IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 | Mooresville Office (704) 660-3625

PERMIT # 230615

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

PIN # 4627800739

APPLICANT/OWNER: Rollans Soil & Env Serv / Stephen Kuffler APPLICANT ADDRESS: P.O. Box 832 Mooresville, NC 28115

SITE ADDRESS: 6668 Beaten Path, Mooresville, NC 28117 PHONE: 704 746-5046 ALT. PHONE

SITE DIRECTIONS: Brawley School Rd TR Blume TL Beaten Path on lakeside

SUBDIVISION: LOT SECTION: 9 LOT # 28 LOT AREA: .7Ac SAP CONTROLLED: ☐ YES ☒ NO

DESIGN FLOW: 480gpd L.T.A.R.: .3

Septic Tank	1000 (gal)	STB	Date	☒ New System ☐ Repair ☐ Expansion System Type: I II III (IV) V VI		☒ Residence	No. Bedrooms	4	Water Supply
Pump Tank	1000 (gal)	PT	Date	System Description: LP PPBPS		☐ Business	No. Persons	8	☒ Private
Pump Make		Model	Serial #	Repair System Description: LP PPBPS		☐ Other	No. Employees		☐ Public
# Nitrification Fields	1	# Lines	4	Linear Ft 272'	Maintenance Agreement Required: ☒ YES ☐ NO	☐ Slab	☐ Crawl Space		☐ Community
Trench Width	24"	Trench Bottom Depth (Low side) max	30"	Gravel Depth N/A	☐ GRAVITY ☒ PRESSURE	☒ Basement w/plumbing			☐ Basement w/o plumbing

Comments / Conditions:

Floor plans show 3 Bedrooms, Septic is permitted for 4 Bedrooms

INITIAL SITE SKETCH

See attached, approved plan by Rollans Soil & Environmental Services, PA (dated 2/7/19)

AS BUILT SKETCH

	Date	Initials
Drain Lines Checked	BB	3.8.19
Tanks Checked	BB	2-27.19
Pressure Manifold or Valve Box Checked	BB	3.8.19
Pressure Head Set	BW	321.19
Electrical Checked	↓	↓
Floats Set		
Alarm Checked		
Maintenance Contract Y / N		
Comments: Pressure line - Needs Inline Pump filter Type IV	BB	2.27.19

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.*

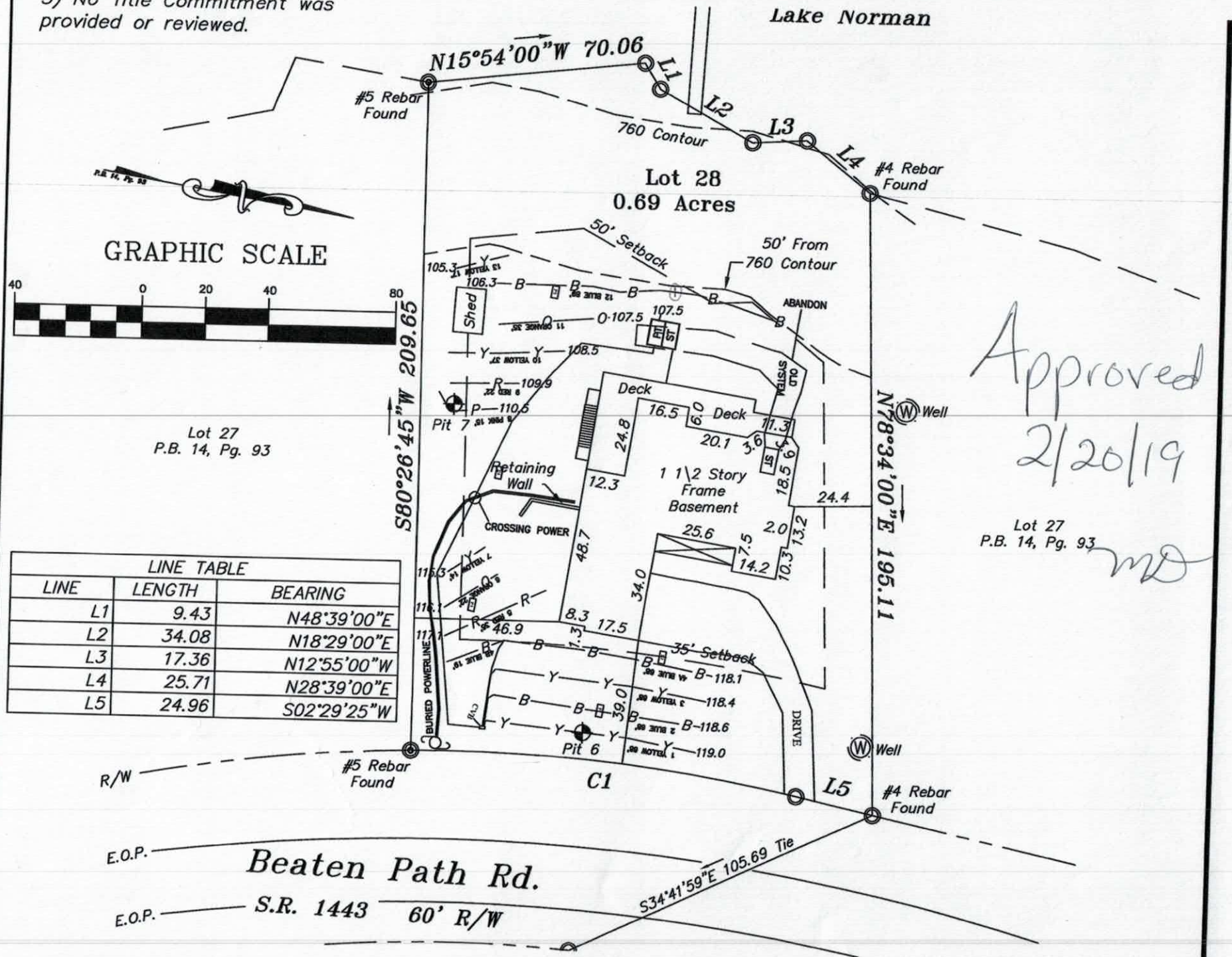
Owner / Applicant Signature: Date: 2/21/19 Installed by: Steve Jordan

