HS (4) AP

ICHD–ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 | Mooresville Office (704) 660-3625 | PERMIT # 239440

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

PIN # 4659711849

APPLICANT/OWNER: Stephen Pope | APPLICANT ADDRESS: 2770 Charlotte Hwy Mooresville, NC 28117

SITE ADDRESS: 141 Shepherd Rd Mooresville, NC 28115 | PHONE: 7049049031 | ALT. PHONE

SITE DIRECTIONS: US 21/Hwy 115 N TR Shepherd Rd on left | SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: N/A | SECTION: — LOT # — LOT AREA: 1.3 Acre | DESIGN FLOW: 360gpd L.T.A.R.: .3

Septic Tank 1000 (gal) STB 2071 Date Infiltrate | ☒ New System ☐ Repair ☐ Expansion System Type: I II (III) IV V VI | ☒ Residence No. Bedrooms 3 | Water Supply: ☒ Private ☐ Public ☐ Community

Pump Tank (gal) PT Date | System Description: Gravity - 25% Reduction | ☐ Business No. Persons 6

Pump Make Model Serial # | Repair System Description: LP PPBPS | ☐ Other No. Employees

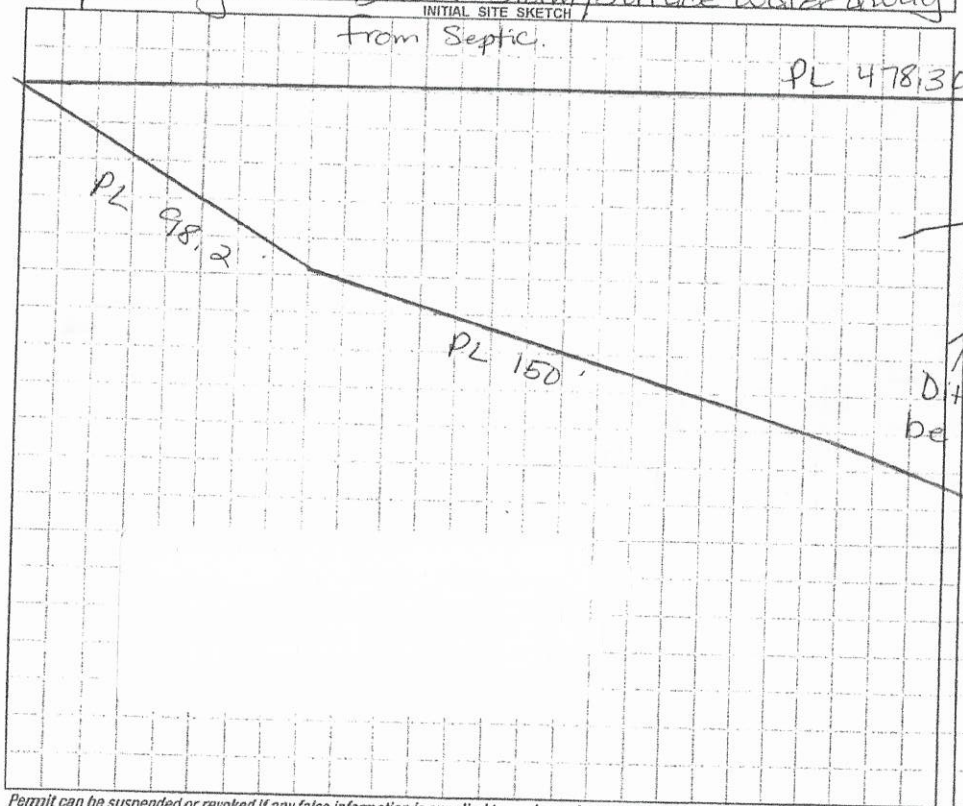
Nitrification Fields 1 # Lines 5 Linear Ft. 300 | Maintenance Agreement Required: ☐ YES ☒ NO | ☐ Slab ☒ Crawl Space

Trench Width 36" Trench Bottom Depth(Low side) 18" Gravel Depth N/A | ☒ GRAVITY ☐ PRESSURE | ☐ Basement w/plumbing ☐ Basement w/o plumbing

