PW

72098

MECKLENBURG COUNTY
GROUNDWATER & WASTEWATER SERVICES

3767

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

1. **SEPTIC / TYPE APPLICATION:** ☐ N/A ☐ NEW SYSTEM ☐ ALTERATION ☐ REPAIR ☑ MODIFIED PLOT PLAN

2. **WELL / TYPE APPLICATION:** ☒ N/A ☒ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT

3. **JOB LOCATION INFORMATION:**

TAX PARCEL NUMBER: 003-331-07
STREET ADDRESS: 15430 Greenwold Dr
CITY: Davidson
STATE: NC ZIP: 28036
SUBDIVISION NAME: Abersham
LOT #: 4 LOT SIZE (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:
NUMBER OF BEDROOMS: 6
NUMBER OF OCCUPANTS:
FOUNDATION TYPE:
☐ CONCRETE SLAB ☐ BASEMENT WITH PLUMBING
☒ CRAWL SPACE ☐ BASMENT WITH NO PLUMBING

5. **IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION:** ☐ N/A

NUMBER OF BEDROOMS TO BE ADDED 5 NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: 10

6. **WATER SUPPLY:** ☐ MUNICIPAL ☒ PRIVATE WELL ☐ PUBLIC WELL ☐ SHARED WELL ☐ OTHER _____

7. **PROPOSED USE OF WELL:** ☐ N/A ☐ IRRIGATION ☒ POTABLE (DRINKING WATER) ☐ OTHER _____

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

☐ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☒ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____

8A. **RANK:** ____ ____ ____ ____ ____

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	☐ YES	☒ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	☐ YES	☒ NO
CHEMICAL/PETROLEUM STORAGE TANKS	☐ YES	☒ NO	KNOWN UNDERGROUND CONTAMINATION	☐ YES	☒ NO
WASTE STORAGE	☐ YES	☒ NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	☐ YES	☒ NO

10. **WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?** _____ ☒ UNKNOWN

11. **WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?** 3/6/08 ☐ N/A

12. **PROPERTY OWNER:**

NAME Neighborhoods at Abersham
ADDRESS: PO Box 99
CITY: Davidson
STATE NC ZIP: 28036
HOME PHONE: N/A
WORK PHONE: 704-895 0556
MOBILE PHONE: N/A
FAX: 704-895-0558

13. **OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:**

NAME Rollins Soil & Environmental Svcs
ADDRESS 470 N Broad St. Suite D
CITY Mooresville
STATE: NC ZIP: 28115
HOME PHONE N/A
WORK PHONE 704-658-1723
MOBILE PHONE 704-746-5046
FAX 704-658-1724

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N TRYON ST SUITE 211 CHARLOTTE, NC 28202 OFFICE 704-336-5103 FAX 704-336-6984

Revised on 7/1/08

14. SEPTIC SYSTEM PERMIT APPLICATION:

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 sixty (60) months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring

SAD (Initial here for septic system applications)

15. WELL PERMIT APPLICATION:

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 twelve (12) months from the date of issuance

_____ (Initial here for well applications)

16. APPLICATION SIGNATURE SECTION:

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below

Property Owner's or Owner's Legal Representative Signature

8/1/08
Date

OFFICE USE ONLY

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

SEPTIC APPLICATION FEES RECEIVED: $ 100 chk 440 DATE FEE RECEIVED 8/4/08

WELL APPLICATION FEES RECEIVED $ _____ DATE FEE RECEIVED _____

APPLICATION PROCESSED BY: JC

GWS FILE NUMBER ASSIGNED 720980

APPLICATION ID NUMBER ASSIGNED 3767

COMMENTS

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N TRYON ST SUITE 214 CHARLOTTE NC 28202 OFFICE 704-336-5103 FAX: 704-336-6984

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

Sheet: 1 of 2
Property ID: PO 003-331-01
Lot #: 4
File #: 7209B
AppID: 2479

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Neighborhoods at Abersham
Applicant: Rollans Soil & Env. Services
Address: PO Box 99, Davidson, N. C. 28036
Date Evaluated: 7/26/2007
Proposed Facility: Residence
Design Flow (.1949): 720gpd
Property Size: 2.15a
Location of Site: Off Grey Road
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] 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	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 7	0-3	GR/CL	FR/SEXP/SS/SP	>53" TO SOIL WETNESS	53	N/A	NONE	PS, IV .3GPD/FT
		3-27	SBK/ABK/C	FI/SEXP/S/P					
		27-53	SBK/CL	FR/SEXP/SS/SP					
2	LS, 9	0-3	GR/CL	"	>51" TO SOIL WETNESS	51	"	"	"
		3-27	SBK/ABK/C	FI/SEXP/S/P					
		27-51	SBK/CL	FR/SEXP/SS/SP					
3	LS, 8	0-2	GR/CL	"	>48" TO SOIL WETNESS	48	"	"	"
		2-32	SBK/ABK/C	FI/SEXP/S/P					
		32-48	SBK/CL	FR/SEXP/SS/SP					
					SITE LTAR .3GPD/FT^2				
A	LS, 10	0-3	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48+	"	"	"
		3-29	SBK/C	FI/SEXP/S/P					
		29-48	SBK/CL	FR/SEXP/SS/SP					
B	"	0-3	GR/CL	"	"	"	"	"	"
		3-48	SBK/C	FI/SEXP/S/P					
C	"	0-3	GR/CL	FR/SEXP/SS/SP	>50" TO SOIL WETNESS	50	"	"	"
		3-50	SBK/C	FI/SEXP/S/P					

Description	Initial System	Repair System
Available Space (.1945)	P.S.	P.S.
System Type(s)	III g	IV a
Site LTAR	0.25	0.25

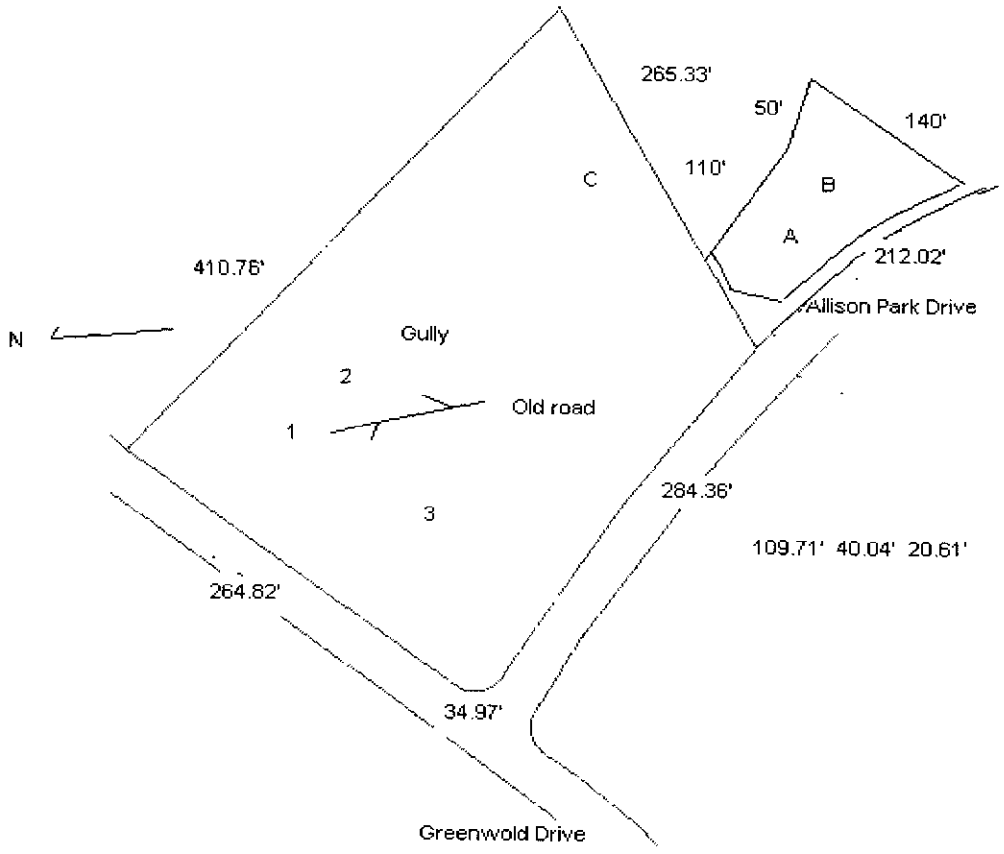
Other Factors (.1946):
Soil Evaluation By: W. R. Martin, LSS, 8/8/2007,
Others Present: A. Rollans
Site Classification (.1948): P.S.
Site Evaluation By:
Others Present:

COMMENTS:
100% repair, additional pits dug 6/19/08

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-Foot 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 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 #: **30003767** GWS File #: **7209B** Tax Parcel #: **003-331-07**

- 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):** 8/7/2013

Type of Installation: Residential - Modified Plot Plan Lot Number: 4

Structure Type: HOUSE Size (ft^2): 0 # Bedrooms: 6 # Occupants: 5

Building Foundation: Crawl Space Water Supply: Community

II. Initial System Type: Approved **System Classification:** IIIg

Initial System Specifications:

Design Flow (gpd):	720	LTAR (gpd/ft^2):	0.25	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	N/A
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	2160	Total Trench Length (ft):	720
Maximum Trench Depth (in):	30	Depth of Media (in):	12	Distribution Device:	Drop Boxes		

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

Repair System Specifications:

Design Flow (gpd):	720	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):	30	Depth of Media (in):	N/A	Distribution Device:	Manifold (LPP Distri		

IV. Permit Conditions/Comments:

(Please See the Following Page for Permit Conditions.)

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

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

DENR Authorized Agent: Philo Walker Owner/Legal Agent: _____
Print Name

Signature: Philo Walker, R.S Signature: _____

Date Issued: 8/7/2008

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 #: **30003767** GWS File #: **7209B**

IV. Permit Conditions/Comments:

- Easement agreement forms shall be on file and the property shall be deeded and recorded prior to issuance of Construction Authorization.
- All drainage improvements (swales, interceptor drains, etc.) noted on the plot plan must be inspected and approved prior to issuance of an Operation Permit.
- 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 the property owner to obtain a contract with a Certified Operator to perform routine inspections and maintenance on the system.
- 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.
- The septic system shall be installed in accordance with the plans submitted by the wastewater system design consultant.
- All components of the septic system must be located at least 100 ft. (50 ft. minimum) from all private wells.

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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- 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 Walker, R.S

Date Issued: 8/7/2008

Owner/Legal Agent: _____
Print Name

Signature: _____

ROLLANS *Soil & Environmental Services, Inc.*

470 N Broad Street, Suite D, Mooresville, NC 28115 Phone: (704) 658-1723 Fax: (704) 658-1724

Ashley Rollans, NC Licensed Soil Scientist
Mobile: (704) 746-5046
Email: rollans.ashley@yahoo.com

Brady Freeman, Registered Sanitarian
Mobile: (704) 746-6497
Email: bfree209@yahoo.com

Attached is a proposed design for an Accepted (25% reduction) Septic System with Gravity distribution for a 6 bedroom single family residence on Lot # 4 Abersham Subdivision, Mecklenburg County, North Carolina.

Contents: **Page**

Information for the Installer---------- 1

Design Information
- Design Specifications---------- 2-3
- Layout Specifications---------- 4

Site Plan/System Plan---------- 5

System Tapsheet---------- 6

Calculations---------- 7

Profile Descriptions---------- 8

June 25, 2008
Project #: 01-1044
Design By: Rollans Soil and Environmental Services

INFORMATION FOR THE INSTALLER:

- The permit should be read very carefully prior to bidding. The following are details that must be considered along with all other considerations.
- Tanks shall be approved by NC DENR, and certification supplied by the manufacturer.
- Tanks shall be water tested prior to installation.
- The installer shall be responsible to the owner for placement of the tanks and to insure that final grades are returned to the original natural grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate cavities left during initial fill placement.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
- Where required by the county health department, post installation inspections by the designer must be scheduled 5 week days in advance.
- Trenches shall be carefully excavated so the bottom is within 2" from the highest to . the lowest points of elevation within the trench. If the bottom elevation needs adjusting after it has been trenched, it will be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over excavated during initial trenching. All fine grading within the trench will be hand done with a shovel. No loose material will be left in the trench
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent slump at a later date.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pinflag locations should be checked by the installer prior to beginning trenches.
- Pumptank riser should be 6" above grade, control panel should be 12" above grade.
- Septic tank riser shall be a minimum of 6" above finished grade.
- System is specified as an innovative 25% reduction installation.
- Repair is specified as a PPBPS with low pressure distribution installation.
- Rake trench walls, lime sidewalls, install trenches 36" wide and have no more than 1/4" fall in 10 feet.

GRAVITY SYSTEM
FOR WASTEWATER TREATMENT

Owner: William Brewster Company

Address: PO Box 99 Davidson
NC 28036
Phone: 704 895 0556
County: Mecklenburg
Location: Abersham LOT # 4

Source of Wastewater Flow: 6 Bedroom Single Family Residence
Estimated Gallons Per Day Flow: 720
System Flow: N/A

Design Specifications

Drainfield Size: 740
Loading Rate (gpd/ft.^{2}): 0.25
Depth of Gravel in Trench: NA (25% reduction)
Gravel Size: NA (25% reduction)
Trench Depth: 36 in.
Trench Width: 36 in.
Septic Tank Size: 1500 gal.
Pump Tank Size: N/A

Estimated Supply Line Length: 66
Supply Line Diameter: 3 in. SCH 40 PVC
Supply Line Volume: 11.48
Dosing Volume: NA
Supply Manifold: SERIAL DROP BOX
Supply Manifold Length: N/A
Supply Manifold Volume: N/A

Recommended Float Controls: N/A

Recommended Control Panel: N/A

Pressure Head: NA
Friction Head: NA
Elevation Head: NA
Total Dynamic Head: NA

Threaded Union: NA
Gate Valves: NA
NA
Check Valves: NA
Anti-Siphon Hole: NA
Additional Comments: Soil suitability was performed by Mecklenburg County Health Department

Abersham LOT # 4
GRAVITY SYSTEM DESIGN

DESIGN FLOW (gpd):	720
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.25
TOTAL AREA TRENCH BOTTOM:	2220
TOTAL LATERAL LENGTH:	740
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	720
SUPPLY LINE LENGTH:	66
TOTAL DYNAMIC HEAD:	NA
MANIFOLD SIZE:	NA
DOSING VOLUME:	NA
PUMP TANK DRAW DOWN*:	NA
SEPTIC TANK SIZE:	1500 gal.
PUMP TANK SIZE:	NA

**Pump tank draw down based on a volume basis of 29 gallons per inch. Draw down may vary among pump tank manufacturers.*

Abersham LOT # 4

Project #: 01-1044

LAYOUT FOR 6 BEDROOM HOME

June 25, 2008

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		NA			NA		
INSTR. I			NA				
HOUSE CNR				NA	NA		
P. TANK				NA	NA		
1	***PINK***			*NA*	*NA*	*31*	*30*
2	***RED***			*NA*	*NA*	*43*	*40*
3	***ORANGE***			*NA*	*NA*	*55*	*55*
4	***BLUE***			*NA*	*NA*	*65*	*65*
5	***PINK***			*NA*	*NA*	*81*	*80*
6	***RED***			*NA*	*NA*	*100*	*100*
7	***ORANGE***			*NA*	*NA*	*100*	*100*
8	***BLUE***			*NA*	*NA*	*80*	*80*
9	***PINK***			*NA*	*NA*	*60*	*60*
10	***RED***			*NA*	*NA*	*65*	*65*
11	***ORANGE***			*NA*	*NA*	*66*	*65*
12	DARK PINK			NA	NA	56	56
13	ORANGE			NA	NA	60	60
14	BLUE			NA	NA	70	70
15	PINK			NA	NA	75	75
16	DARK PINK			NA	NA	80	80
17	ORANGE			NA	NA	80	80
18	BLUE			NA	NA	61	61
					Total	**1228**	**1222**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH SYSTEM	DISTRIBUTION
** System*	*740*	*0.250*	*ACCEPT.*	*0.250*	*25% RED.*	**GRAVITY**
Repair	482	0.250	*MOD.*	0.250	PPBPS	**DISTRIBUTION** LOW PRESSURE