IMPROVEMENT PERMIT by: Maina Dolson Date: 2/20/19 OPERATION PERMIT by: Bryant C. White (ad) Date: 3-21-19

AUTHORIZATION TO CONSTRUCT by: Maina Dolson Date: 2/20/19 Existing System Inspected by: Date:

FOR SEPTIC FINAL INSPECTION: CALL 704-664-3703 between 8am-9am the day th ection is needed. Be sure to speak with an inpsector to confirm your inspection time.

5) No title Commitment was provided or reviewed.



LINE TABLE		
LINE	LENGTH	BEARING
L1	9.43	N48°39'00"E
L2	34.08	N18°29'00"E
L3	17.36	N12°55'00"W
L4	25.71	N28°39'00"E
L5	24.96	S02°29'25"W

Approved
2/20/19
MD

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 relayout design for a PPBPS Septic System w/Low Pressure distribution for a 4 bedroom single family residence at 668 Beaten Path Mooresville, CL&T Lot # 28 (PIN# 4627800739), 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	8-9
Zoning Permit & Receipt	SUBMITTED
Septic Application	13-14
Agent Authorization	SUBMITTED
Voluntary Relinquishment Form	SUBMITTED
Expedited Review Process Checklist	17
Green Sheet	18



2/7/2019
Project #: 01-3406
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 DHHS, 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 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.
- **Existing Drainfield to be properly abandoned per Iredell County Requirements**
- **Existing buried power line on Site Plan must be crossed by supply line.**
- **Grading in primary lines to establish contour is required. ~6-7 Tenths of a foot.**

LP PPBPS SYSTEM
FOR WASTEWATER TREATMENT

Owner/Applicant:	Stephen & Dorothy Kuffler
Current Address:	49 Willway Avenue Richmond, VA 23226
Phone:	704.746.5046
County:	Iredell
Location:	CL&T Lot 28

Approved
MD
2/20/19

Source of Wastewater Flow:	4 Bedroom Single Family Residence
Estimated Gallons Per Day Flow:	480 gpd
System Flow:	27.47 gpm

Design Specifications

Drainfield Size:	272
Loading Rate (gpd/ft.^{2}):	0.3
Depth of Gravel in Trench:	NA (PPBPS)
Gravel Size:	NA (PPBPS)
Trench Depth:	30 in., Repair 30 in. Trench Depth
Trench Width:	24 in.
Septic Tank Size:	1000
Pump Tank Size:	1000

Estimated Supply Line Length:	170
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	29.58
Dosing Volume:	230.40
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:	3.03
Elevation Head:	19.00
Total Dynamic Head:	27.63

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

CL&T Lot 28
LP PPBPS

DESIGN FLOW (gpd):	480
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.3
TOTAL AREA TRENCH BOTTOM:	544
TOTAL LATERAL LENGTH:	272
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	266.6666667
SUPPLY LINE LENGTH:	170
TOTAL DYNAMIC HEAD:	27.63
MANIFOLD SIZE:	N/A
DOSING VOLUME:	230.40
PUMP TANK DRAW DOWN*:	11.0
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	1000

Approved
2/20/19
MD

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

Approved 2/20/19

668 Beaten Path (CL&T LOT 28)

Project #: 01-3406

2/7/2019

LAYOUT FOR 4 BEDROOM HOME

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM							
INSTR. 1							
HOUSE CNR (LEFT FRONT GARAGE)							
P. TANK					118.00		
	EXISTING	BED			107.50		
					ABANDON		
1	***YELLOW***				***119.00***	***68***	***68***
2	***BLUE***				***118.60***	***68***	***68***
3	***YELLOW***				***118.40***	***68***	***68***
4A	***BLUE***				***118.10***	***68***	***68***
4B	BLUE				118.10	19	19
5	RED				117.10	35	35
6	ORANGE				116.10	22	22
7	YELLOW				115.30	14	14
8	PINK				110.50	15	15
9	RED				109.90	22	22
10	YELLOW				108.50	37	37
11	ORANGE				107.50	35	35
12	BLUE				106.30	89	89
13	YELLOW				105.30	17	17
					Total	**577**	**577**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH SYSTEM	DISTRIBUTION
****System***	***272***	***0.300***	***MOD.***	***0.300***	***PPBPS***	**LOW PRESSURE**
Repair	305	***0.300***	MOD.	***0.300***	PPBPS	LOW PRESSURE

Notes:

****All lines and elevations located/established by Licensed Surveyor**
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags

Approved
2/20/19
MD

LP PPBPS TAPSHEET -CL&T Lot 28

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench Area	Number of Panels
1	BLUE	119.00	68	0.156	0.41	136	16
2	YELLOW	118.60	68	0.156	0.41	136	16
3	BLUE	118.40	68	0.156	0.41	136	16
4	YELLOW	118.10	68	0.156	0.41	136	16
	total	feet =	272	gal/min =	26.24		64
			Des. Flow	480			
			Pump Run=	5.88			
			soil LTAR	0.3			
			LTAR +5%	0.315			
			LTAR with mod.	0.6			
			LTAR with mod.. + 5%	0.63			

.156 equals 5/32 inch hole

CALCULATIONS

Location 668 BEATEN PATH

Project Number	01-3406	
Lot No:	28	
No. of Bedrooms	4	
Design Flow	480	$^{gal}/_{day}$
LTAR	0.3	$^{gal}/_{ft^2\ day}$
PPBPS? (YES OR NO)	YES	
Supply Line Length	170	ft.
Supply Line Volume	29.58	gal.
Required Feet of Line	266.6667	ft.
Amount of Line from Layout	272	ft.
Gallons per Minute	26.24	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Pump Tank Capacity	1000	gal.
Panel Volume	3.6	gal.
# of Panels	64	
Dosing Volume	230.40	gal.