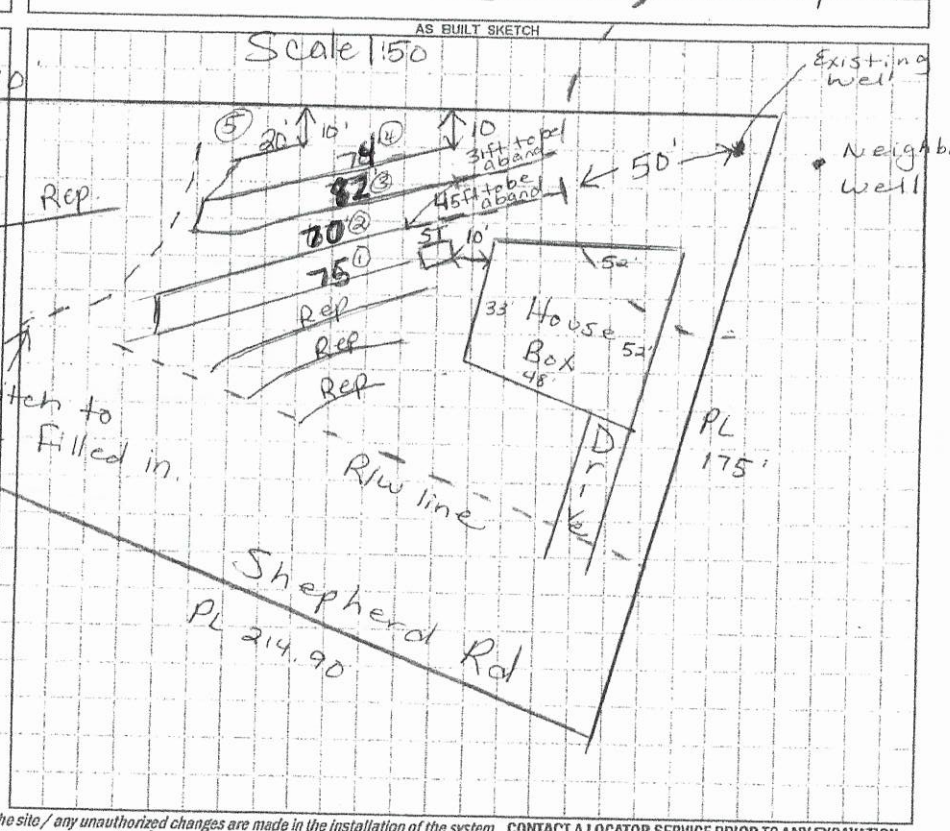
Comments / Conditions: Do not exceed 18" trench bottom depth. Fill in existing ditch within 15ft of Septic System. Divert Storm/Surface water away from Septic.

Abandon 45Ft of drainline (2) that's 24" deep & abandon 31ft of drainline (3) that's 24" deep.