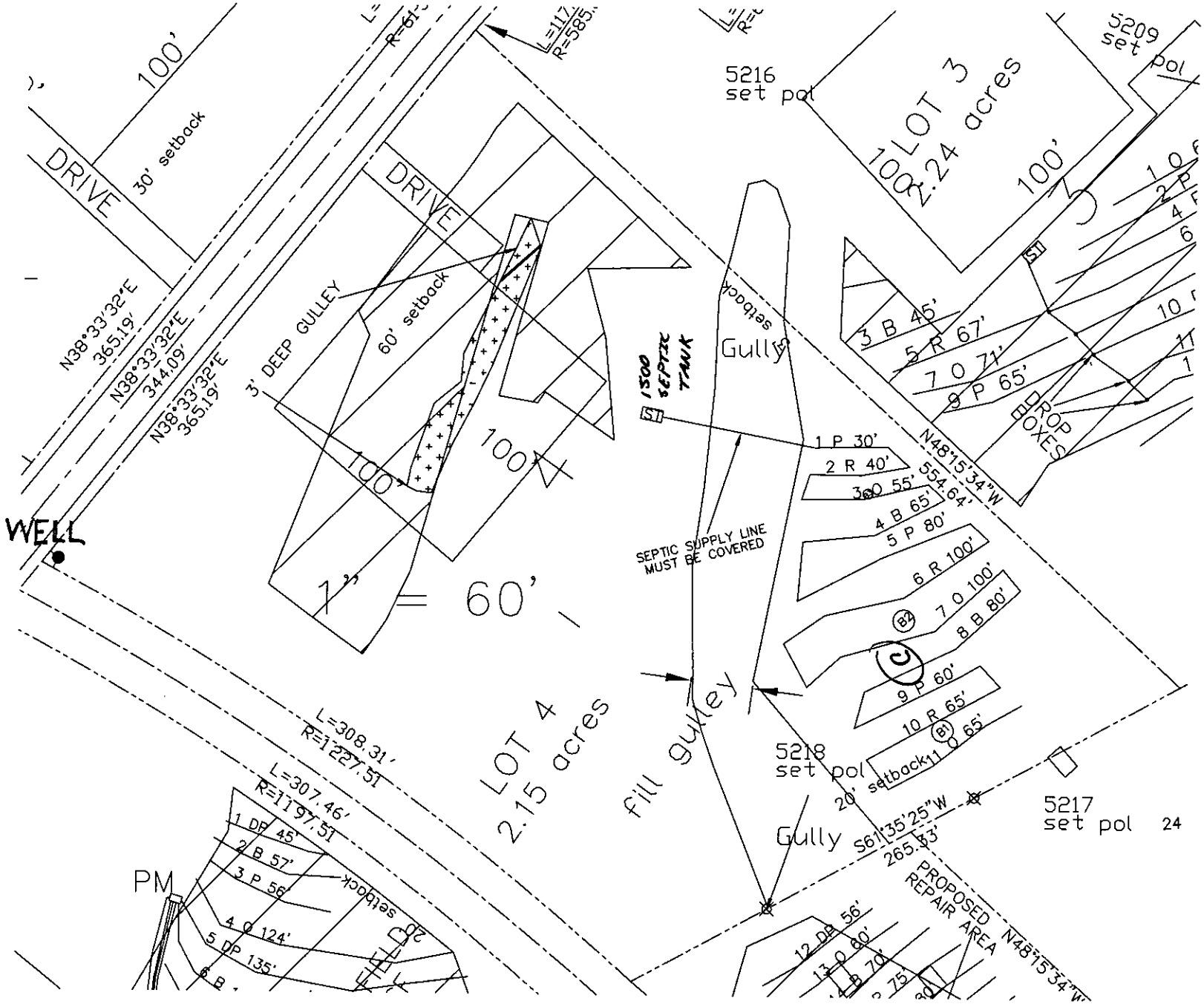
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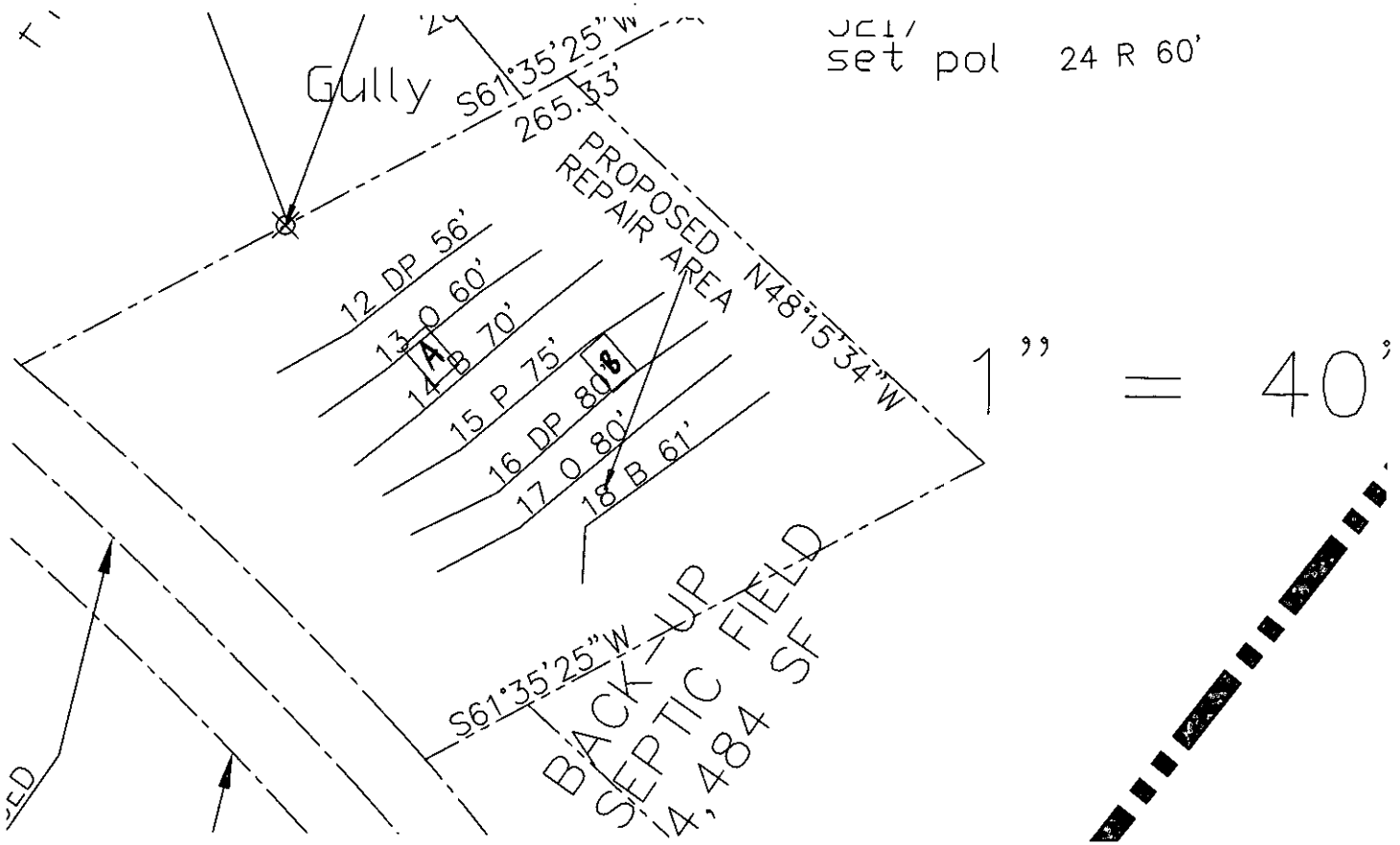
**TBM is assumed to be 100'

**All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**BS, HI, and FS indicate rod readings


100'
30' setback
DRIVE
DRIVE
N38°33'32"E
365.19'
N38°33'32"E
344.09'
N38°33'32"E
365.19'
3' DEEP GULLEY
60' setback
100'
100'
1" = 60'
WELL
1500 SEPTIC TANK
SEPTIC SUPPLY LINE MUST BE COVERED
Gully
setback
fill gulley
LOT 4
2.15 acres
LOT 3
2.24 acres
5216
set pol
5209
set pol
5218
set pol
5217
set pol
20' setback
N48°15'34"W
554.64'
S61°35'25"W
265.33'
PROPOSED REPAIR AREA
N48°15'34"W
L=308.31'
R=1227.51
L=307.46'
R=1197.51
PM
1 DP 45'
2 B 57'
3 P 56'
4 Q 124'
5 DP 135'
6 B
setback
28'
1 P 30'
2 R 40'
3 Q 55'
4 B 65'
5 P 80'
6 R 100'
7 Q 100'
8 B 80'
9 P 60'
10 R 65'
11 Q 65'
3 B 45'
5 R 67'
7 Q 71'
9 P 65'
PROP BOXES
12 DP 56'
13 Q 80'
14 B 70'
24