Note: Dosing Volume based on 100% of # of panels times 3.6 gal/panel

Tank Draw Down	11.0	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	8.78	minutes
Elevation Head	19	ft.
Pressure Head	2	ft.
Friction Factor	1.78	ft./100 ft. *(From the interpolater.)*
Friction Head	3.03	ft.
Total Dynamic Head (+15%)	27.63	ft.

Approved
2/20/19
MD

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

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

[redacted]

668 BEATEN PATH

Approved MD 2/20/19

Sheet 2 of 2

PROPERTY ID #: 462780017

DATE OF EVALUATION: 8-15-19

COUNTY: Iredell

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
SPIT	B 0/0 L	0-11	BCL wlc sbk	frss sp sexp	few saprolite inclusions	52"	35-52"		.3 – .35
		11-35	B1R C mod med sbk	frss sp sexp					
		35-52	B1R CL wlc fi sbk	frss sp sexp					
PIT 6	12% L	0-3	Fill						.3
		3-8	RB-cl wmsbk						
		8-35	Rc wmsbk						
		35-63	RBcl wfsbk	Frssp					
		63-74	Var mass						
PIT 7	12% L	0-6	Bcl wmsbk		Few-com sap.				.3
		6-12	Rbcl wmsbk						
		12-39	Rc wmsbk						
		39-62	RBcl wfsbk						
B1	10% L	0-10	BcL wmsbk	Frssp	few-com sap.				.3
		10-32	Rc wmsbk	" " "					
		32-48	RbcL wmsbk	" " "					

COMMENTS:

PROPERTY ID #: 462781007
COUNTY: Iredell

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

OWNER: Stephen + Dorthy Kuffler
ADDRESS: ~~1068~~ 40 Willway Ave Richmond VA 23226 APPLICATION DATE
PROPOSED FACILITY: PROPOSED DESIGN FLOW (.1949): 4/60 gpd DATE EVALUATED: 8-15-17
LOCATION OF SITE: 668 Beaten Path Mooresville NC 28117 PROPERTY SIZE: .7 acres
WATER SUPPLY: ☐ Private ☐ Public ☑ Well ☐ Spring ☐ Other PROPERTY RECORDED: Y
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	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	6% L	0-13	Brn cl wk fsbk	fr ss sp sxp		>59"			.3 - .35
		13-35	B R Clay wk med sbk	fr ss sp sexp					
		35-59	B R Cl wk sbk	fr ss sp sexp					
2	6% L	0-5"	Brn cl wk fsbk	fr ss sp sxp		>56"			.3 - .35
		5-25"	R Brn Cl wk med sbk	fr ss sp sexp					
		25-56"	R B Cl wk sbk	fr ss sp sexp	few/common	saprolite			
3	6% L	0-11"	F.11			46			.3 - .35
		11-15	Brn Cl wk fsbk	fr ss sp sexp					
		15-30	B R Cl common med sbk	fr ss sp sexp					
		30-57	B R Cl wk sbk	fr ss sp sexp	few saprolite inclusions				
4	8% L	0-11	B Cl wk sbk	fr ss sp sexp		51			.3 - .35
		11-35	B R Cl wk med sbk	fr ss sp sexp					
		35-51	B R Cl wk fsbk	fr ss sp sexp	- few saprolite inclusions 35-51 FRACTURED rock one side @ 36" < 10% OF PIT				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	PPBPS	PPBPS
Site LTAR	0.34	0.34

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): RS
EVALUATED BY: S. Ashley Rollins, A. Lorne Cook
OTHER(S) PRESENT:

COMMENTS:

PROPERTY ID #: 46278800
COUNTY: Iredell

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

Approved 10/11/17

OWNER: Stephen + Dorthy Kuffler
ADDRESS: ~~6668~~ 4a Willway Ave Richmond Va 23226 APPLICATION DATE
PROPOSED FACILITY: PROPOSED DESIGN FLOW (.1949): 400 gpd DATE EVALUATED: 8-15-17
LOCATION OF SITE: 668 Beaten Path Mooresville NC 28117 PROPERTY SIZE: .7 acres
WATER SUPPLY: ☐ Private ☐ Public ☑ Well ☐ Spring ☐ Other PROPERTY RECORDED: ~~18~~
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
1	6% L	0-13	Brwn cl wk f	fr ss sp slxp		>59"			.3 – .35
		13-35	B R Clay wk med sbk	fr ss sp slxp					
		35-59	B R Cl wk sbk	fr ss sp slxp					
2	6% L	0-5"	Brwn cl wk f sbl	fr ss sp slxp	few/common saprolite	>56"			.3 – .35
		5-25"	B/R cl wk med sbk	fr ss sp slxp					
		25-56"	R/B cl wk sbk	fr ss sp slxp					
3	6% L	0-11"	F.11		few saprolite inclusions	46			.3 – .35
		11-15	Brwn cl wk f sbk	fr ss sp slxp					
		15-30	B/R C wk med med sbk	fr ss sp slxp					
		30-57	B/R cl wk sbk	fr ss sp slxp					
4	8% L	0-11	B cl wk sbk	fr ss sp slxp	few saprolite inclusions 35-51 Fractured rock on side @ 36" < 10% OF PIT	51			.3 – .35
		11-35	B/R cl wk sbk	fr ss sp slxp					
		35-51	B/R cl wk f sbk	fr ss sp slxp					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	PPBPS	PPBPS
Site LTAR	0.34	0.34

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): RS
EVALUATED BY: S. Ashley Rollins, A. Lorne Cook
OTHER(S) PRESENT:

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

[redacted]

668 BEATEN PATH

Sheet 2 of [redacted]

PROPERTY ID #: 4027500?

