IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 217340

IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PIN # 4626-04-2710

APPLICANT: Rollans Soil APPLICANT ADDRESS: Po Box 832 Mooresville 28115

SITE ADDRESS: 789 McKendree Rd - Mooresville PHONE: 704-746-5046 ALT. PHONE:

SITE DIRECTIONS: BSR, TR McKendree, on L

SUBDIVISION: Pine Knoll Pointe SECTION: LOT # 13 LOT AREA: .95 AC DESIGN FLOW: 480 L.T.A.R.: .25

Septic Tank	1000	(gal)	STB	194	Date	9/27/16	☒ New System	☐ Repair	☐ Expansion	System Type: I II III (IV) V VI	☒ Residence	No. Bedrooms	4	Water Supply
Pump Tank	1000	(gal)	PT	298	Date	9/24/16	System Description:	LP - Panel Block			☐ Business	No. Persons		☒ Private
Pump Make	Liberty	Model	290		Serial #		Repair System Description:	Same			☐ Other	No. Employees		☐ Public
# Nitrification Fields	1	# Lines	4		Linear Ft:	340'	Maintenance Agreement Required:	☒ YES	☐ NO		☐ Slab	☐ Crawl Space		☐ Community
Trench Width	24"	Max. Trench Bottom Depth	36"		Gravel Depth	—		☐ GRAVITY	☒ PRESSURE		☒ Basement w/plumbing		☐ Basement w/o plumbing	

Comments / Conditions:

INITIAL SITE SKETCH

See Plan From Rollans Soil & Environmental Services

AS BUILT SKETCH

Tanks, Line

	Date	Initials
Drain Lines Checked	11/3	WS
Tanks Checked	11/3	WS
Pressure Manifold or Valve Box Checked	3-23	BA
Pressure Head Set		BA
Electrical Checked		BA
Floats Set		BA
Alarm Checked		BA
Maintenance Contract Y / N	3-28-17	BA
Comments:		

Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☒ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☒ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

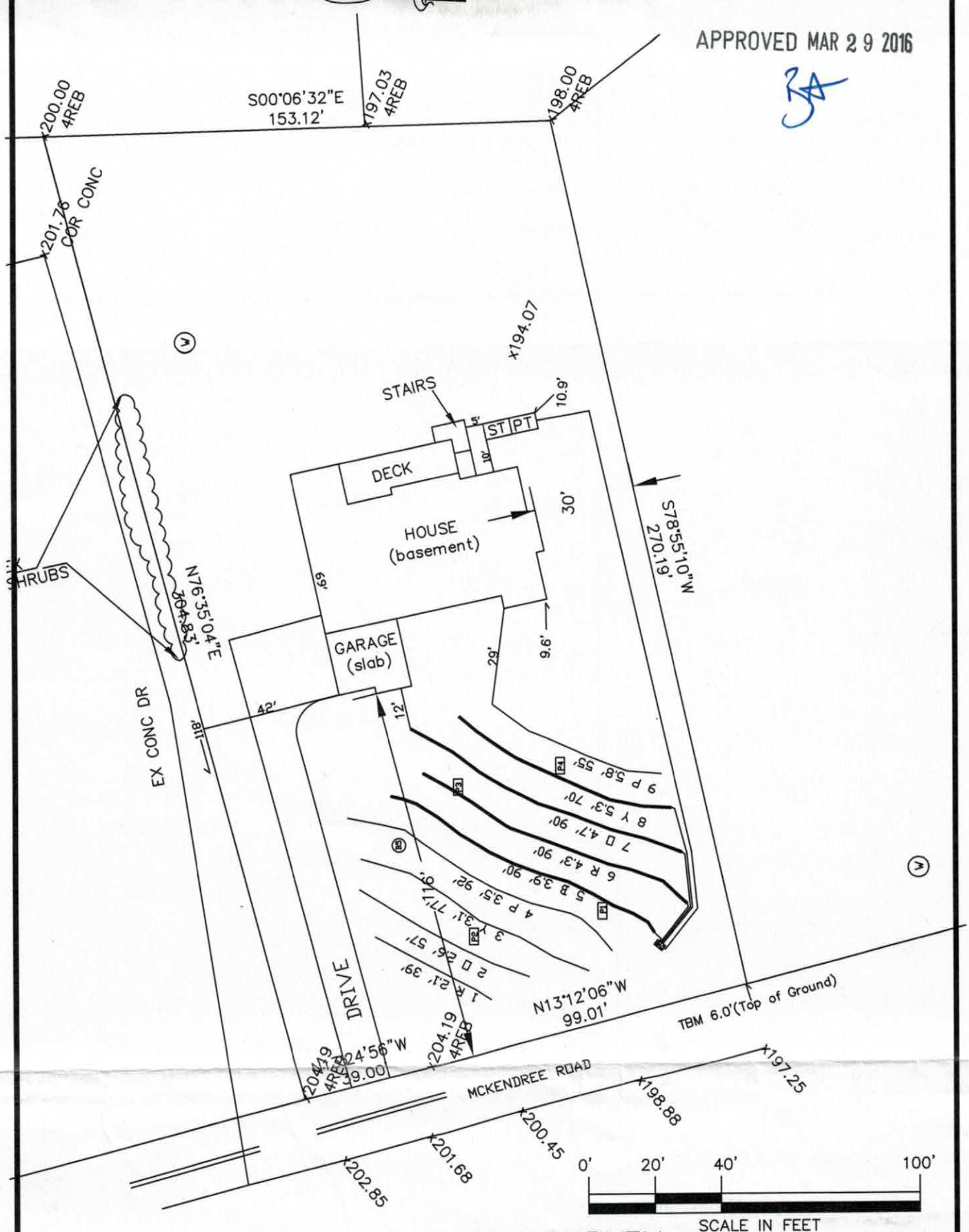
Owner / Applicant Signature: Sammy G Rollins Date: 3/31/16 Installed by: Richard Abernathy