Gully
S61°35'25"W
265.33'
PROPOSED REPAIR AREA
N48°15'34"W
12 DP 56'
13 O 60'
14 B 70'
15 P 75'
16 DP 80'
17 O 80'
18 B 61'
A
B
S61°35'25"W
BACK-UP SEPTIC FIELD
14,484 SF
set pol
24 R 60'
1" = 40'

CALCULATIONS

Location ABERSHAM

Project Number 01-1044

Lot No: Lot 4

No. of Bedrooms	6	
Design Flow	720	$^{gal}/_{day}$
LTAR	0.25	$^{gpd/ft^2}$
25% RED.? (YES OR NO)	YES	
Supply Line Length	66	ft.
Supply Line Volume	11.484	gal.
Required Feet of Line	720	ft.
Amount of Line from Layout	740	ft.
Gallons per Minute	N/A	$^{gal}/_{min}$
Required Septic Tank Capacity	1500	gal.
Minimum Standard Tank Size	1500 gal.	
Lateral Line Volume	483.22	gal.
Dosing Volume	NA	gal.

Note: Dosing Volume based on70% of lateral line volume

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

Tank Draw Down	NA	*Generic Draw Down of 29 gal.per in.*
Pump Run Time	NA	minutes
Elevation Head	NA	ft.
Pressure Head	NA	ft.
Friction Factor	NA	ft./100 ft. *(From the interpolater.)*
Friction Head	NA	ft.
Total Dynamic Head (+15%)	NA	ft.

FILE COPY
FILED FOR REGISTRY
DATE 10/24/08 BOOK 24312 PAGE 781
STAMPS $26.00
NORTH A. CARLSON
REGISTER OF DEEDS
MECKLENBURG COUNTY, NC

STATE OF NORTH CAROLINA

MECKLENBURG COUNTY COPY

SEPTIC SYSTEM EASEMENT AGREEMENT

This EASEMENT made this 23 day of October, 20 08, by and between

GRANTOR	GRANTEE
NEIGHBORHOODS AT ABERSHAM, LLC	MARBLE PROPERTIES, LLC 105 Mystic Lake Loop Mooresville, N. C. 28117

Enter in appropriate block for each party: name, address, and, if appropriate, character or entity, e.g., corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee an easement as hereinafter described, to run with the land upon that certain lot or parcel of land owned by Grantor and located in the city of _____, Deweese Township, Mecklenburg County, North Carolina, and more particularly described as follows:

This instrument was prepared by: Richard J. Kline

Mail after recording to: P.O. Box 1508, Davidson NC 28036

Being the parcel identified as "Back-up Septic Field 0.41 acres located along the northern boundary of Allison Park Drive and the eastern boundary of Lot 4, as shown on a plat of Abersham recorded in Map Book 50 Page 700 Mecklenburg County Public Registry, hereinafter referred to as the "Easement Parcel."

Grantor hereby imposes said easement for the benefit of Grantee as the present owner and for the benefit of future owners of the following lot or parcel of land, situated in Deweese Township, Mecklenburg County, North Carolina, and more particularly described as follows:

Lot 4 Blockof Abersham recorded in Map Book 50 Page 700 Mecklenburg County Public Registry, hereinafter referred to as the "Benefited Parcel."

Said Easement shall enable the Grantee to place, if, as and when needed, such need to be determined by the Grantee in his sole discretion, a septic tank and drain field or portions thereof, upon the Septic System Easement Area on the Easement Parcel and to inspect, maintain, repair and replace components of said septic system at any time and from time to time. If the Easement Area also includes a connector strip for ingress and egress, Grantee shall have the right to use said connector strip for access as needed. *This Easement may not be altered, amended or cancelled without the express written permission of the Mecklenburg County Health Department, which written permission must be part of any document recorded to alter, amend or cancel this Easement.* This Easement shall automatically expire, however, should Grantee ever hook up the structure located or to be located on the Benefited Parcel to a public or community sanitary sewage system but shall otherwise be perpetual.

Grantor acknowledges that the Septic Tank System Easement Area cannot be used and will not be used for any of the following activities or in any of the following ways:

- Grading or filling
- Parking or driving heavy equipment in the area or in any other way compacting the soil in the Area
- Excavating soil from the Area
- Placing footings or foundations or engaging in any other construction activity in the Area
- Placing in-ground or above-ground swimming pools in the Area
- Placing irrigation systems in the Area

- Placing underground utility lines or cables in the Area
- Planting trees or gardens in the Area
- Removing any large trees in the Area unless dead or diseased
- Using the Area for the burial of stumps, trash, or any other type of construction material
- Using the Area for gravesites
- Diverting the natural flow of water onto the Area by way of drainage ditches or diversion ditches or using the Area to receive water from any gutter or downspout discharges

IN WITNESS WHEREOF, the Grantor and Grantee have hereunto set their hands and seals, or if corporate, have caused this instrument to be signed in their corporate names by their duly authorized officers and their seals to be hereunto affixed by authority of their Boards of Directors, the day and year first above written.

GRANTOR

Neighborhoods at Abersham LLC (SEAL)
(Corporate Name)

BY: Everett F. Jackson III (SEAL)
Managing Member/Agent President

ATTEST: (SEAL)

(SEAL)

Secretary (Corporate Seal)

SEAL-STAMP

North Carolina, Mecklenburg County

I, Noreen R Brewer, a Notary Public of the County and State aforesaid, certify that Everett F Jackson III Grantor, personally appeared before me this day and acknowledged the execution of the foregoing instrument. WITNESS my hand and official stamp or seal, this 24 day of Oct, 2008.

My Commission Expires: 10/1/12 Noreen R Brewer (Notary Public)

NOREEN R. BREWER NOTARY PUBLIC MECKLENBURG COUNTY, N. C.

SEAL-STAMP North Carolina, _____ County

I, _____, a Notary Public of the County and State aforesaid, certify that _____ personally came before me this day and acknowledged the ___he is _____ Secretary of _____ a corporation, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its _____ President, sealed with its corporate seal, and attested by _____ as its _____ Secretary. WITNESS my hand and official stamp or seal, this _____ day of _____, 20_____.

My Commission Expires: _____ _____ (Notary Public)

GRANTEE

MARBLE Properties LLC _____ (SEAL)
(Corporate Name)

BY: _____ _____ (SEAL)
Manager President

ATTEST: _____ (SEAL)

_____ _____ (SEAL)
_____ Secretary (Corporate Seal)

SEAL-STAMP North Carolina, Mecklenburg County

I, Noreen R Brewer, a Notary Public of the County and State aforesaid, certify that John L Gerino, Grantee, personally appeared before me this day and acknowledged the execution of the foregoing instrument. WITNESS my hand and official stamp or seal, this 24 day of Oct, 2008.

My Commission Expires: 10/1/12 Noreen R Brewer (Notary Public)

NOREEN R. BREWER NOTARY PUBLIC MECKLENBURG COUNTY, N.C.

SEAL-STAMP North Carolina, _____ County

I, _____, a Notary Public of the County and State aforesaid, certify that _____ personally came before me this day and acknowledged the ___he is _____ Secretary of _____, a corporation, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its _____ President, sealed with its corporate seal, and attested by _____ as its _____ Secretary. WITNESS my hand and official stamp or seal, this _____ day of _____, 20_____.

My Commission Expires: _____ _____
(Notary Public)

Approval by the Mecklenburg County Health Department does not certify or extend to matters of title. The purchaser of property subject to or affected by this easement is responsible for ascertaining all matters affecting the validity and enforceability of this instrument.