DATE OF EVALUATION: 8-15-17

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
SPIT	8 0/0 L	0-11	BCL wlc sbk	fr ss sp s exp	few saprolite inclusions	52"	35-52"		.3 – .35
		11-35	B1R c mod med sbk	fr ss sp s exp					
		35-52	B1R CL wlc fi sbk	fr ss sp s exp					

RECEIVED FEB - 2018

IREDELL COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
PAGE 1: APPLICATION FORM

*Relayout - Expedited

Paid $225.00 #230615

Application For:

(✓) Septic Improvement Permit (✓) New Well Permit (✓) Authorization to Construct ( ) Well Repair Permit ( ) Existing System Inspection ( ) Well Abandonment ( ) Septic System Repair

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.

Page 2: *Site Plan Worksheet* form MUST accompany this application

The following optional attachments may also be submitted:

Place an (X) beside whichever is submitted if applicable

(✓) Survey Plat, scaled no more than 1 inch = 60 feet
(✓) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information:

Applicant Name: Rollins Soil & Environmental Services, PA **Address:** P.O. Box 832 Mooresville, NC 28115 **Phone:** 704-746-5046

Owner Name: Stephen + Dorthy Kutcher **Address:** 49 Willway Ave Richmond VA 23226 **Phone:**

Property Information:

Street Address: 668 Beaten Path Rd, Mooresville NC, 28117

Subdivision Name: Crescent Land + Timber Corp **Section/Phase:** 59 **Lot Number:** 28

Driving Directions:

Site Development Information: *(check or complete ALL that apply)*

(✓) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition

Maximum Number of Bedrooms: 4
Maximum Number of Occupants: 8
( ) Swimming Pool
( ) Other Addition/Structure:

( ) Crawl Space Foundation
( ) Concrete Slab Foundation
(✓) Basement with Plumbing
( ) Basement without Plumbing

Non-Residential Site Development:

Type of Business:
Square Footage of Building:
Maximum Number of Employee:
Maximum Number of Seats/Beds/Other:

Water Supply:

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

Desired Septic System Type: *(you may rank in order of preference)*

( ) No Preference ( ) Alternative ( ) Conventional ( ) Innovative (✓) Modified Conventional ( ) Other:

Year existing system installed:

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. industrial) 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.

Signature: [redacted] 2/7/19

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

RECEIVED FEB 2 - 2018

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM

Application For: (√) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
( ) Septic Improvement Permit (√ Authorization to Construct ( ) Existing System Inspection ( ) Septic System Repair

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.

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 an (X) beside whichever is submitted if applicable ( ) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information: (PRINT CLEARLY)

Applicant Name: Cobble Creek Custom Homes, LLC Address: 1658 Maggie St Catawba NC Zip: 28609
Applicant Email: Cobblecrkhomes@yahoo.com Phone: 704.369.9856 Alt. Phone: 828.241.4150
Owner Name: Stephen Kuffler Address: 49 Willway Ave, Richmond VA Zip: 23226
Owner Email: Sjkuffler@gmail.com Phone: 804.630.5161 Alt. Phone: 804.335.2415

Property Information:

Street Address: 668 Beaten Path Rd Mooresville NC 28117
Subdivision Name: CL5T Section/Phase: 9 Lot Number: 28
Driving Directions: Brawley School Rd, Right Blume Rd, Left on Beaten Path, on left.

Site Development Information: *(check or complete ALL that apply*

(√) New Single Family Residence Maximum Number of Bedrooms: 4
( ) New Multi-Family Residence Maximum Number of Occupants: ____
( ) Accessory Building ( ) Swimming Pool
( ) Bedroom(s) Addition ( ) Other Addition/Structure: ____
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem: ____
Non-Residential Site Development: Type of Business: ____
Square Footage of Building: ____ Max. Number of Employees: ____ Max. Number of Seats/Beds/Other: ____

CHECK FOUNDATION TYPE

( ) Crawl Space Foundation
( ) Concrete Slab Foundation
(√ Basement with Plumbing
( ) Basement without Plumbing

Water Supply: ( ) Replacement Well – Reason: ____
( ) Multi-connection Well Number of Houses: 1 Number of Persons: 2

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

Desired Septic System Type: *(you may rank in order of preference)* Year existing system installed: ____
( ) No Preference ( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional ( ) Other: ____

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. industrial) 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.

Signature: [signature] 2/1/18
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

Email Well Permit To:
Cobblecrk homes@yahoo.com
bkwell drilling@yahoo.com

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, Stephen J. Kuffler, am the legal owner(s) of the property located at 668 BEATEN PATH ROAD, MOORESVILLE, NC, identified as PIN (Parcel Identification Number) _____, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) COBBLE CREEK Custom Homes, 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.

Signature of Owner(s) 1/8/2018 Date

Signature of Witness 1/8/2018 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

Revised

RECEIVED OCT -4 2017

IREDELL COUNTY HEALTH DEPARTMENT

Paid $850.00

ENVIRONMENTAL HEALTH DIVISION

PAGE 1: *APPLICATION FORM* Comp. Relayout # 230615

Application For:

(✓) Septic Improvement Permit ( ) New Well Permit ( ) Authorization to Construct ( ) Well Repair Permit ( ) Existing System Inspection ( ) Well Abandonment ( ) Septic System Repai

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.