INITIAL SITE SKETCH



AS BUILT SKETCH



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**

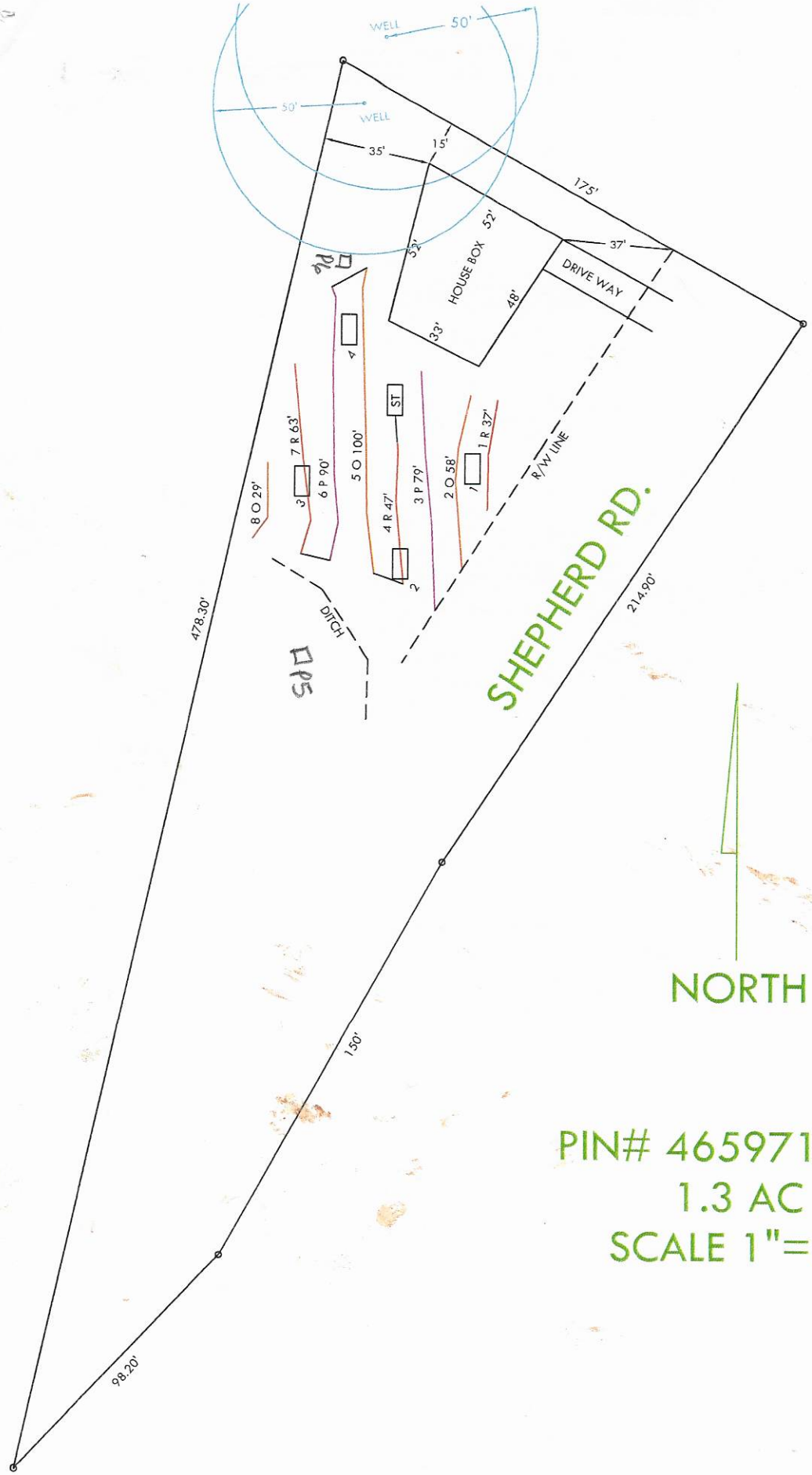
☐ IMPROVEMENT PERMIT *with plat valid without expiration.* ☒ IMPROVEMENT PERMIT *with site plan valid for 60 mos.* ☐ AUTHORIZATION TO CONSTRUCT *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Stephen Pope Date: 2-9-21 Installed by: (Joe Thompson) JST Enterprises

IMPROVEMENT PERMIT by: Maria Dotson Date: 2/9/2021 OPERATION PERMIT by: Benjamin A Burdette Date: 2-10-21

AUTHORIZATION TO CONSTRUCT by: Maria Dotson Date: 2/9/2021 Existing System Inspected by: Date:

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



Approved
10/23/18
MD

PIN# 4659711849
1.3 AC
SCALE 1"=50'

Carolina Soil & Septic Consulting, PLLC

P.O. Box 1703, Mooresville, NC 28115

Phone: (704) 202-5791 Email: adrianpruett@yahoo.com

NC Licensed Soil Scientist, SC Professional Soil Classifier,
Certified Septic System Operator, Licensed Septic Installer,
Certified Septic Inspector

**Proposed Design for a 25% Reduction Septic System
using Gravity distribution for a 3 bedroom single family residence
at 141 SHEPHERD RD., in
MOORESVILLE, Iredell County, North Carolina.**

Contents:

	Page
Information for the Installer	1
Design Information	
Design Specifications	2
Layout Specifications	3
Site Plan/System Plan	4
Dosing Calculations	5
Soil Profile Descriptions	6

**September 20, 2018
JOB# 18079
Design By: Ben Aldridge**



INFORMATION FOR INSTALLER:

- The permit should be read very carefully prior to submitting bid. 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.
- All tanks shall be properly back filled and compacted to prevent slump at a later date.
- The installer is responsible for final grades and returning that grade to original, with exception of added structural features.
- The supply trench shall be compacted to eliminate any 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 has no more than 1/4"fall in 10 feet with no high or low areas within. If high or low areas do exist after trench excavation, high areas should be removed rather than filling in low areas. Do not over excavate trenches! Any fine grading should be completed by hand with a rake and shovel, leaving no loose material.
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral to prevent unwanted lateral water movement.
- 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 pin flag locations should be checked by the installer prior to beginning trenches to insure accuracy.
- If septic tank risers are used they should be a minimum of 6" above finished grade or within 6" of final grade if buried.
- Design precludes use of foundation drains on the residence.
- System is specified as an Accepted 25% Reduction Gravity installation.
- Repair is specified as PPBPS Low Pressure HORIZONTAL installation.
- Trench width is specified as 36" wide, rake and lime all trench sidewalls
- **If grading for slab foundation is utilized do not grade/create greater than 2 ft of elevation difference within 15 ft of any component of the septic or repair. If back filling do not backfill over any initial or repair septic line.**

OWNER INFORMATION

Owner: DOUG JOHNSON
Address: 112 OLD POST RD.
MOORESVILLE, NC 28117
Phone: 704-400-5066
County: Iredell
Location: 141 SHEPHERD RD.

Source of Wastewater Flow: 3 Bedroom Single Family Residence
Estimated Gallons Per Day Flow: 360
System Flow: NA

Approved
10/23/18
MD

25% GRAVITY DESIGN INFORMATION

Drainfield Design Flow (gpd): 360
Loading/Soil Application Rate (gpd/ft.^{2}): 0.300
Depth of Gravel in Trench: NA (25% reduction)
Gravel Size: NA (25% reduction)
Total Lateral Length From Layout: 300
Total Lateral Length Required: 300
Trench Depth: 18 in. Lowside
Trench Width: ~~36 in.~~
TOTAL AREA TRENCH BOTTOM: 900

Trench Spacing on Center: 9 ft.
Repair Trench Spacing on Center: 8 ft.
Repair Trench Depth: 18 in.

Septic Tank Size: 1000 gal.

Estimated Supply Line Length: 9
Supply Line Diameter: 3 in. SCH 40 PVC
Supply Line Volume: 3.24
Dosing Volume: NA
Supply Manifold: SERIAL DISTRIBUTION

Additional Comments: Soil suitability was performed by BEN ALDRIDGE, REHS

141 SHEPHERD RD.
FIELD LAYOUT SPECIFICATIONS

LAYOUT FOR 3 BEDROOM RESIDENCE

9-20-18

LINE #	FLAG COLOR	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM			NA		
HOUSE CRN		NA	NA		
P. TANK		NA	NA		
1	RED	NA	NA	37	37
2	ORANGE	NA	NA	58	58
3	PINK	NA	NA	79	79
4	***RED***	***NA***	***NA***	***75***	***47***
5	***ORANGE***	***NA***	***NA***	***120***	***100***
6	***PINK***	***NA***	***NA***	***102***	***90***
7	***RED***	***NA***	***NA***	***63***	***63***
8	ORANGE	NA	NA	29	29
			Total	**563**	**503**

Approved
10/23/18

System	LINE LENGTH *300*	SYSTEM TYPE *ACCEPT.*	SOIL LTAR GPD/FT² *0.300*	TRENCH SYSTEM *25% RED.*	DISTRIBUTION *GRAVITY*
Repair	203	*MOD.*	0.300	PPBPS HORIZONTAL	LOW PRESSURE

Notes: ** TBM Is Not Required.
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags

Comments: **Iredell County has CS&SC's permission to change septic tank location and distribution type**

DOSING CALCULATIONS

Location 141 SHEPHERD RD.