FEE: 0.00
DATE: 10/15/2008

CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

MECKLENBURG COUNTY
GROUNDWATER & WASTEWATER SERVICES

FILE NUMBER: 7209B

PERMIT NUMBER: 30003767

PARCEL NUMBER: 00333107

JOB LOCATION INFORMATION

ADDRESS: 15430 GREENWOLD DR

CITY: DAVIDSON **STATE: NC** **ZIP:** 28036

ISSUED TO: NEIGHBORHOODS AT ABERSHAM

CONSTRUCTION AUTHORIZATION ISSUANCE DATE: 10/15/2008

CONSTRUCTION AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 30003767, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

2. AN INSTALLATION APPROVAL MUST BE SECURED PRIOR TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A REGISTERED SEPTIC TANK CONTRACTOR WITH THE MECKLENBURG COUNTY HEALTH DEPARTMENT.

3. ANY ALTERATION IN SITE OR SOIL CONDITIONS (INCLUDING LOCATION OF STRUCTURES AND APPURTENANCES) OR MODIFICATION IN USE, DESIGN WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS AS SPECIFIED IN THE ASSOCIATED IMPROVEMENT PERMIT AND APPLICATION, MAY SUBJECT THIS CONSTRUCTION AUTHORIZATION AND ASSOCIATED PERMIT(S) TO REVOCATION.

4. THIS CONSTRUCTION AUTHORIZATION AS PROVIDED IN G.S. 130A-335(f) AND G.S. 130A-336(b) SHALL BE VALID FOR A PERIOD EQUAL TO THE VALIDITY OF THE IMPROVEMENT PERMIT, NOT TO EXCEED 60 MONTHS.
   *CONSTRUCTION AUTHORIZATION EXPIRATION DATE: 8/7/2013

FILE NUMBER: 7209B

Revised On: January 3, 2007

APPLICATION NUMBER: 2479

SEPTIC FEE: 200
DATE: 7/6/07
CK# 36528 JKH

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: 00333101, 00304103, Part of 00333102

STREET ADDRESS: 3513 Grey Road

CITY: Davidson

STATE: NC ZIP: 28036

SUBDIVISION NAME: ABERSHAM

LOT #: 4 LOT SIZE (acres): 2.15 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:

NUMBER OF BEDROOMS: 6

NUMBER OF OCCUPANTS: 12 maximum

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)*:

8A. RANK: ☐ ANY TYPE ☒ CONVENTIONAL 1 ☒ ACCEPTED 2 ☒ INNOVATIVE 3 ☒ ALTERNATIVE 4 ☐ OTHER ____

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 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	☐ YES ☒ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	☐ YES ☒ NO

10. PROPERTY OWNER:

NAME: Neighborhoods at Abersham
ADDRESS: P.O. Box 99
CITY: Davidson
STATE: NC ZIP: 28036
HOME PHONE: N/A WORK PHONE: 704.895.0556
MOBILE PHONE: N/A FAX: 704.895.0558

11. OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:

NAME: Rollans Soil & Environmental Services
ADDRESS: 470 N. Broad St., Suite D
CITY: Mooresville
STATE: NC ZIP: 28115
HOME PHONE: N/A WORK PHONE: 704.658.1723
MOBILE PHONE: 704.746.5046 FAX: 704.658.1724

12. WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? _____

13 WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? _____

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.

Samuel A Rollans

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.

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

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

HOUSE
60'x60'
(TYP.)
N38°33'32"E
365.19'
N38°33'32"E
344.09'
N38°33'32"E
365.19'
30' setback
60' setback
20' setback
L=307.46'
R=1197.51
L=308.31'
R=1227.51
LOT 4
SEPTIC FIELD
14,472 SF
LOT 4
2.15 acres
4
275.34'
42.
3
L=41.69
R=615.00
L=117.93'
R=585.00
L=120.89
R=600.00
3' setback
20' setback
S61°35'25"W
265.33'
N48°15'34"W
554.64'
LOT 3
2.24 acres
3
LOT 3
SEPTIC FIELD
24,267 SF
480.76'
N46°15'39"W
1"=60'

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

Sheet: 1 of 2
Property ID: PO 003-331-01
Lot #: 4
File #: 7209B
AppID: 2479

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Neighborhoods at Abersham
Applicant: Rollans Soil & Env. Services
Address: PO Box 99, Davidson, N. C. 28036
Date Evaluated: 7/26/2007
Proposed Facility: Residence
Design Flow (.1949): 720gpd
Property Size: 2.15a
Location of Site: Off Grey Road
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] 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	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 7	0-3	GR/CL	FR/SEXP/SS/SP	>53" TO SOIL WETNESS	53	N/A	NONE	PS, IV
		3-27	SBK/ABK/C	FI/SEXP/S/P					.3GPD/FT
		27-53	SBK/CL	FR/SEXP/SS/SP					
2	LS, 9	0-3	GR/CL	"	>51" TO SOIL WETNESS	51	"	"	"
		3-27	SBK/ABK/C	FI/SEXP/S/P					
		27-51	SBK/CL	FR/SEXP/SS/SP					
3	LS, 8	0-2	GR/CL	"	>48" TO SOIL WETNESS	48	"	"	"
		2-32	SBK/ABK/C	FI/SEXP/S/P					
		32-48	SBK/CL	FR/SEXP/SS/SP					
					SITE LTAR .3GPD/FT^2				

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)	IIIb	Iva
Site LTAR	.03	0.3

Other Factors (.1946):
Soil Evaluation By: W. R. Marlin, LSS, 8/8/2007
Others Present:
Site Classification (.1948): PS
Site Evaluation By: PHILO WALKER RS 10/17/07
Others Present:

COMMENTS:
100% repair

Landscape Position	Group	Texture	.1955 LTAR	Structure
R-Ridge	I	S-Sand	1.2 - 0.8	SG-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		M-Massive
LS-Linear Slope				CR-Crumb
FS-Foot 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



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 #: **30002479** GWS File #: **7209B** Tax Parcel #: **003-331-01**

- 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):** 10/22/2012

Type of Installation: Residential - New System Lot Number: 4

Structure Type: HOUSE Size (ft^2): 0 # Bedrooms: 6 # Occupants: 12

Building Foundation: Basement With Plumbing Water Supply: Private Well

II. Initial System Type: Pump to Approved **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):	30	Depth of Media (in):	12	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:	Manifold (LPP Distri		

IV. Permit Conditions/Comments:

(Please See the Following Page for Permit Conditions.)

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

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

DENR Authorized Agent: Philo Walker

Signature: Philo Walker RS

Date Issued: 10/22/2007

Owner/Legal Agent: GREG WILLIAMS
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 #: **30002479** GWS File #: **7209B**

IV. Permit Conditions/Comments:

- Easement agreement forms shall be on file and the property shall be deeded and recorded prior to issuance of Construction Authorization.
- 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.
- 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 the property owner to obtain a contract with a Certified Operator to perform routine inspections and maintenance on the system.
- 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 installed in accordance with the required setbacks listed on the corresponding plot plan.
- All components of the septic system must be located at least 100 ft. (50 ft. minimum) from all private wells.

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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- 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 Walker RS

Date Issued: 10/22/2007

Owner/Legal Agent: Greg Williams
Print Name

Signature: G. Williams

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

Sheet: 1 of 2
Property ID: PO 003-331-01
Lot #: 4
File #: 7209B
AppID: 2479

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Neighborhoods at Abersham
Applicant: Rollans Soil & Env. Services
Address: PO Box 99, Davidson, N. C. 28036
Date Evaluated: 7/26/07
Proposed Facility: Residence
Design Flow (.1949): 720gpd
Property Size: 2.15a
Location of Site: Off Grey Road
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] 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	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 7	0-3	GR/CL	FR/SEXP/SS/SP	>53" TO SOIL WETNESS	53	N/A	NONE	PS, IV
		3-27	SBK/ABK/C	FI/SEXP/S/P					.3GPD/FT
		27-53	SBK/CL	FR/SEXP/SS/SP					
2	LS, 9	0-3	GR/CL	"	>51" TO SOIL WETNESS	51	"	"	"
		3-27	SBK/ABK/C	FI/SEXP/S/P					
		27-51	SBK/CL	FR/SEXP/SS/SP					
3	LS, 8	0-2	GR/CL	"	>48" TO SOIL WETNESS	48	"	"	"
		2-32	SBK/ABK/C	FI/SEXP/S/P					
		32-48	SBK/CL	FR/SEXP/SS/SP					
					SITE LTAR .3GPD/FT^2				
A	LS, 10	0-3	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48+	"	"	"
		3-29	SBK/C	FI/SEXP/S/P					
		29-48	SBK/CL	FR/SEXP/SS/SP					
B	"	0-3	GR/CL	"	"	"	"	"	"
		3-48	SBK/C	FI/SEXP/S/P					
C	"	0-3	GR/CL	FR/SEXP/SS/SP	>50" TO SOIL WETNESS	50	"	"	"
		3-50	SBK/C	FI/SEXP/S/P					