Page 2: *Site Plan Worksheet* form MUST accompany this application

The following optional attachments may also be submitted:

Place an (X) beside whichever is submitted if applicable

(✓) Survey Plat, scaled no more than 1 inch = 60 feet

( ) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information:

Applicant Name: Rollins Soil & Environmental Services, PA **Address:** P.O. Box 832 Mooresville NC 28115 **Phone:** 704-746-50

Owner Name: Stephen + Dorthy Kuffler **Address:** 49 Willway Ave Richmond VA 23226 **Phone:**

Property Information:

Street Address: 668 Beaten Path Rd, Mooresville NC, 28117

Subdivision Name: Crescent Land + Timber Corp **Section/Phase:** 59 **Lot Number:** 28

Driving Directions:

Site Development Information: ***(check or complete ALL that apply)***

(✓) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition

Maximum Number of Bedrooms: 4
Maximum Number of Occupants: 8
( ) Swimming Pool
( ) Other Addition/Structure:

( ) Crawl Space Foundation
( ) Concrete Slab Foundation
(✓) Basement with Plumbing
( ) Basement without Plumbing

Non-Residential Site Development:

Type of Business:
Square Footage of Building:
Maximum Number of Employee:
Maximum Number of Seats/Beds/Other:

Water Supply:

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

Desired Septic System Type: ***(you may rank in order of preference)***

( ) No Preference ( ) Alternative ( ) Conventional ( ) Innovative (✓) Modified Conventional ( ) Other:

Year existing system installed:

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. industrial) 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.

Signature: _____ 9/25/17

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, Stephen & Dorothy Kuffler, am the legal owner(s) of the property located at 668 Besten Path Road, identified as PIN (Parcel Identification Number) 4627800739, located in Iredell County, North Carolina.

I do hereby authorize (print legal representative/company name) Samuel Ashley Rollans Rollans Soil & 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.

Stephen Kuffler 8/23/2017 Kristi Bussing 8/23/2017

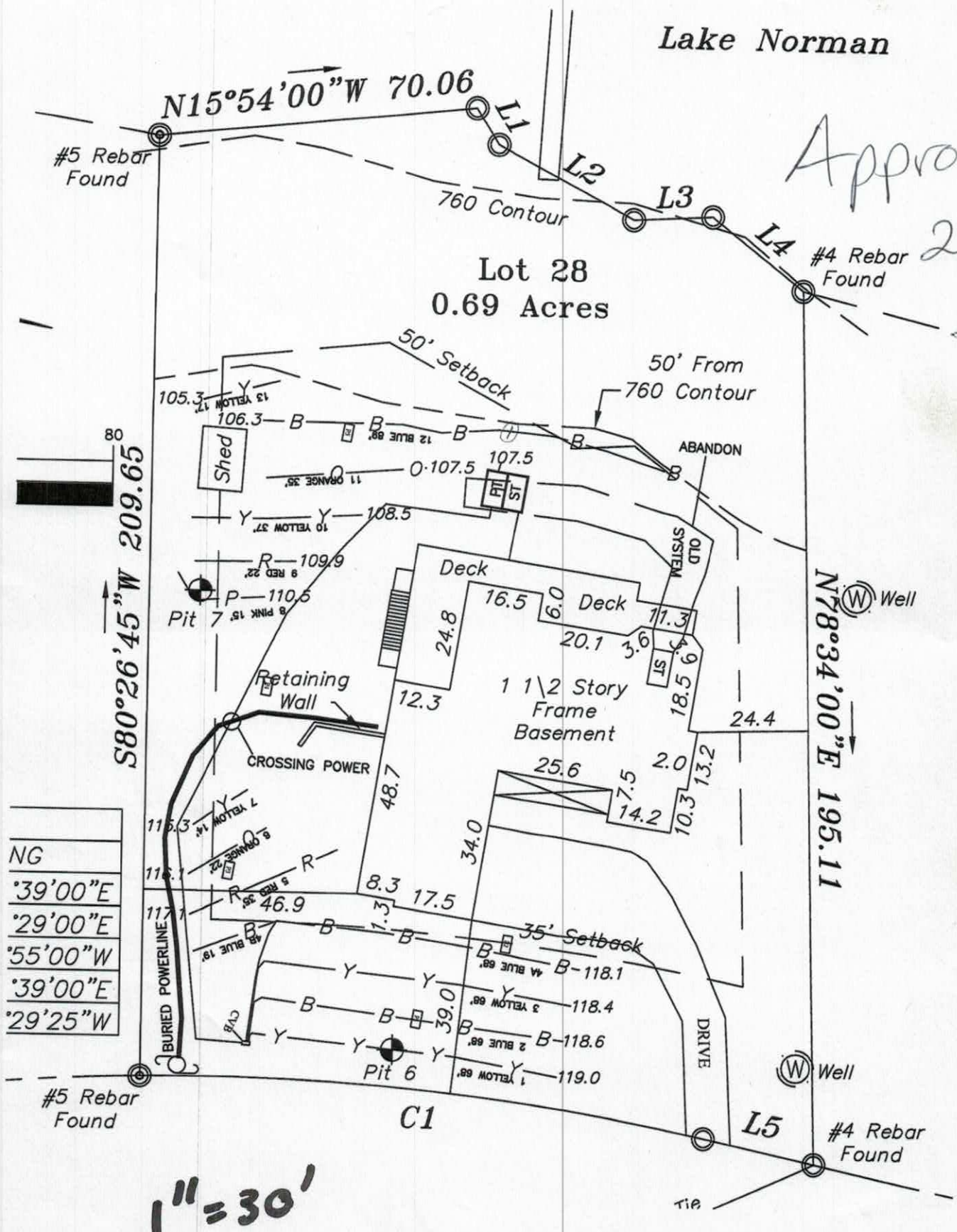
Signature of Owner(s) Date Signature of Witness Date