Lot No:

No. of Bedrooms	3
Design Flow	360 $^{gal}/_{day}$
LTAR	0.300 $^{gal}/_{ft^2\ day}$
25% RED.? (YES OR NO)	YES
Supply Line Length	9 ft.
Supply Line Volume	3.24 gal.
Required Feet of 25% RED. Line	300 ft.
Amount of Line from Layout	300 ft.
Gallons per Minute	NA $^{gal}/_{min}$
Septic Tank Capacity	1000 gal.
Minimum Septic Tank Capacity	1000 gal.
Lateral Line Volume	195.9 gal.

Approved
10/23/18

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

Approved 10/23/18 MD

Sheet 1 OF 1
PROP. ID #: 4659711849
COUNTY: IREDELL

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

OWNER: DOUG JOHNSON
ADDRESS: 113 BROCKTON LN. MOORESVILLE, NC 28117
PROPOSED FACILITY: SFR PROPOSED DESIGN FLOW (.1949): 360
LOCATION OF SITE: SHEPHERD RD.

APPLICATION DATE: 10/9/2018
DATE EVALUATED: 10/9/2018
PROPERTY SIZE: 1.3 AC
PROPERTY RECORDED: YES

WATER SUPPLY: X PRIVATE PUBLIC X WELL SPRING OTHER:

EVAL. METHOD: A. BORING X PIT CUT **WASTEWATER TYPE** X SEWAGE INDUSTRIAL PROCESS MIXED

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE MINERALOGY	.1942 SOIL WETNESS/C OLOR	.1943 SOIL DEPTH	.1956 SAPROLITE CLASS	.1944 RESTR HORIZON	
1	LS/6%	0-9	SCL,W,SBK	FR,SS,SP,SEXP	NA	42	COMMON INC 30-42 / S	62+	0.3
		9-30	RC,S,ABK	FI,S,SP,SEXP					
		30-42	RCL,M,SBK	FR,SS,SP,SEXP					
		42-62	SLSAP	FR,SS,SP,SEXP					
2	LS/6%	0-7	SCL,W,SBK	FR,SS,SP,SEXP	NA	43	COMMON INC 28-43 / S	65+	0.3
		7-28	RC,S,ABK	FI,S,SP,SEXP					
		28-43	RCL,M,SBK	FR,SS,SP,SEXP					
		43-65	SLSAP	FR,SS,SP,SEXP					
3	LS/7%	0-5	SCL,W,SBK	FR,SS,SP,SEXP	NA	32	COMMON INC 15-32 / S	58+	0.35
		5-15	RC,M,SBK	FI,S,SP,SEXP					
		15-32	RCL,W,SBK	FR,SS,SP,SEXP					
		32-58	LSAP	VFR,SS,SP,SEXP					
4	LS/7%	0-6	SCL,W,SBK	FR,SS,SP,SEXP	NA	40	COMMON INC 29-40 / S	65+	0.3
		6-29	RC,S,ABK	FI,S,SP,SEXP					
		29-40	RCL,W,SBK	FR,SS,SP,SEXP					
		40-65	SLSAP	VFR,SS,SP,SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	OTHER FACTORS (.1946):	
AVAILABLE SPACE (.1945)	PS	PS	SITE CLASSIFICATION (.1948):	PS
			EVALUATED BY:	BEN ALDRIDGE
SYSTEM TYPE(S)	GRAVITY 25% REDUCTION	HORIZONTAL PPBPS	OTHER(S) PRESENT	JACOB CONRAD, DAVID BEANE
SITE LTAR	0.3	0.3		
COMMENTS				