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

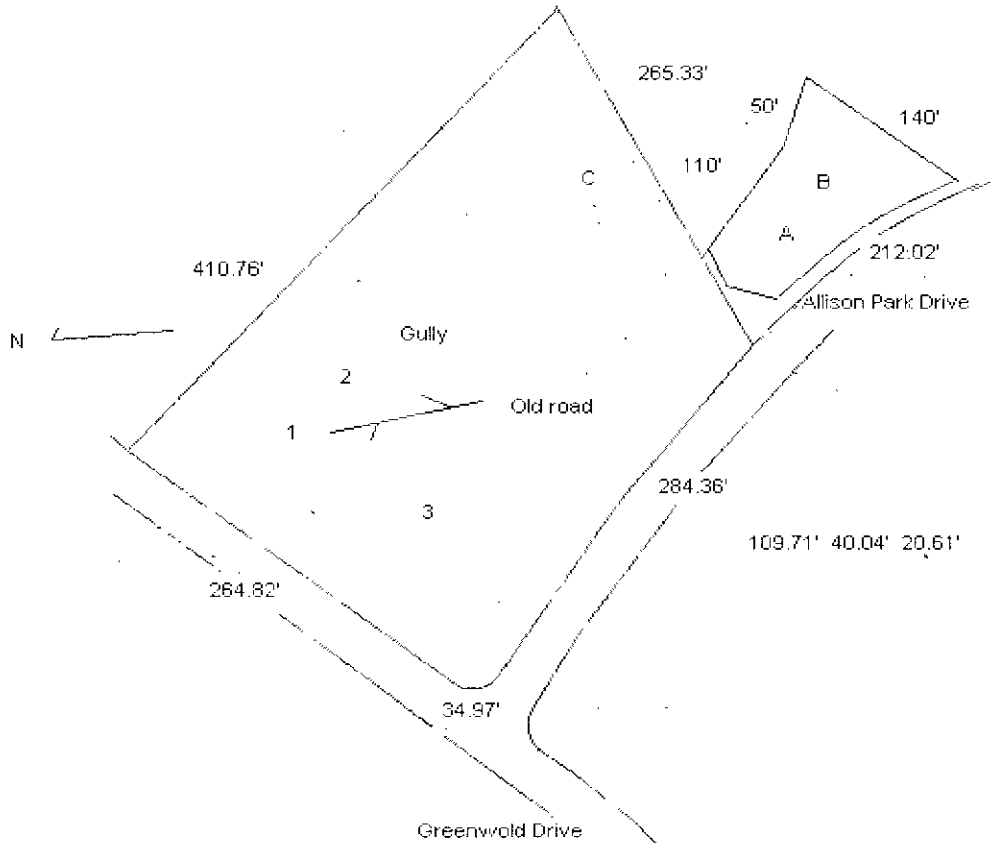
Other Factors (1946):
Soil Evaluation By: W. R. Marlin, LSS, 8/8/2007, W. R. Marlin
Others Present: A. Rollans
Site Classification (.1948):
Site Evaluation By:
Others Present:

COMMENTS:
100% repair, additional pits dug 6/19/08

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-Foot 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



FEE: 400.00
DATE: 10/14/2008

CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

MECKLENBURG COUNTY
GROUNDWATER & WASTEWATER SERVICES

FILE NUMBER: 7209B

PERMIT NUMBER: 30002479

PARCEL NUMBER: 00333107

JOB LOCATION INFORMATION

ADDRESS: 15430 GREENWOLD DR

CITY: DAVIDSON **STATE: NC** **ZIP:** 28036

ISSUED TO: NEIGHBORHOODS AT ABERSHAM

CONSTRUCTION AUTHORIZATION ISSUANCE DATE: 10/14/2008

CONSTRUCTION AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 30002479, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

2. AN INSTALLATION APPROVAL MUST BE SECURED PRIOR TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A REGISTERED SEPTIC TANK CONTRACTOR WITH THE MECKLENBURG COUNTY HEALTH DEPARTMENT.

3. ANY ALTERATION IN SITE OR SOIL CONDITIONS (INCLUDING LOCATION OF STRUCTURES AND APPURTENANCES) OR MODIFICATION IN USE, DESIGN WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS AS SPECIFIED IN THE ASSOCIATED IMPROVEMENT PERMIT AND APPLICATION, MAY SUBJECT THIS CONSTRUCTION AUTHORIZATION AND ASSOCIATED PERMIT(S) TO REVOCATION.

4. THIS CONSTRUCTION AUTHORIZATION AS PROVIDED IN G.S. 130A-335(f) AND G.S. 130A-336(b) SHALL BE VALID FOR A PERIOD EQUAL TO THE VALIDITY OF THE IMPROVEMENT PERMIT, NOT TO EXCEED 60 MONTHS.
   *CONSTRUCTION AUTHORIZATION EXPIRATION DATE: 10/22/2012

ROLLANS *Soil & Environmental Services, Inc.*

470 North Broad St., Suite D, Mooresville, NC 28115 *Phone: (704) 658-1725* *Fax: (704) 658-1724*

Ashley Rollans, NC Licensed Soil Scientist
Mobile: (704) 746-5046
E-mail: Rollanstortcj@aol.com

Brady Freeman, Registered Sanitarian
Mobile: (704) 746-6497
E-mail: bfree209@yahoo.com

Attached is a proposed design for an Accepted (25% reduction) Septic System with Pressure Manifold distribution for a 6 bedroom single family residence on Lot #4 Abersham Subdivision, Mecklenburg County, North Carolina.

Contents: **Page**

Information for the Installer---------- 1

Design Information
- Design Specifications---------- 2-3
- Layout Specifications---------- 4
- System Tapsheet---------- 5
- Pressure Manifold Diagram---------- 6

Site Plan/System Plan---------- 7

Calculations---------- 8

Profile Descriptions---------- 9

August 22, 2007
Project #: 01-1044
Design By: Rollans Soil and Environmental Services

GWS Septic System Design Review

GWS File #: 7209B **Approved** Disapproved

Design Review: TCT 10-18-07 ☒ ☐

Field Review: 10/12/07 TSW ☒ ☐

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

INFORMATION FOR THE INSTALLER:

- The permit should be read very carefully prior to bidding. The following are details that must be considered along with all other considerations.
- Tanks shall be approved by NC DENR, and certification supplied by the manufacturer.
- Tanks shall be water tested prior to installation.
- The installer shall be responsible to the owner for placement of the tanks and to insure that final grades are returned to the original natural grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate cavities left during initial fill placement.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
- Where required by the county health department, post installation inspections by the designer must be scheduled 5 week days in advance.
- Trenches shall be carefully excavated so the bottom is within 2" from the highest to the lowest points of elevation within the trench. If the bottom elevation needs adjusting after it has been trenched, it will be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over excavated during initial trenching. All fine grading within the trench will be hand done with a shovel. No loose material will be left in the trench
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent slump at a later date.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pinflag locations should be checked by the installer prior to beginning trenches.
- Pumptank riser should be 6" above grade, control panel should be 12" above grade.
- Septic tank riser shall be a minimum of 6" above finished grade.
- System is specified as an innovative 25% reduction installation.
- Repair is specified as a MODIFIED 50% reduction installation.
- Rake trench walls, lime sidewalls, install trenches 36" wide and have no more than 1/4" fall in 10 feet.