IMPROVEMENT PERMIT by: APPROVED MAR 29 2016 Date: OPERATION PERMIT by: Date: 3-28-17

AUTHORIZATION TO CONSTRUCT by: S Thomas Shuda Date: 3-31-2016 Existing System Inspected by: Date:

Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK

APPROVED MAR 2 9 2016



TOPOGRAPHIC SURVEY

OF

LOT 13 PINE KNOLL POINTE SUBD

SCALE 1" = 40'

DAVIDSON TWSP., IREDELL CO., NC

FIELD BOOK:

FILE: 10076 LOT 13

ACQUIRED BY: DICK GWILT

TAX MAP NO:

ROLLANS *Soil & Environmental Services, PA.*

P.O. Box 832, Mooresville, NC 28115 Phone: (704) 746-5046 Fax: (704) 278-0989

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

Attached is a proposed design for a PPBPS Septic System with Low Pressure distribution for a 4 bedroom single family residence on Pine Knoll Subdivision Lot # 13 (PIN# 4626042710), 789 McKendree Road, Iredell County, North Carolina.

Contents: **Page**

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

Design Information
- Design Specifications---------- 2-3
- Layout Specifications---------- 4
- System Tapsheet---------- 5

Site Plan/System Plan---------- 6

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

Profile Descriptions----------SUBMITTED

Septic Application----------SUBMITTED

Well Application----------SUBMITTED

Zoning Permit & Receipt----------SUBMITTED

Agent Authorization----------SUBMITTED

Expedited Review Process Checklist----------SUBMITTED

Green Sheet----------SUBMITTED

LICENSED SOIL SCIENTIST Samuel A. Rollans 1231 STATE OF NORTH CAROLINA

3/28/16

March 28, 2016
Project #: 01-3114
Design By: Rollans Soil & Environmental Services, PA

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 a PPBPS installation with low pressure distribution.
- Repair is specified as a PPBPS installation with low pressure distribution.
- Backfill 4 - 6" of material (County Approved) over panels, rake trench walls, lime side-walls, install trenches 24" wide and have no more than 1/4" fall in 10 feet.

APPROVED MAR 2 9 2016

BA

LP PPBPS SYSTEM
FOR WASTEWATER TREATMENT

Owner/Applicant:	Richard (Dick) Gwilt
Current Address:	800 McKendree Road Mooresville, NC 28117
Phone:	704.651.8613
County:	Iredell
Location:	789 McKendree Road
Source of Wastewater Flow:	4 Bedroom Single Family Residence
Estimated Gallons Per Day Flow:	480 gpd
System Flow:	47.01

Design Specifications

Drainfield Size:	340
Loading Rate (gpd/ft.^{2}):	0.25
Depth of Gravel in Trench:	NA (PPBPS)
Gravel Size:	NA (PPBPS)
Trench Depth:	36 in., Repair 36 in. Trench Depth
Trench Width:	24 in.
Septic Tank Size:	1000
Pump Tank Size:	1000
Estimated Supply Line Length:	188
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	32.71
Dosing Volume:	190.55 75%
Supply Manifold:	N/A
Supply Manifold Length:	N/A
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:	4.46
Elevation Head:	12.00
Total Dynamic Head:	21.22
Threaded Union:	In Tank
Gate Valves:	1 in Tank 1 per lateral
Check Valves:	In Tank
Anti-Siphon Hole:	NA
Additional Comments:	Soil suitability was performed by Rollans Soil & Environmental Services

APPROVED MAR 2 9 2016

789 McKendree Road

LP PPBPS

DESIGN FLOW (gpd):	480
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.25
TOTAL AREA TRENCH BOTTOM:	680
TOTAL LATERAL LENGTH:	340
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	320
SUPPLY LINE LENGTH:	188
TOTAL DYNAMIC HEAD:	21.22
MANIFOLD SIZE:	N/A
DOSING VOLUME:	190.55
PUMP TANK DRAW DOWN*:	9.1
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	1000

**Pump tank draw down based on a volume basis of 21 gallons per inch. Draw down may vary among pump tank manufacturers.*

APPROVED MAR 2 9 2016

789 MCKENDREE ROAD (PINE KNOLL SUBD. LOT # 13)

Project #: 01-3114

LAYOUT FOR 4 BEDROOM HOME — March 28, 2016

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		6.0			100.00		
INSTR. 1			106.00				
HOUSE CNR				9.60	96.40		
P. TANK				10.90	95.10		
1	RED			2.10	103.90	39	39
2	ORANGE			2.60	103.40	57	57
3	YELLOW			3.10	102.90	77	77
4	PINK			3.50	102.50	92	92
5	***BLUE***			***3.90***	***102.10***	***90***	***90***
6	***RED***			***4.30***	***101.70***	***90***	***90***
7	***ORANGE***			***4.70***	***101.30***	***90***	***90***
8	***YELLOW***			***5.30***	***100.70***	***70***	***70***
9	PINK			5.80	100.20	55	55
					Total	**660**	**660**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH SYSTEM	DISTRIBUTION
**** System***	***340***	***0.235***	***MOD.***	***0.250***	***PPBPS***	**LOW PRESSURE**
Repair	***320***	***0.250***	***MOD.***	***0.250***	***PPBPS***	**LOW PRESSURE**