Dorothy M. Kuffler

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


Lake Norman
N15°54'00"W 70.06
L1
L2
L3
L4
#5 Rebar Found
760 Contour
#4 Rebar Found
Lot 28
0.69 Acres
50' Setback
50' From 760 Contour
ABANDON
Shed
Pit
ST
OLD SYSTEM
Deck
Deck
Pit 7
Retaining Wall
CROSSING POWER
1 1\2 Story Frame Basement
Well
S80°26'45"W 209.65
N78°34'00"E 195.11
BURIED POWERLINE
35' Setback
DRIVE
Pit 6
Well
#5 Rebar Found
C1
L5
#4 Rebar Found
Tie
NG
°39'00"E
°29'00"E
°55'00"W
°39'00"E
°29'25"W
1"=30'
Approved
2/20/19
MD

Attention: Maria

Faxed 2/1/18

WELL ABANDONMENT RECORD

This form can be used for single or multiple wells

For Internal Use ONLY:

1. Well Contractor Information:

Alfred Kiesling Jr

Well Contractor Name (or well owner personally abandoning well on his/her property)

3266-A

NC Well Contractor Certification Number

B & K Well Drilling Inc.

Company Name

2. Well Construction Permit #: 230615

List all applicable well permits (i.e. County, State, Variance, Injection, etc.) if known

3. Well use (check well use):

Water Supply Well:
- ☐ Agricultural
- ☐ Geothermal (Heating/Cooling Supply)
- ☐ Industrial/Commercial
- ☐ Irrigation
- ☐ Municipal/Public
- ☑ Residential Water Supply (single)
- ☐ Residential Water Supply (shared)

Non-Water Supply Well:
- ☐ Monitoring

Injection Well:
- ☐ Aquifer Recharge
- ☐ Aquifer Storage and Recovery
- ☐ Aquifer Test
- ☐ Experimental Technology
- ☐ Geothermal (Closed Loop)
- ☐ Geothermal (Heating/Cooling Return)
- ☐ Recovery
- ☐ Groundwater Remediation
- ☐ Salinity Barrier
- ☐ Stormwater Drainage
- ☐ Subsidence Control
- ☐ Tracer
- ☐ Other (explain under 7g)

4. Date well(s) abandoned: 1/31/18

5a. Well location:

Cobble Ck. Custom Homes

Facility/Owner Name

Facility ID# (if applicable)

668 Beaton Path Rd

Physical Address, City, and Zip

Iredell

County

4627806739

Parcel Identification No. (PIN)

5b. Latitude and longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

_____ N _____ W

CONSTRUCTION DETAILS OF WELL(S) BEING ABANDONED

Attach well construction record(s) if available. For multiple injection or non-water supply wells ONLY with the same construction abandonment, you can submit one form.

6a. Well ID#: _____

6b. Total well depth: 30 (ft.)

6c. Borehole diameter: 24" (in.)

6d. Water level below ground surface: 29 (ft.)

6e. Outer casing length (if known): _____ (ft.)

6f. Inner casing/tubing length (if known): _____ (ft.)

6g. Screen length (if known): _____ (ft.)

WELL ABANDONMENT DETAILS

7a. Number of wells being abandoned: 1

For multiple injection or non-water supply wells ONLY with the same construction/abandonment, you can submit one form.

7b. Approximate volume of water remaining in well(s): _____ (gal.)

FOR WATER SUPPLY WELLS ONLY:

7c. Type of disinfectant used: Chlorine

7d. Amount of disinfectant used: 16 oz

7e. Sealing materials used (check all that apply):
- ☐ Neat Cement Grout
- ☐ Sand Cement Grout
- ☑ Concrete Grout
- ☐ Specialty Grout
- ☐ Bentonite Slurry
- ☐ Bentonite Chips or Pellets
- ☐ Dry Clay
- ☐ Drill Cuttings
- ☐ Gravel
- ☐ Other (explain under 7g)

7f. For each material selected above, provide amount of materials used:

5 yards Concrete

7g. Provide a brief description of the abandonment procedure:

Poured

8. Certification:

Alfred J Kiesling Jr 1-31-18

Signature of Certified Well Contractor or Well Owner — Date

By signing this form, I hereby certify that the well(s) was (were) abandoned in accordance with 15A NCAC 02C .0100 or 2C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

9. Site diagram or additional well details:
You may use the back of this page to provide additional well site details or well abandonment details. You may also attach additional pages if necessary.