PRESSURE MANIFOLD SYSTEM
FOR WASTEWATER TREATMENT

Owner:	William Brewster Company
Address:	PO Box 99 Davidson NC 28036
Phone:	704 895 0556
County:	Mecklenburg
Location:	Abersham LOT #4
Source of Wastewater Flow:	6 Bedroom Single Family Residence
Estimated Gallons Per Day Flow:	720
System Flow:	42.66

Design Specifications

Drainfield Size:	600
Loading Rate (gpd/ft.^{2}):	0.3
Depth of Gravel In Trench:	NA (25% reduction)
Gravel Size:	NA (25% reduction)
Trench Depth:	36 in.
Trench Width:	36 in.
Septic Tank Size:	1500 gal.
Pump Tank Size:	1500 gal.
Estimated Supply Line Length:	174
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	30.28
Dosing Volume:	274.26
Supply Manifold:	4 in. SCH 80 PVC
Supply Manifold Length:	4 ft. (minimum)
Supply Manifold Volume:	N/A
Recommended Float Controls:	SJE Sensor Float Control Switches as Required for Control Panel or County Approved Equivalents
Recommended Control Panel:	SJE-Rhombus Model 112 (NEMA 4x) Control Panel or County Approved Control Panel.
Pressure Head:	2 ft.
Friction Head:	NA
Elevation Head:	NA
Total Dynamic Head:	NA
Threaded Union:	In Tank
Gate Valves:	1 in Tank 1 at Pressure Manifold
Check Valves:	In Tank
Anti-Siphon Hole:	NA
Additional Comments:	Soil suitability was performed by Mecklenburg County Health Department.

Abersham LOT #4
PRESSURE MANIFOLD DESIGN

DESIGN FLOW (gpd):	720
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.3
TOTAL AREA TRENCH BOTTOM:	1800
TOTAL LATERAL LENGTH:	600
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	600
SUPPLY LINE LENGTH:	174
TOTAL DYNAMIC HEAD:	NA
MANIFOLD SIZE:	4 in.SCH 80 PVC
DOSING VOLUME:	274.26
PUMP TANK DRAW DOWN*:	13.1
SEPTIC TANK SIZE:	1500 gal.
PUMP TANK SIZE:	1500 gal.

**Pump tank draw down based on a volume basis of 31 gallons per inch. Draw down may vary among pump tank manufacturers.*

Abersham LOT #4

Project #: 01-1044

LAYOUT FOR 6 BEDROOM HOME — August 22, 2007

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		NA			NA		
INSTR. 1			NA				
HOUSE CNR				NA	NA		
P. TANK				NA	NA		
1	BLUE			NA	NA	28	28
2	PINK			NA	NA	58	58
3	ORANGE			NA	NA	75	75
4	DARK PINK			NA	NA	68	68
5	*BLUE*			*NA*	*NA*	*107*	*100*
6	*PINK*			*NA*	*NA*	*119*	*100*
7	*ORANGE*			*NA*	*NA*	*108*	*100*
8	*DARK PINK*			*NA*	*NA*	*124*	*100*
9	*BLUE*			*NA*	*NA*	*105*	*100*
10	*PINK*			*NA*	*NA*	*127*	*100*
11	ORANGE			NA	NA	67	67
12	DARK PINK			NA	NA	62	62
13	BLUE			NA	NA	67	67
					Total	1115	1025

	LINE LENGTH	LTAR GPD/FT²	SYSTEM TYPE	SOIL LTAR GPD/FT²	TRENCH SYSTEM	DISTRIBUTION
" System	*600*	*0.3*	*ACCEPT.*	*0.3*	*25% RED.*	PRESSURE
Repair	425	0.3	*MOD.*	0.3	PPBPS	MANIFOLD LOW PRESSURE

Notes:

- **TBM is assumed to be 100'
- **All measures in feet
- **Nitrification lines are demonstrated on contour via colored pin flags
- **BS, HI, and FS indicate rod readings

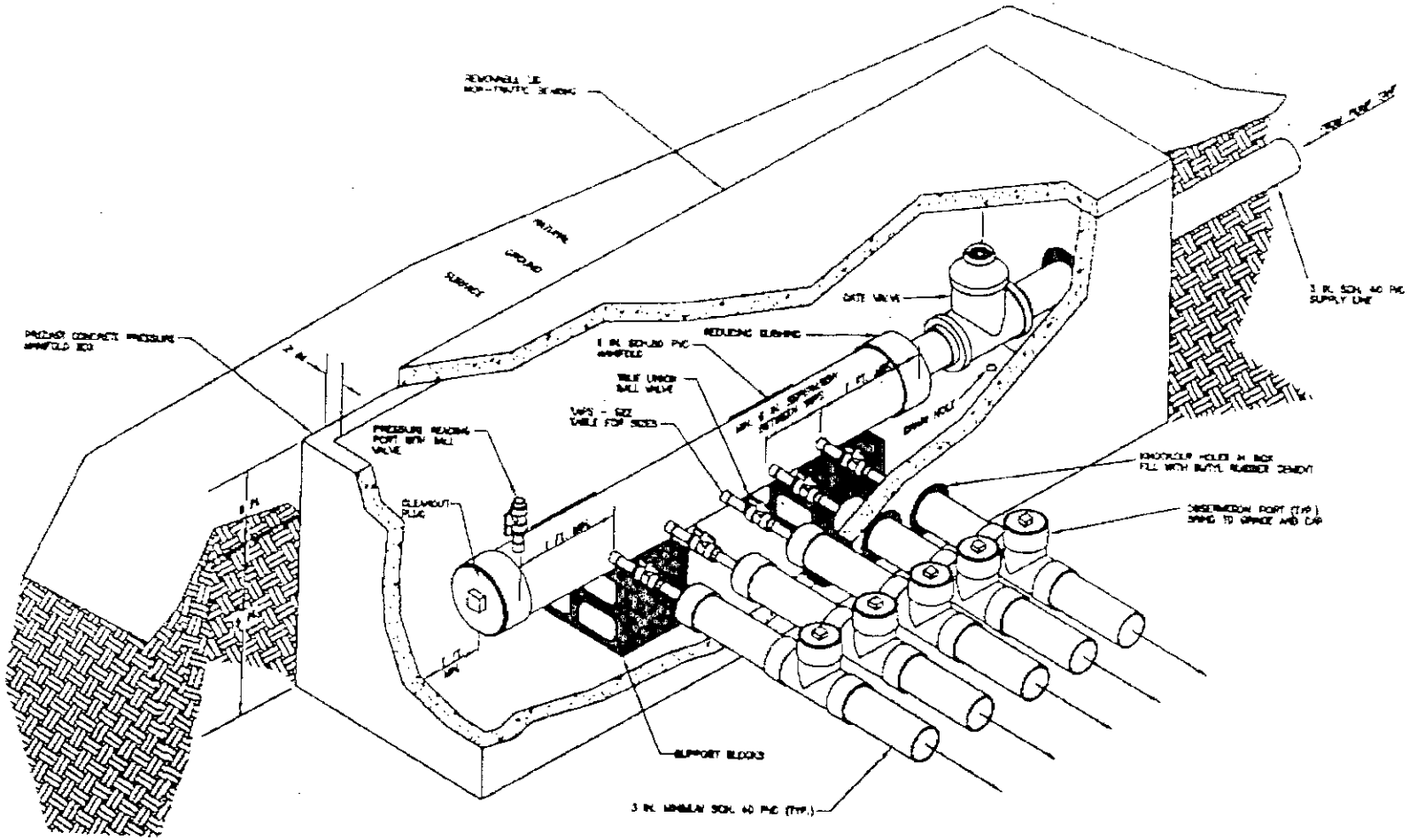
PRESSURE MANIFOLD TAPSHEET - ABERSHAM LOT#4