Notes:

** TBM located on top of ground at EIP (SEE SITE PLAN)
**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

APPROVED MAR 2 9 2016

BA

LP PPBPS TAPSHEET -789 McKendree Road

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench Area	Number of Panels
5	BLUE	102.10	90	0.156	0.41	270	21
6	RED	101.70	90	0.156	0.41	270	21
7	ORANGE	101.30	90	0.156	0.41	270	21
8	YELLOW	100.70	70	0.156	0.41	210	16
	total	feet =	340	gal/min =	32.39		79
			Des. Flow	480			
			Pump Run=	5.88			
			soil LTAR	0.25			
			LTAR +5%	0.2625			
			LTAR with mod.	0.5			
			LTAR with mod.. + 5%	0.525			

.156 equals 5/32 inch hole

APPROVED MAR 2 9 2016

CALCULATIONS

Location 789 McKendree Road

Project Number 01-3114

Lot No: 13
Pine Knoll

No. of Bedrooms 4

Design Flow 480 $^{gal}/_{day}$

LTAR 0.25 $^{gal}/_{ft^2\,day}$

PPBPS? (YES OR NO) YES

Supply Line Length 188 ft.

Supply Line Volume 32.712 gal.

Required Feet of Line 320 ft.
Amount of Line from Layout 340 ft.

Gallons per Minute 32.39 $^{gal}/_{min}$

Required Septic Tank Capacity 1000 gal.
Pump Tank Capacity 1000 gal.

Panel Volume 3.6 gal.
# of Panels 79
Dosing Volume 190.55 gal.

Note: Dosing Volume based on 67% of # of panels times 3.6 gal/panel

Tank Draw Down 9.1 *Generic Draw Down of 21 gal.per in.*

Pump Run Time 5.88 minutes

Elevation Head 12 ft.
Pressure Head 2 ft.
Friction Factor 2.37 ft./100 ft. *(From the interpolater.)*
Friction Head 4.46 ft.

Total Dynamic Head (+15%) 21.22 ft.

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

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

APPROVED MAR 29 2016 BA

Sheet 1 of 2
PROPERTY ID #: 962042710
COUNTY: IREDELL

FRHC 7.7 BTM PMHC 3.9'
BRHC 8.5

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
(Complete all fields in full)

OWNER: DICK GWILT
ADDRESS: 800 McKendree Rd Mooresville NC 28117
PROPOSED FACILITY: 3BR
PROPOSED DESIGN FLOW (.1949): 360 gpd
LOCATION OF SITE: 789 McKendree Rd Mooresville NC 28117
APPLICATION DATE: 3/2016
DATE EVALUATED: 2/2016
PROPERTY SIZE: 0.949 ac.
PROPERTY RECORDED:

WATER SUPPLY: ☒ Private ☐ Public ☒ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☒ Auger Boring ☒ Pit ☐ Cut
TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
P1	4/5%	0-8	RB C WMSBK	FR SS SP	N/A	60+	N/A	N/A	PS .275
		8-42	BR C WMS/MBK	FR SS SP FYB MOTTLE					
		42-60	RB CL WMS/MBK	FR SS SP					
P2	4/6%	0-7	RB CL COMPACT MASS	FI SS SP	N/A	60+	N/A	N/A	PS .25
		7-60	RB C WFA/SBK	FR SS SP FY MOT >B"					
P3	4/9%	0-18	RB C MASS/FINE		f. Fe depl. Robert SK (2.5Y6/2@30" RELIC+37")	60+	N/A	N/A	PS - 30" ~~Did Not use this Area~~ .25 BA
		18-44	RB C WFS/A	FR SS SP CY MOTT					
		44-70	RB CL WFSBK/MA	FR SS SP					
P4	4/9%	0-9	YB SCL WMSBK	FR SS SP	N/A	63"	N/A	N/A	PS .25
		9-44	RB C MFA/SBK	FR SS SP CY MOTTLE					
		44-63	YB CL MFA/SBK	FR SS SP CY MOTTLE					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	PPBPS	PPBPS
Site LTAR	.25	.25

OTHER FACTORS (.1946): PS
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: OVERBY
OTHER(S) PRESENT:

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

APPROVED MAR 29 2016 ZA

PROPERTY ID #: 4626042710
DATE OF EVALUATION: 2/2016
COUNTY: Iredell

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
B6	L/6%	0-6	B C mass	F S P SEXP	- Compacted	2/8	-	-	PS 0.25
		6-12	RBC nmsbk	" " " "	- Compacted				
		12-48	RBC mfAbk/sbk	Fr SS P SEXP	- f Redepl. >24"				

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION*

(THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED - APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS)

1. **APPLICATION FOR:** ___ Improvement Permit X Authorization To Construct ___ Existing System Inspection

2. **Page 2: *Site Plan Worksheet* Form MUST Accompany This Application**
The following optional attachments may also be submitted: ___ Survey Plat, Scaled no more than 1 Inch = 60 Feet
Place check ( ) beside whichever is submitted if applicable ___ Custom Site Plan, Scaled no more than 1 Inch = 60 Feet

3. **Applicant Information:**

Applicant Name	Mailing Address	Home Phone #	Alternate Phone #
Richard Gwilt	~~800~~ 789 McKendree Road	704-634-8613	704-634-3661
Owner Name	**Mailing Address**	**Home Phone #**	**Alternate Phone #**

4. **Property Information:**

Street Address	Subdivision Name	Section/Phase and Lot Number
789 McKendree Rd.	NA	NA

Driving Directions: Bradley School Road To McKendree, Turn right, go 3 miles and 789 is on the left side

5. **RESIDENTIAL Site Development Information:** *(Check or Complete ALL that apply)*

- X New, Single Family Residence
- ( ) New, Multi-Family Residence
- ( ) Expansion of Existing Septic System
- Repair To Failing Septic System due to _____
- ( ) Other _____

Maximum Number of Bedrooms 4
Maximum Number of Occupants ___
If Expansion, Current Number of Bedrooms ___

- ( ) Crawl Space Foundation?
- (X) Concrete Slab Foundation?
- (X) Basement w/Plumbing?
- ( ) Basement w/out Plumbing?