SUBMITTAL INSTRUCTIONS

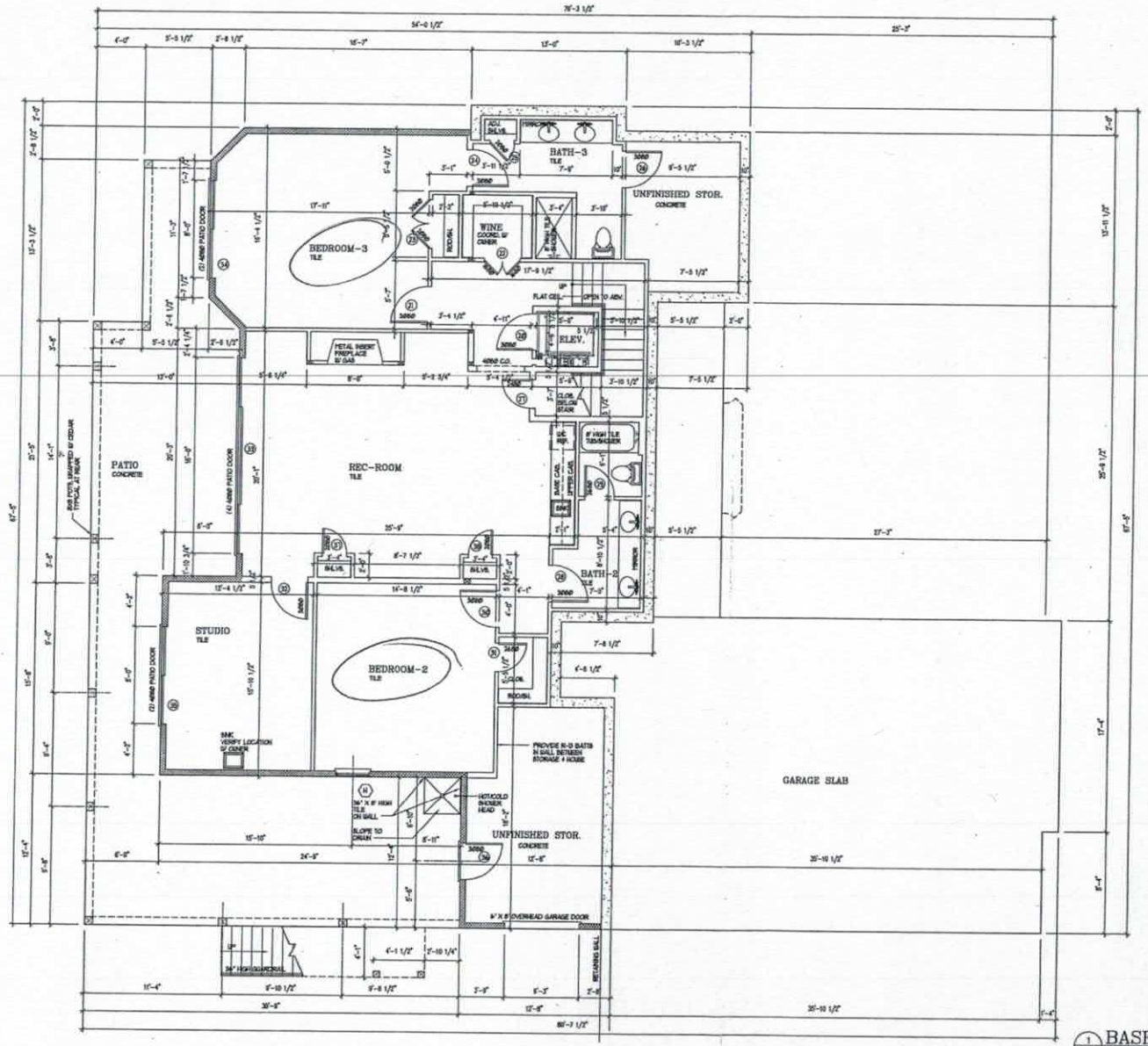
10a. **For All Wells:** Submit this form within 30 days of completion of well abandonment to the following:

Division of Water Resources, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

10b. **For Injection Wells:** In addition to sending the form to the address in 10a above, also submit one copy of this form within 30 days of completion of well abandonment to the following:

Division of Water Resources, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

10c. **For Water Supply & Injection Wells:** In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well abandonment to the county health department of the county where abandoned.



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

Acknowledgement of Plans Submittal ONLY!

Date 2/4/18

Date 2/6/18

WINDOW NOTES: SEE SCHEDULE, SHEET 12

1. WINDOW SHALL BE WINDSOR, PINNACLE SERIES, CLAD DOUBLE-HUNG WINDOW.
3. WINDOW SHALL HAVE FLASHING ALL FOUR-SIDES, AND SHALL BE SEALED ALL FOUR-SIDES, IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4. THE CONTRACTOR SHALL FOLLOW WINDOW MANUFACTURER'S INSTALLATION SPECIFICATIONS.

NOTES:

1. TYPICAL INTERIOR PARTITIONS ARE 3 1/2" WIDE (2x4 STUDS) UNLESS SHOWN OTHERWISE.
2. TYPICAL EXTERIOR WALLS/BASEMENT L.B. PARTITIONS ARE 5 1/2" WIDE (2x6 STUDS).
3. INTERIOR DIMENSIONS ARE TO THE FACE OF STUDS.
4. INTERIOR DIMENSIONS TO EXTERIOR WALLS ARE TO THE OUTSIDE FACE OF THE WALL.
5. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS. NOTIFY THE DESIGNER OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

STRUCTURAL ENGINEERING:

Scott Fleming Design, LLC
residential design

Charlotte, NC
704.907.3045
scott@
scottflemingdesign.com

PROJECT:

Kuffler Residence
668 Beaten Path Rd.
Mooresville
Iredell County, NC

Scott Fleming Design, LLC
10612-D Providence Rd.
#482
Charlotte, NC 28277
704.907.3045
scott@scottflemingdesign.com