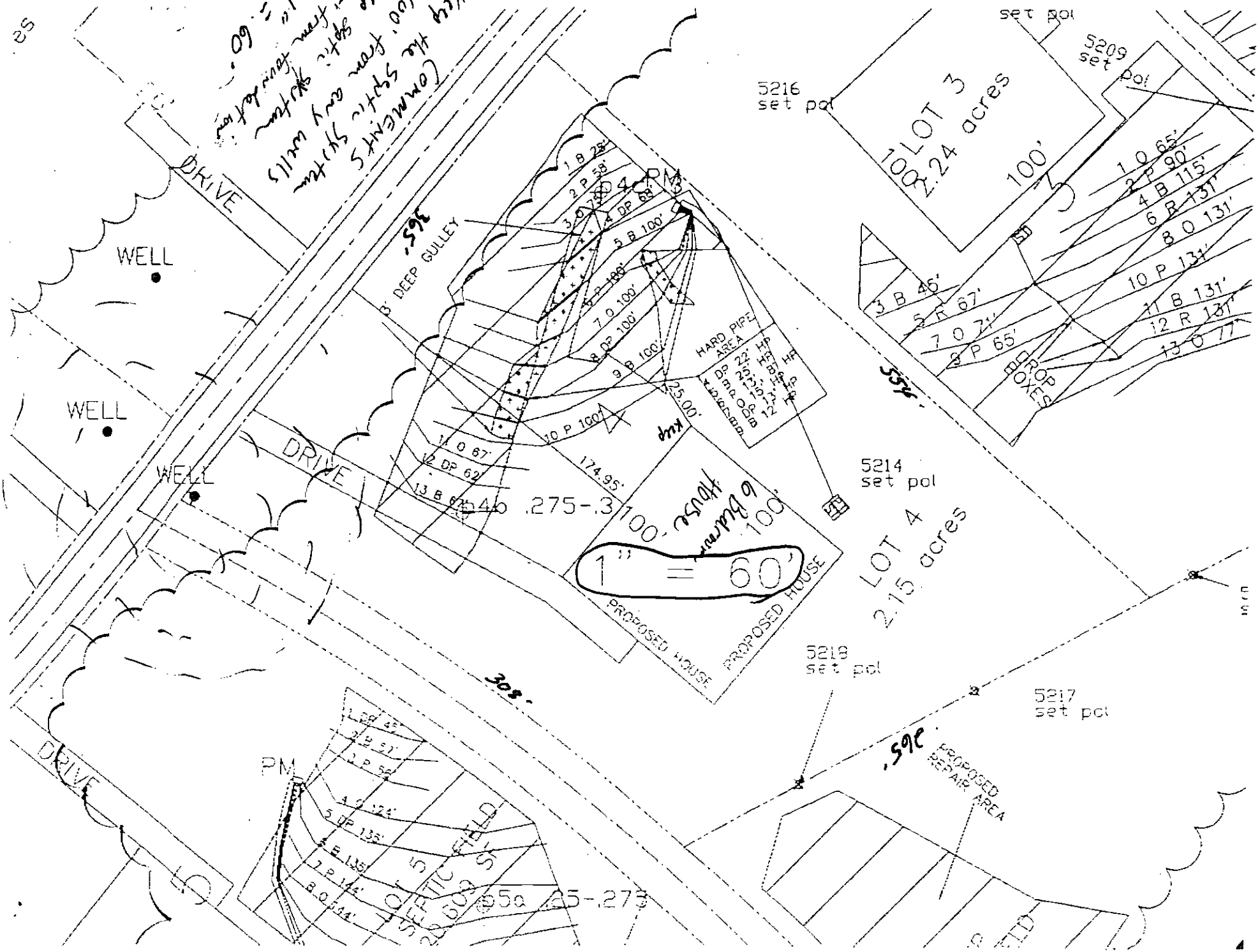
SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/Tap	Trench Area
5	*BLUE*	NA	*100*	SCH 40 1/2	7.11	300
6	*PINK*	NA	*100*	SCH 40 1/2	7.11	300
7	*ORANGE*	NA	*100*	SCH 40 1/2	7.11	300
8	*DARK PINK*	NA	*100*	SCH 40 1/2	7.11	300
9	*BLUE*	NA	*100*	SCH 40 1/2	7.11	300
10	*PINK*	NA	*100*	SCH 40 1/2	7.11	300

total	feet =	600	gal/min =	42.66
		Des. Flow	720	
		Pump Run=	6.43	
		soil LTAR	0.3	
		LTAR +5%	0.315	
		LTAR with ACCEPTED	0.4	
		LTAR with ACCEPTED + 5%	0.42	

TYPICAL PRESSURE MANIFOLD DETAIL




LOT 3
100' x 2.24 acres
LOT 4
2.15 acres
5216 set pol
5209 set pol
5214 set pol
5218 set pol
5217 set pol
DRIVE
WELL
WELL
WELL
3' DEEP GULLEY
HARD PIPE AREA
PROPOSED HOUSE
PROPOSED HOUSE
PROPOSED REPAIR AREA
1" = 60'
100' x 100'
100' x house
55'
30'
.59
.59
.275-.3
.275-.3
PM
PM
SEPTIC FIELD
SEPTIC FIELD

CALCULATIONS

Location ABERSHAM

Project Number 01-1044

Lot No. Lot 4

No. of Bedrooms	6	
Design Flow	720	$^{gal}/_{day}$
LTAR	0.3	$^{gpd/ft^2}$
25% RED.? (YES OR NO)	YES	
Supply Line Length	174	ft.
Supply Line Volume	30.276	gal.
Required Feet of Line	600	ft.
Amount of Line from Layout	600	ft.
Gallons per Minute	42.66	$^{gal}/_{min}$
Required Septic Tank Capacity	1500	gal.
Minimum Standard Tank Size	1500	gal.
Lateral Line Volume	391.8	gal.
Dosing Volume	274.26	gal.
	Note: Dosing Volume based on70% of lateral line volume	
Tank Draw Down	13.1	*Generic Draw Down of 31 gal per in.*
Pump Run Time	6.43	minutes
Elevation Head	NA	ft.
Pressure Head	NA	ft.
Friction Factor	2.37	ft./100 ft. *(From the interpolater.)*
Friction Head	NA	ft.
Total Dynamic Head (+15%)	NA	ft.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	f
20	0.84
[illegible]	[illegible]
25	1.27
[illegible]	[illegible]
30	1.78
[illegible]	[illegible]
35	2.37
[illegible]	[illegible]
40	3.03
[illegible]	[illegible]
45	3.77
[illegible]	[illegible]
50	4.58
[illegible]	[illegible]
60	[illegible]



5430 Greenwold Dr

~~3513 GREY~~ RD

0033310~~1~~
7

1/11/2008

duponbj

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

Groundwater & Wastewater Services
Septic Project File & Data Review Worksheet

LD

GWS File #: 7209 B WASPS App #: 2479

Primary ES assigned to project: PW

Secondary ES assigned to project:

Project Type: New System ☑ Alteration ☐ Repair ☐ Modified Plot Plan ☑ 025 00

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: 3			
	Were sufficient auger borings made?	Yes ☑	No ☐	N/A ☐
.1939(d), .1955, .1956, .1957	LTAR .3	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 ☐

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: KR

Date performed: 10/8/07

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	08/04/08	**Amount:**	100.00
Receipt #:	58482	**Tendered:**	100.00
Check / Auth #:	CHECK 4400	**Returned:**	0.00
Received By:	CRAIGGY		

Account Information

Account #: 200000
Contractor: ROLLANS SOIL & ENVIRONMENTAL
Attn:
Address: 470 N BROAD ST., SUITE D
Address:
City/State/Zip: MOORESVILLE, NC 28115

Item	Description	Permit#	Quantity	Unit Price	Total Price
0704	Change in Plot Plan LOT 4 ABERSHAM, FILE 7209B		1	100.00	100.00

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

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

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	10/14/08	**Amount:**	200.00
Receipt #:	59294	**Tendered:**	0.00
Check / Auth #:	CHARGE	**Returned:**	0.00
Received By:	GLADNAG		

Account Information

Account #: X41029
Contractor: MARBLE CUSTOM HOMES LLC
Attn:
Address: 105 MYSTIC LAKE LOOP
Address:
City/State/Zip: MOORESVILLE, NC 28117

Item	Description	Permit#	Quantity	Unit Price	Total Price
0734	Auth for Waste Wtr Sys Constr 15430 GREENWOLD DR		1	200.00	200.00

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

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
200.00					

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	10/14/08	**Amount:**	200.00
Receipt #:	59295	**Tendered:**	0.00
Check / Auth #:	CHARGE	**Returned:**	0.00
Received By:	GLADNAG		

Account Information

Account #: X41029
Contractor: MARBLE CUSTOM HOMES LLC
Attn:
Address: 105 MYSTIC LAKE LOOP
Address:
City/State/Zip: MOORESVILLE, NC 28117

Item	Description	Permit#	Quantity	Unit Price	Total Price
0703	Installation/Final Approval 15430 GREENWOLD DR		1	200.00	200.00

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

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
400.00					