IF Non- Residential Site Development:
Type of Business _____
Square Footage of Building _____
Maximum Number of Employees _____
Maximum Number of Seats _____

6. **Proposed Water Supply:**

X New Well ( ) Existing Well ( ) Community Well ( ) City Water ( ) Other Public Water

7. **Desired Septic System Type:** *(You may rank in order of preference, if any)* ( ) EXISTING SYSTEM installed _____ *Year*

( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional ( ) Other _____

8. **Please Answer The Following** ( ) Yes X No Does the site contain any jurisdictional wetlands?
To The Best of Your Ability: ( ) Yes ( ) No Is any non-domestic sewage (i.e. industry) to be generated?
( ) Yes ( ) No Is the site subject to approval by any other public agency?

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.

9. **Signature:** Richard Gwilt — 3/31/16

Property owner or owner's legal representative signature (SIGNATURE REQUIRED) — DATE

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION*

RECEIVED MAR 17 2016

(THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED - APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS) Paid $850.00

1. **APPLICATION FOR:** √ Improvement Permit ___ Authorization To Construct ___ Existing System Inspection

****

#217340

2. Page 2: *Site Plan Worksheet* Form MUST Accompany This Application
   The following optional attachments may also be submitted: ___ Survey Plat, Scaled no more than 1 Inch = 60 Feet
   Place check ( ) beside whichever is submitted if applicable √ Custom Site Plan, Scaled no more than 1 Inch = 60 Feet

****

3. **Applicant Information:**

Applicant Name	Mailing Address	Home Phone #	Alternate Phone #
Rollanssoil	PO Box 832 Mooresville NC 28115		7047465946
Owner Name	**Mailing Address**	**Home Phone #**	**Alternate Phone #**
Richard Gwitt	800 McKendree Rd Mooresville NC 28117		7046518613

****

4. **Property Information:**

Street Address	Subdivision Name	Section/Phase and Lot Number
789 McKendree Rd Mooresville NC 28117	Pine Knoll	Lot 13

Driving Directions: Brawley, Rt on McKendree, Lot on Lt

****

5. **RESIDENTIAL Site Development Information:** *(Check or Complete ALL that apply)*

(√) New, Single Family Residence
( ) New, Multi-Family Residence
( ) Expansion of Existing Septic System
(X) Repair To Failing Septic System due to _____
( ) Other _____

Maximum Number of Bedrooms 4 SNR
Maximum Number of Occupants 8
If Expansion, Current Number of Bedrooms ___

( ) Crawl Space Foundation?
( ) Concrete Slab Foundation?
(√) Basement w/Plumbing?
( ) Basement w/out Plumbing?

IF Non- Residential Site Development:
Type of Business _____
Square Footage of Building _____
Maximum Number of Employees _____
Maximum Number of Seats _____

****

6. **Proposed Water Supply:**

(√) New Well ( ) Existing Well ( ) Community Well ( ) City Water ( ) Other Public Water

****

7. **Desired Septic System Type:** *(You may rank in order of preference, if any)* ( ) EXISTING SYSTEM installed _____ *Year*

( ) Alternative ( ) Conventional ( ) Innovative (√) Modified Conventional ( ) Other _____

8. **Please Answer The Following To The Best of Your Ability:**
   ( ) Yes (√) No Does the site contain any jurisdictional wetlands?
   ( ) Yes (√) No Is any non-domestic sewage (i.e. industry) to be generated?
   ( ) Yes (√) No Is the site subject to approval by any other public agency?

****

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.

9. **Signature:** _____ 3/17/16
   Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

Applications for permits require the "signature of the owner or owner's legal representative" (15A NCAC 18A .1937). If the owner does not sign the application himself or herself, they can submit any one of the following documents to designate their legal representative:

Power of Attorney; Real Estate Contract; Estate executor; Bankruptcy trustee; Court ordered guardianship

In the absence of the above documentation, the property owner may provide the local health department with documentation that designates a legal representative. A property owner may:

Complete this form to document his or her legal representative, or provide his or her own form that contains the information in this form.

If there are multiple property owners, then all property owners must sign the form that designates a legal representative.

By signing a form that designates a legal representative for purposes of 15A NCAC 18A .1937, the property owner authorizes that representative to act on their behalf in matters pertaining to the application and permitting process, including signing or receiving any application, document or permit. The owner retains full responsibility to meet all permit conditions specified by the local health department.

I, Richard Gwiht, am the legal owner(s) of the property located at 789 McKendree Road, identified as PIN (Parcel Identification Number) 4626042710.000, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) Samuel Ashley Rollans, Rollans Soils Environmental Services, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

- Application for Improvement Permit (IP) / Authorization to Construct (AC)
- Improvement Permit (IP) / Authorization to Construct (AC)
- Application for soil-site evaluation (new/repair)
- Application/permit for private drinking water well/well abandonment
- Application for Compliance Inspection

I agree to abide by all decisions and/or conditions between the legal representative acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division.