ON-SITE WASTEWATER SECTION

PROPERTY ID #: 4659711899
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Stephen Pope
ADDRESS: 2770 Charlotte Hwy Mooresville NC 28117 APPLICATION DATE
PROPOSED FACILITY: House PROPOSED DESIGN FLOW (.1949): 360gpd DATE EVALUATED: 2/8/2021
LOCATION OF SITE: 141 Shepherd Rd M'ville PROPERTY SIZE: 1.3 Acre
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 5	LS 6%	0-20"	Brn SCL w SBK SS, SP, SExP, FR						PS .3
		20"-48"	RC m-w SBK SS, SP, SExP w/ Few to many SAP Incls						
		48-52	LSAP massive		FR				
2	7% LS	0-10"	Brn SCL w SBK SS, SP, SExP, FR						PS .3
		10"-28"	R Cm-w SBK SS, SP, SExP, FR						
		28-41"	R Cl w SBK SS, SP, SExP, FR						
		41-52	L/SL SAP massive, FR						
3									
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	25% Red	PPBPS
Site LTAR	.3	.3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948):
EVALUATED BY: Maria Dotson
OTHER(S) PRESENT: Joe Thompson

COMMENTS:

RECEIVED JAN 2 6 2020

APPLICATION MUST BE FILLED OUT COMPLETELY & BE LEGIBLE OR IT WILL NOT BE PROCESSED

#239440
$500.00

Iredell County Health Department – Environmental Health Division

PAGE 1: *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: Stephen Pope Address: 2770 Charlotte Hwy Mooresville Zip: 28117
Applicant Email: _____ Phone: 704 90K 9031 Alt. Phone: _____
Owner Name: Stephen Pope Address: _____ Zip: _____
Owner Email: Jal Thompson Phone: 980.722.0287 Alt. Phone: _____

Property Information:

Street Address: 141 Shepherd Rd Mooresville
Subdivision Name: _____ Section/Phase: _____ Lot Number: _____
Driving Directions: 1st lot on left on Shepherd Rd off Hwy 21

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

(✓) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem: _____
Maximum Number of Bedrooms: 3
Maximum Number of Occupants: _____
( ) Swimming Pool
( ) Other Addition/Structure: _____
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: _____ Number of Persons: _____

(✓) 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: Stephen Pope 8-3-19
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

Public Health
Prevent. Promote. Protect.
Iredell County Health Department

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

Public Health
Prevent. Promote. Protect.
Iredell County Health Department

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

(Check and sign only ONE of the options below)

1. *** APPLICANT AND OWNER ARE THE SAME. *** (*Sign here*) Stephen Page

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.

2. I, _____, am the legal owner(s) of the property located at _____, identified as

PIN (Parcel Identification Number)_____, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) _____, _____, 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 Page — Signature of Owner(s)

8-3-19 — Date

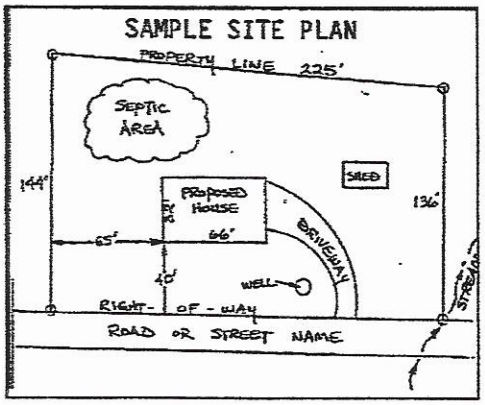
Mooresville - Environmental Health
ronda.hart@co.iredell.nc.us
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