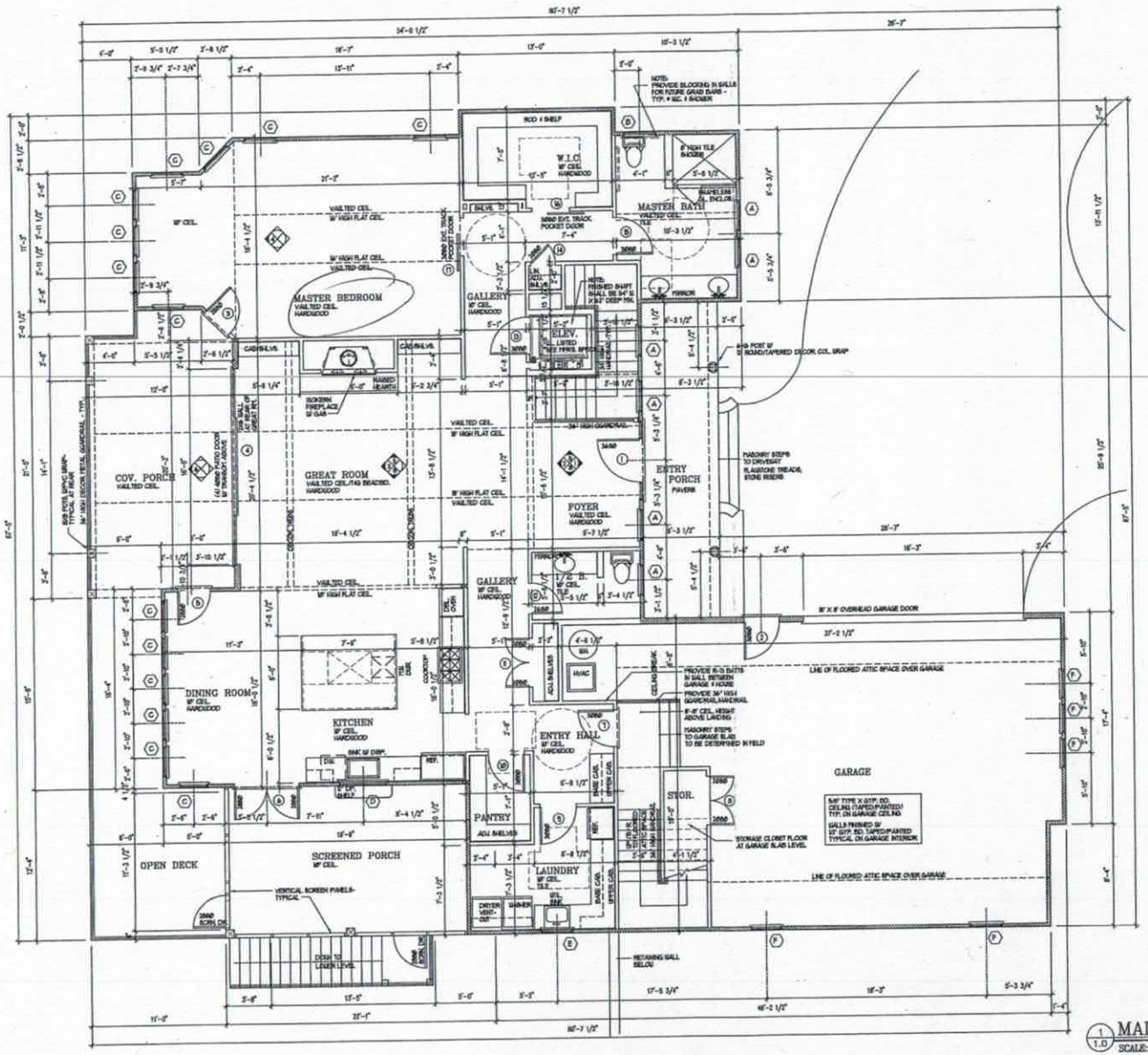
©2018 Scott Fleming Design, LLC

This drawing is the property of Scott Fleming Design, and is not to be reproduced or copied in whole or in part. It is not to be used on any other project, and is to be returned upon request.

Content:
BASEMENT FLOOR PLAN

Project
Date 01218
Revisions

Sheet
1.1



Acknowledgement of Plans Submittal ONLY!

Date 2/12/18

Date 2/12/18

1/1.0 MAIN-LEVEL FLOOR PLAN
SCALE: 1/4" = 1'-0"

STRUCTURAL ENGINEERING:

Scott Fleming Design, LLC
residential design

Charlotte, NC
704.907.3045
scott@
scottflemingdesign.com

PROJECT:

Kuffler Residence

668 Beaten Path Rd.
Mooresville
Iredell County, NC

Scott Fleming Design, LLC
10920-D Providence Rd.
#892
Charlotte, NC 28277
704.907.3045
scott@scottflemingdesign.com

©2018 Scott Fleming Design, LLC

This drawing is the property of Scott Fleming Design, and is not to be reproduced or copied in whole or in part. It is not to be used on any other project, and is to be returned upon request.

Content:
MAIN-LEVEL FLOOR PLAN

Project
Date 01.12.18
Revisions

Sheet
1.0

IREDELL COUNTY

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

APPLICATION NUMBER
230615
Issue Date: 10/02/2017

ZONING PERMIT

Residential

Parcel Number	Street Address	Jurisdiction
4627800739.000	668 BEATEN PATH ROAD, MOORESVILLE, NC	IREDELL COUNTY

Owner Information	Applicant Information
Owner: KUFFLER STEPHEN J+DOROTHY M	Applicant: ROLLANS SOIL & ENVIRON
Address: 49 WILLWAY AVE RICHMOND, VA 23226	Address: 470 NORTH BROAD STREET SUITE D MOORESVILLE, NC 28115
Phone:	Phone: 704-658-1723

Use Requested	Zone Code
SFD REPLACING PERMIT 180127	R20

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
.700	35.00	50.00	15.00	15.00	CACL	AE

Remarks:

Lots with frontage on the lake must meet both the 50 foot setback from the 760 contour line and the 35 foot setback from the rear property line for any structure.

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: 10/4/17

Permit Number	116649	TOTAL FEES:	$ 77.25