Richard Gwiht 3/16/16 — Signature of Owner(s) — Date

[signature] 3/16/16 — Signature of Witness — Date

Please return this signed form to the appropriate office:

Mooresville - Environmental Health
ronda.hart@co.iredell.nc.us
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

Statesville - Environmental Health
adrienne.shea@co.iredell.nc.us
Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION:*

SITE PLAN WORKSHEET

SEE THE "SAMPLE SITE PLAN" BELOW. ***INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!***

Place an (X) beside each item as you complete the site plan:

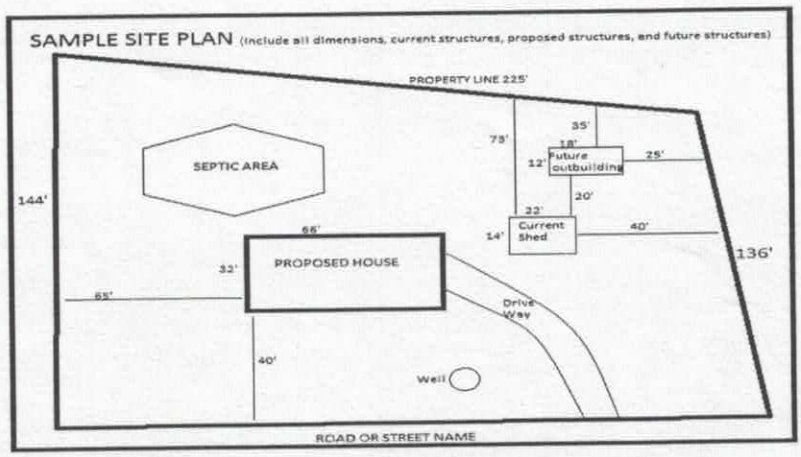
- X **Property Line measurements are clearly identified…**
- X **All proposed structures are indicated…**

SHOW: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

- X **Front and side setbacks from property line…**
- X **Preferred driveway location and configuration, preferred well location…**
- ____ **Area you prefer your septic system to be placed…**
- X **North arrow, or other sufficient indicator of direction…**

Circle N/A on the following if appropriate:

- **Location of septic systems and wells within 100' of your property… N/A**
- **Location of easements and rights of ways on your property… N/A**
- ____ **Location of any designated wetlands on the property… N/A**



USE THIS SPACE TO DRAW YOUR SITE PLAN

See Septic Permit

Signature: Richard Hunt

REQUIRED **property owner or owner's legal representative signature.**

3/31/16

DATE

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION*:

SITE PLAN WORKSHEET

SEE THE "SAMPLE SITE PLAN" BELOW. ***INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!***

Place an (X) beside each item as you complete the site plan:

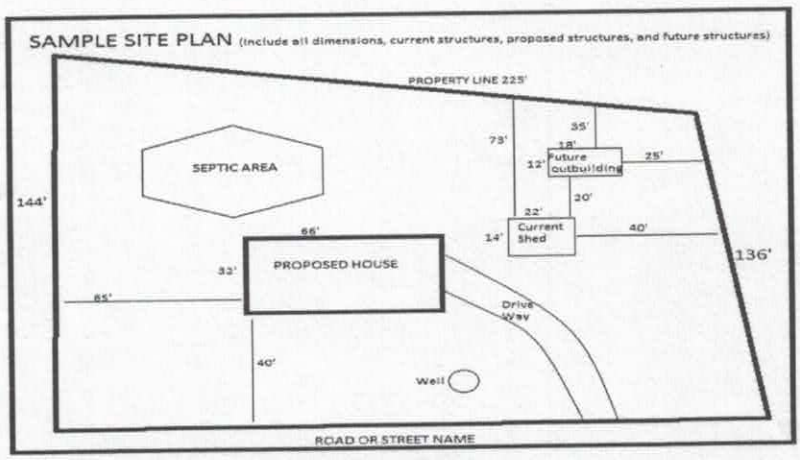
- **__X__ Property Line measurements are clearly identified…**
- **__X__ All proposed structures are indicated…**

SHOW: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

- **__X__ Front and side setbacks from property line…**
- **__X__ Area you prefer your septic system to be placed…**
- **__X__ Preferred driveway location and configuration, preferred well location…**
- **__X__ North arrow, or other sufficient indicator of direction…**

Circle N/A on the following if appropriate:

- **__X__ Location of septic systems and wells within 100' of your property… N/A**
- **__X__ Location of easements and rights of ways on your property… N/A**
- **__X__ Location of any designated wetlands on the property… N/A**