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

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

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 OR WELL PERMIT!!!*



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

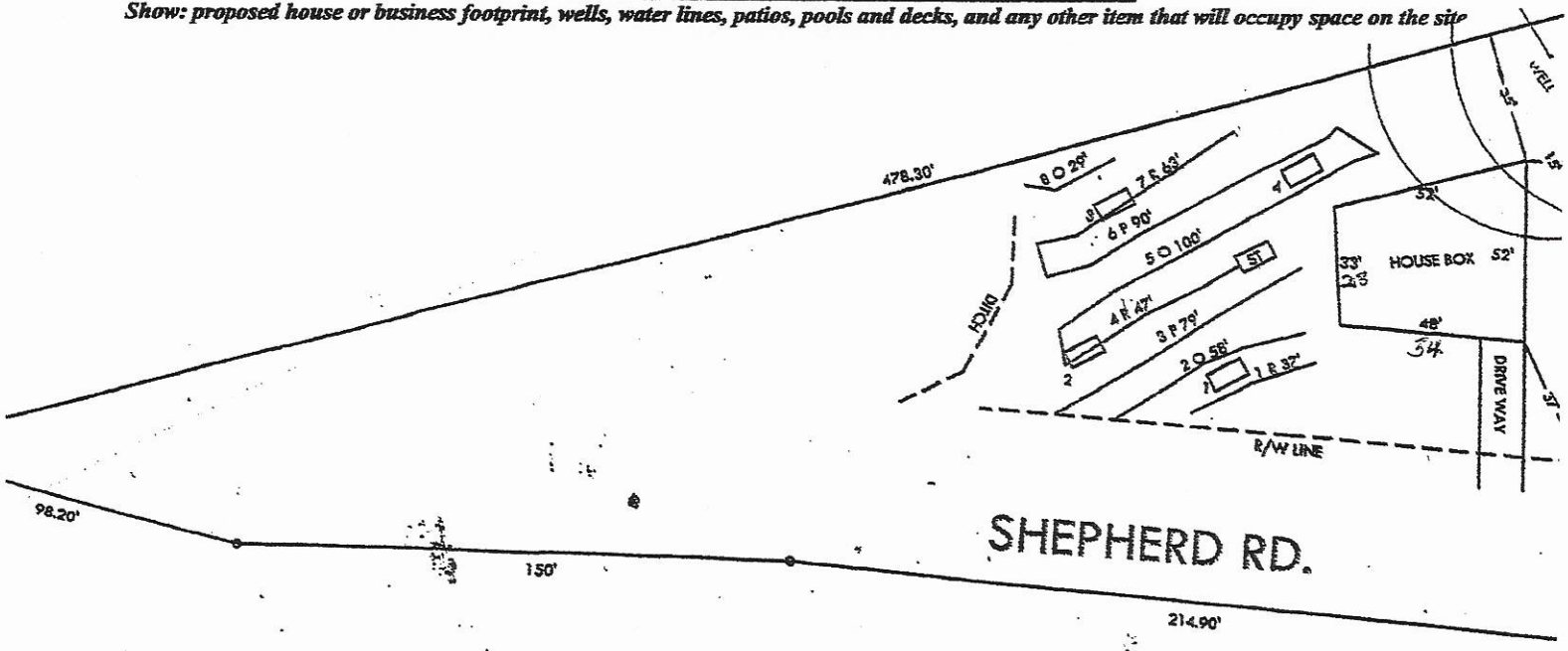
- ( ) **Property Line measurements are clearly identified**
- ( ) **All proposed structures are indicated**
- ( ) **Front and side setbacks from property line**
- ( ) **Preferred driveway location**
- ( ) **Preferred well location**
- ( ) **Preferred septic system location**
- ( ) **North arrow, or other 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

