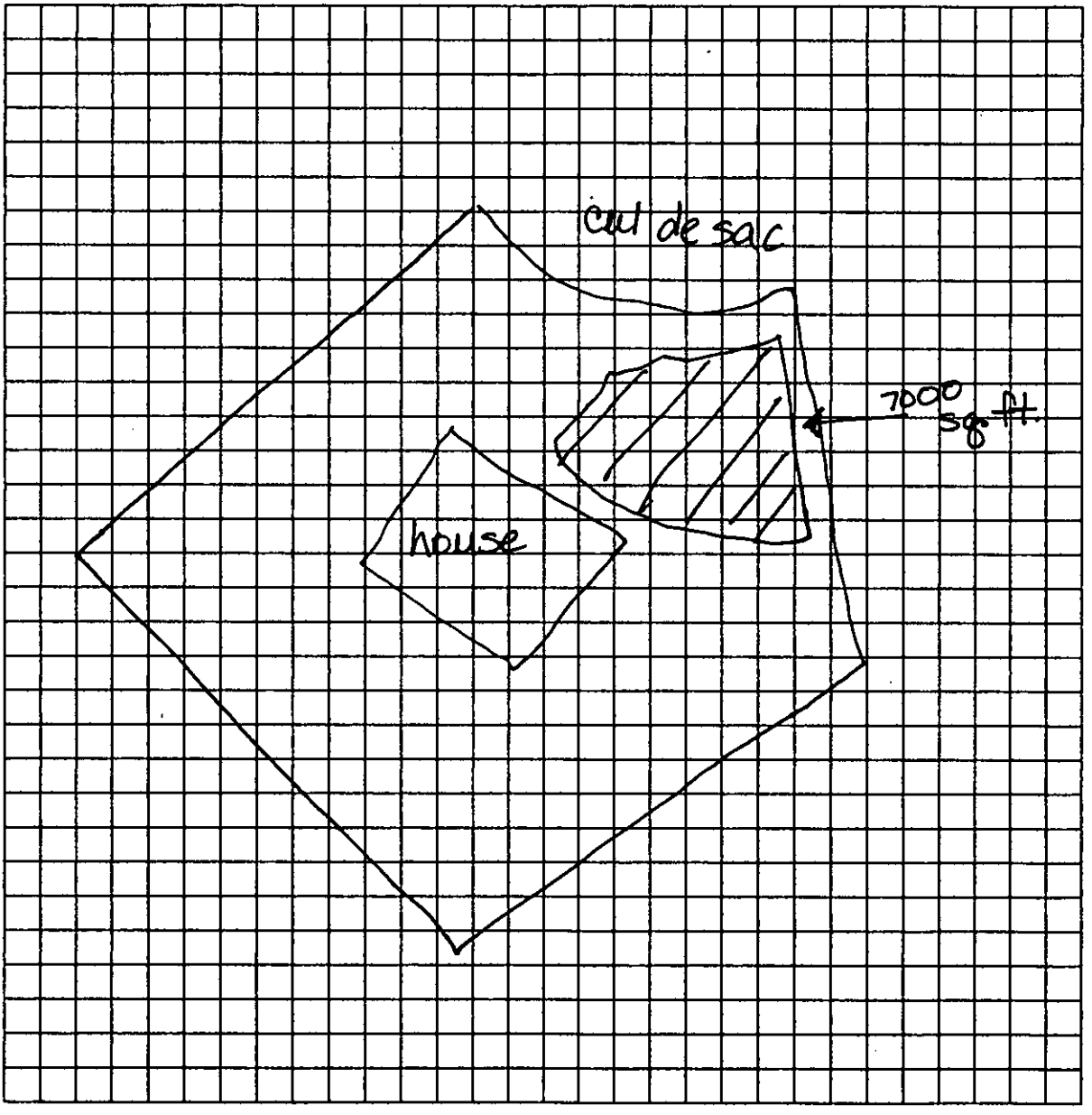


Mecklenburg County
Land Use & Environmental Service Agency
Groundwater & Wastewater Services
700 N. Tryon St., Suite 211
Charlotte, NC 28202
Phone: (704) 336-5103
Fax: (704) 336-6894

File # 18348
Date _____

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.



Note: placement of house is subject to your findings see Brandon Fulton's specs for location of fields.

Owner/Agent Signature	Cindy Kerber
Date	10-1-07

LBC 12/15/04