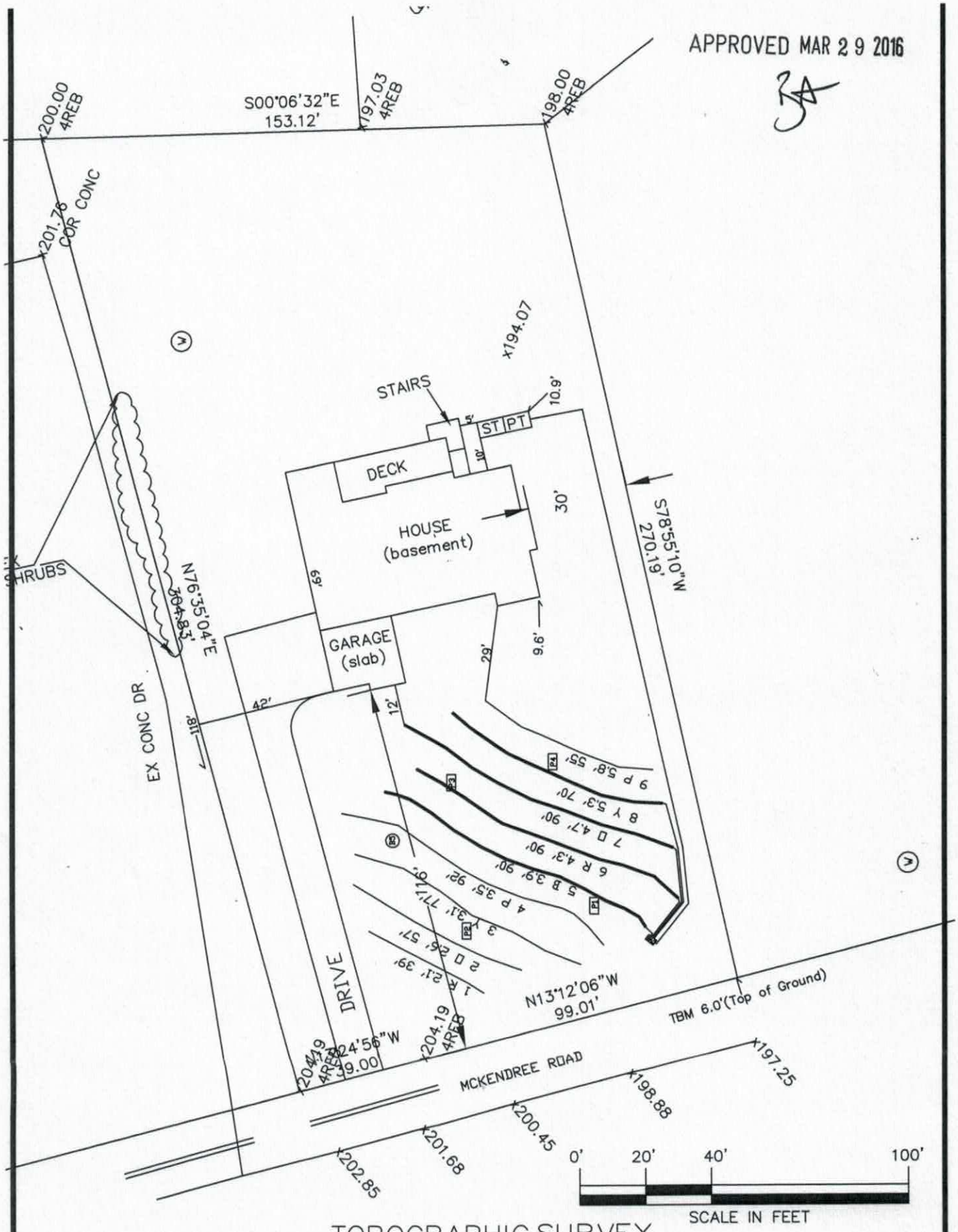
USE THIS SPACE TO DRAW YOUR SITE PLAN

See Attached

Signature: *James A Tolbert* 3/17/16

REQUIRED **property owner or owner's legal representative signature.** **DATE**

APPROVED MAR 2 9 2016



TOPOGRAPHIC SURVEY

OF

LOT 13 PINE KNOLL POINTE SUBD

SCALE 1" = 40'