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

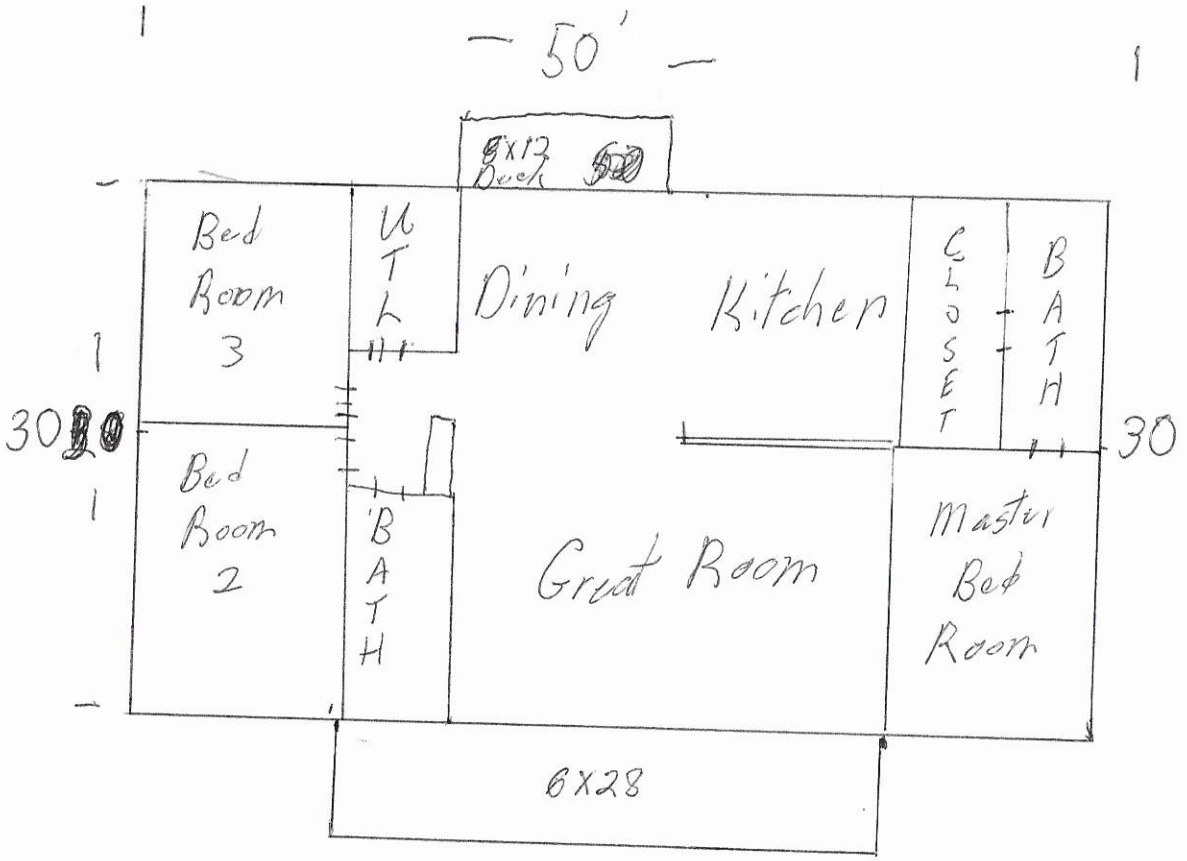


NORTH

PIN# 4659711849
1.3 AC
SCALE 1"=50'

Approx
10/23/18
MB

141 Shepherd Rd



Acknowledgement of
Plans Submittal ONLY!

Date 8/27/19

Date

IREDELL COUNTY

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

APPLICATION NUMBER
239440
Issue Date: 10/10/2018

Permit Type: IMPROVEMENT PERMIT APPLICATION

Parcel Number	Street Address	Jurisdiction
4659711849.000	141 SHEPHERD ROAD	

Owner Information	Applicant Information	Contractor Information
Owner: SHERRILL DON G+NATALYN ARCHER TRUST Address: 1809 IREDELL CO, NC 28625 Phone:	Applicant: CAROLINA SOIL SEPTIC C Address: 162 WEST B ST KANNAPOLIS, NC 28081 Phone: 704-202-5791	Contractor: CAROLINA SOIL SEPTIC C Address: 162 WEST B ST KANNAPOLIS, NC 28081 Phone: 704-202-5791 License Type: UNLI License Number:

Project Description

NEW SINGLE FAMILY - IREDELL

Scope of Work

SFD

Permit Details:

EFT	IMPROVEMENT PERMIT FEE	Amount:	350.00
		Amount:	
		Amount:	
		Amount:	
		Amount:	
		Amount:	
		Amount:	

I hereby certify that all information in this application is correct and all work will comply with the state code and all other applicable state and local laws, ordinances and regulations. The respective department will be notified of any changes in the approved plans, a change of contractor, and/or specifications for the project permitted herein. This application becomes a permit only when validated and approved.

Signature of Owner/Contractor

Date: 10/10/2018

ANY PERMIT ISSUED EXPIRES SIX (6) MONTHS AFTER ISSUANCE IF NO INSPECTIONS HAVE BEEN MADE. ANY PERMIT ISSUED SHALL EXPIRE TWELVE (12) MONTHS AFTER LAST INSPECTION IF THE WORK IS DISCONTINUED.

Permit Number	155199	TOTAL FEES:	$ 350.00