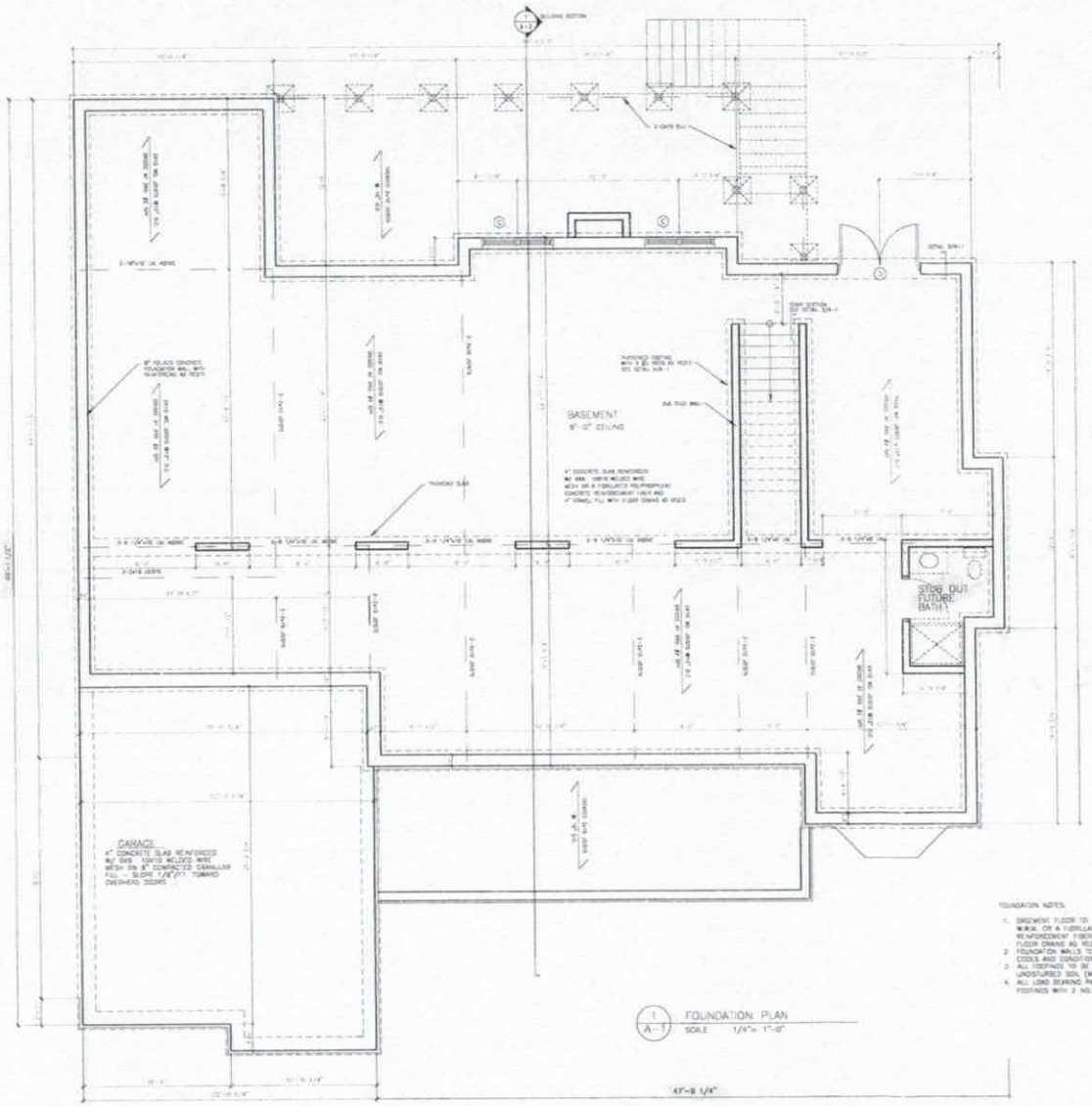
DAVIDSON TWSP., IREDELL CO., NC

FIELD BOOK:

FILE: 10076 LOT 13

ACQUIRED BY: DICK GWILT

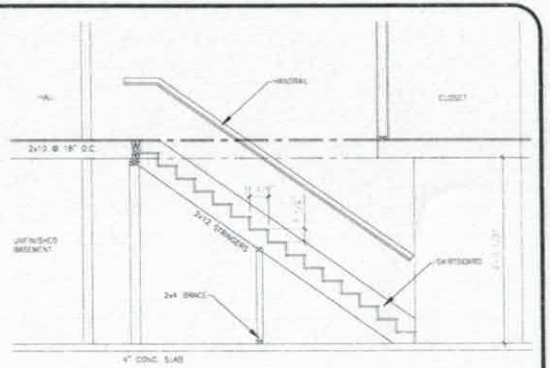
TAX MAP NO:



1 A-1 FOUNDATION PLAN
SCALE 1/4"= 1'-0"

FOUNDATION NOTES:

1. BASEMENT FLOOR TO BE 4" CONCRETE FLOOR WITH 6"x6" NO.10 W.W.M. OR 6 FIBRILLATED POLYPROPYLENE CONCRETE REINFORCEMENT FIBER OVER VAPORBARRIER AND 4" GRAVEL FILL WITH FLOOR DRAINS AS REQUIRED.
2. FOUNDATION WALLS TO HAVE REINFORCING AS REQUIRED BY LOCAL CODES AND CONDITIONS.
3. ALL FOOTINGS TO BE LOCATED BELOW FROST LINE ON HARD FIRM UNDISTURBED SOIL (MIN. 2,500 LB. SOIL).
4. ALL LOAD BEARING PARTITIONS TO HAVE 8"x16" CONTINUOUS FOOTINGS WITH 2 NO.5 BA. RODS AS REQ'D.

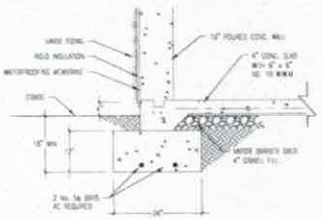


2 A-1 INTERIOR STAIR DETAIL
SCALE 3/8"= 1'-0"

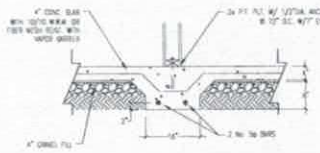
Acknowledgement of Plans Submittal ONLY!

Richard Gwilt Date 3/31/16

Tom Shrader Date 3/31/16



3 A-1 REAR FOUNDATION DETAIL
SCALE 3/4"= 1'-0"



4 A-1 THICKENED FOOTING DETAIL
SCALE 3/4"= 1'-0"

GWILT ARCHITECTURE, PLLC
MARY ANN GWILT A.I.A.
800 MCKENDREE ROAD
Mooresville, North Carolina 28117
Ph (704) 651-8611

FOUNDATION PLAN

owner information:
RICHARD GWILT
800 MCKENDREE ROAD
MOORESVILLE, NC 28117
T: 704-651-8613

project description:
789 MCKENDREE ROAD
MOORESVILLE, NC 28117
IREDELL COUNTY

A-1

A.C.
DRAWN BY: MARY ANN GWILT
ISSUED: 3RD REVIEW
APRIL 1, 2016
REVISIONS

Acknowledgement of
Plans Submittal ONLY!

Richard Gwilt Date 3/31/16

Tom Shuck Date 3/31/16

GENERAL NOTES:
1. THE MAKE, MODEL NO. AND LOCATION OF THE FOLLOWING OPTIONAL EQUIPMENT TO BE SELECTED BY OWNER:
1.1. CENTRAL VACUUM SYSTEM
1.2. MASTER RADIO - INTERCOM SYSTEM AND STATIONS
1.3. SECURITY SYSTEM (BURGLAR AND FIRE)
1.4. T.V. AND JACKS
1.5. EXTERIOR FLOOD LIGHTS, ACCENT LIGHTS AND SPOTLIGHTS
1.6. TELEPHONE JACKS
1.7. ELECTRIC GARAGE DOOR OPENER
2. FLOOR, CEILING AND RAFTER FRAMING SHALL BE SOUTHERN PINE (MILN-DRIED) CONFORMING TO DEPARTMENT OF COMMERCE PS20-70 with "S" VALUE OF 1.6

DESIGN VALUES (BASED ON):
FLOOR JOISTS:
40psf LIVE LOAD, 10psf DEAD LOAD
CEILING JOISTS:
20psf LIVE LOAD, 10psf DEAD LOAD
RAFTERS:
20psf LIVE LOAD, 10psf DEAD LOAD
EXTERIOR BALCONIES & DECKS:
60 psf LOAD
SNOW:
15 psf LOAD
WIND:
80 mph BASIC WIND SPEED

3. FURNACE AND WATER HEATER USING FOSSIL FUEL REQUIRES FRESH AIR VENT FROM OUTSIDE FOR COMBUSTION AIR AT THE RATE OF 1 SQ. IN. OF FREE AIR SPACE PER 1000 B.T.U.
4. GARAGE AREA REQUIRES 1/2" GYPSUM BOARD OR EQUIVALENT APPLIED TO CEILINGS AND WALLS

NOTES:

ALL FLOOR JOIST TO HAVE 1X4 CROSS BRIDGING LOCATED AT MIDSPAN.
ALL SUBFLOOR TO HAVE 3/4" TOUNGE AND GROOVE PLYWOOD, GLUED, NAILED TO THE FLOOR
HEADERS SHALL BE USED BELOW EXTERIOR UNLESS OTHERWISE NOTED ON DRAWINGS.
2" TO 3'-6" ---- 2 2X6'S
3'-6" TO 5'-6" ---- 2 2X8'S
5'-6" TO 8' ---- 2 2X10'S
8' TO 9' ---- 2 2X12'S
10"/11'2" 3 2X10'S OR 3 2X12'S
ANYTHING OVER 12' TO BE ENGINEERED APPROVED
LVL - SEE PLAN FOR LOCATION - NAILED CONNECTIONS FOR LVL - THREE ROWS 16D COMMON @ 6" O.C.

NOTE: ON PLANS THE 3 2X10 BEAMS CAN BE A 3" X 9 1/4" LVL

PROVIDE WATERPROOFING FROM CRAWL TO FOOTING W/ PROTECTIVEWALL BOARD AS REQ'D. FOR BACKFILL
PROVIDE 4" PVC DRAIN PIPE W/ PIPE SOCK AT FOOTINGS, SET IN GRAVEL, WASH AS REQ'D. DRAIN ALL LINES TO DAYLIGHT. TYP. AT ALL PERIMETER WALLS

ELECTRICAL LEGEND

SQUARE FOOTAGE CALCULATIONS

MAIN LEVEL:	3,684 +/-HEATED S.F.
BASEMENT:	3,707 UNHEATED S.F.
GARAGE:	582 S.F.
FRONT PORCH:	320 S.F.
REAR DECK:	363 S.F.
EXTERIOR FOOTPRINT:	5,376 S.F. (EXT. FACE STONE)

1/A-2 FLOOR PLAN
SCALE: 1/4"= 1'-0"

GWILT ARCHITECTURE, PLLC
MARY ANN GWILT A.I.A.
800 MCKENDREE ROAD
Mooresville, North Carolina 28117
Ph (704) 651-8613

FLOOR PLAN

project description:
789 MCKENDREE ROAD
MOORESVILLE, NC 28117
IREDELL COUNTY

client description:
RICHARD GWILT
800 MCKENDREE ROAD
MOORESVILLE, NC 28117
T: 704-651-8613

A-2

IREDELL COUNTY

PO Box 788
349 North Center St.
Statesville, NC 28677

APPLICATION NUMBER
217340
Issue Date: 03/17/2016

ZONING PERMIT

Open Space

Parcel Number	Street Address	Jurisdiction
4626042710.000	789 MCKENDREE ROAD, MOORESVILLE, NC	IREDELL COUNTY

Owner Information	Applicant Information
Owner: GWILT RICHARD	Applicant: ROLLANS SOIL & ENVIRON
Address: 800 MCKENDREE RD MOORESVILLE, NC 28117	Address: 470 NORTH BROAD STREET SUITE D MOORESVILLE, NC 28115
Phone:	Phone: 704-658-1723

Use Requested	Zone Code
SFD	RR

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
.950	35.00	35.00	15.00	15.00	CACL	X

Remarks:

The applicant certifies that there are no deed restrictions, contractual agreements or governmental regulations of any kind that interfere with or prohibit the use of the property or the use for which this permit is requested. The applicant further acknowledges that enforcement of deed restrictions, plat conditions and other contractual agreements will not be undertaken by Iredell County and is the sole responsibility of the affected parties.

Applicant: _____ Date: 3/17/16

Permit Number	63042	TOTAL FEES:	$ 77.25


4626051121.000
4626054187.000
840
309
139
67
4626055067.000
4626041967.000
11
775
MCKENDREE RD
P B 22-112 & 112A
1544
136
4626045954.000
337
781
140
115
4626042804.000
12
4626045851.000
4616956401.000
122
23
305
153
35
15
R R
WS-IV-CA
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4616947596.000
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922
4626042442.000
4616949450.000
15
800
4626045249.000
KEMP RD
201
16
236
789 McKendree