IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 237604

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

PIN # 4723116325 ✓

APPLICANT/OWNER: Forster Fry APPLICANT ADDRESS: 119 Quarter Ln Mooresville

SITE ADDRESS: 222 Delight Loop, Statesville 28677 PHONE: 704-239-3232 ALT. PHONE

SITE DIRECTIONS: Buffalo Shoals → L on Old Airport Rd → L Parker Lake Loop → L on Delight → on right SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Lakewood Estates SECTION: 2 LOT # 42 LOT AREA: .37ac DESIGN FLOW: 360 gpd L.T.A.R.: .3 (.275 repair)

Septic Tank	1000 (gal)	STB	325	Date	12-14-18	☒ New System	☐ Repair	☐ Expansion	System Type: I II III IV V VI
Pump Tank	- (gal)	PT	-	Date	-	System Description:	25% reduction		
Pump Make		Model		Serial #		Repair System Description:	LPPBDS		
# Nitrification Fields	1	# Lines	6	Linear Ft	300	Maintenance Agreement Required:	☐ YES	☒ NO	
Trench Width	36"	Trench Bottom Depth(Low side)	33"	Gravel Depth	—		☒ GRAVITY	☐ PRESSURE	

☒ Residence ☐ Business ☐ Other ☐ Slab ☐ Basement w/ plumbing

No. Bedrooms 3 No. Persons 6 No. Employees ☒ Crawl Space

Water Supply: ☐ Private ☒ Public ☐ Community

☐ Basement w/o plumbing

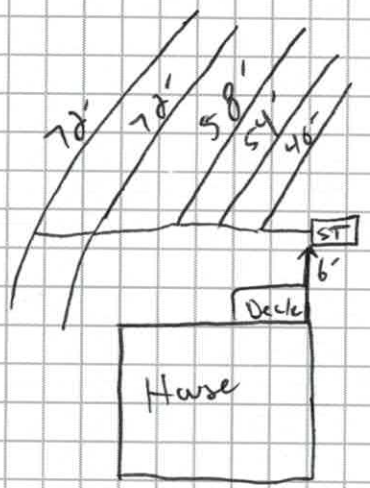
Comments / Conditions: Install on contour + utilize serial distribution. Do not exceed max trench depth of 36" (high side). * All property lines must be clearly marked at time of install/inspection (~ every twenty ft) *

INITIAL SITE SKETCH

See attached design by Carolina Soil & Septic Consulting, PLLC

LSS Adrian Pruett #1314

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**

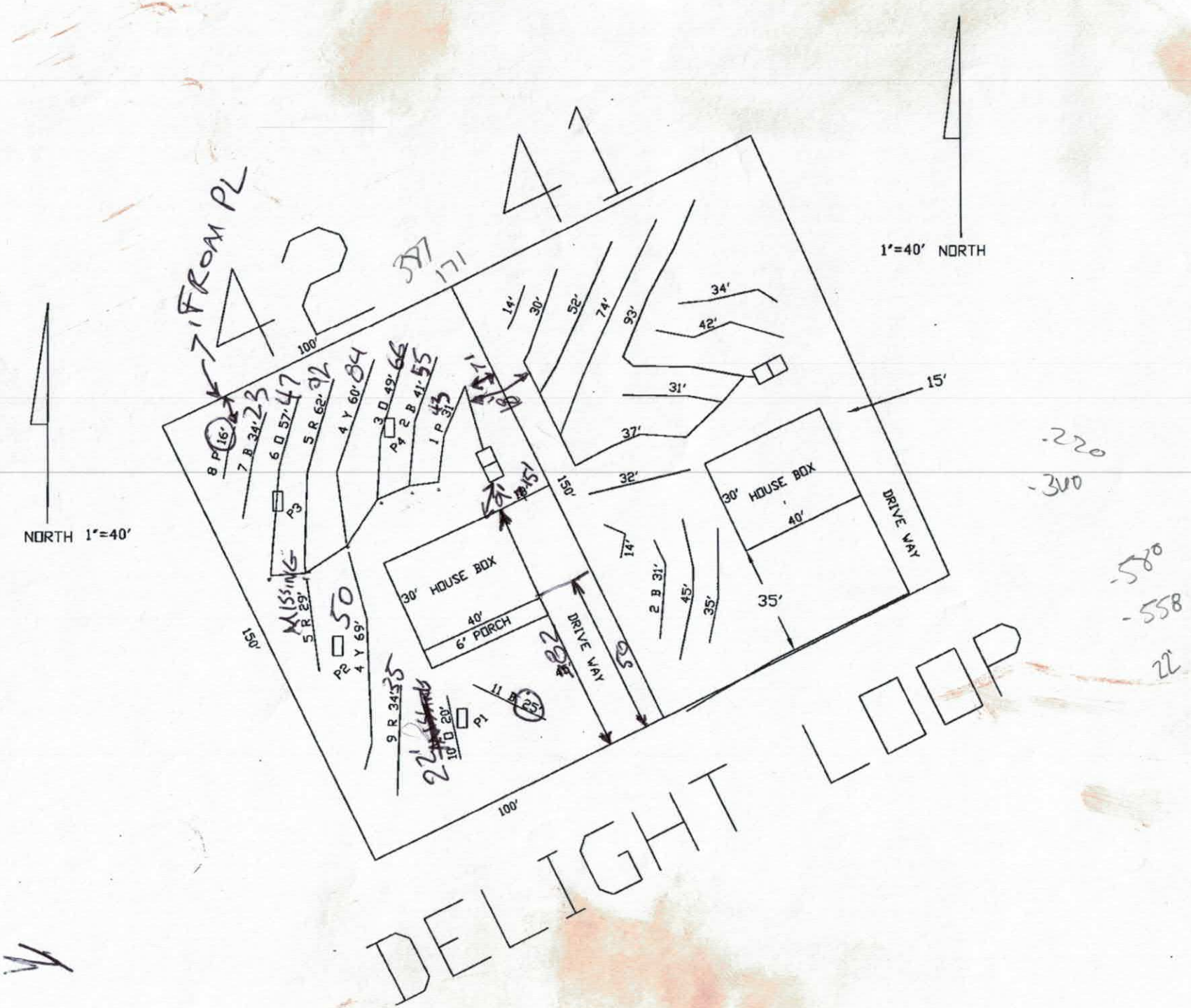
☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☒ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☒ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Forster Fry Date: 8-21-18 Installed by: Rawn Septic

IMPROVEMENT PERMIT by: Carla C. Cave Date: 8/15/18 OPERATION PERMIT by: Date: 2-15-19

AUTHORIZATION TO CONSTRUCT by: Carla C. Cave Date: 8/21/18 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.


1"=40' NORTH
NORTH 1"=40'
DELIGHT LOOP
42
41
387
171
100'
150'
50'
100'
30' HOUSE BOX
40'
6' PORCH
30' HOUSE BOX
40'
DRIVE WAY
DRIVE WAY
35'
15'
MISSING
50
82
-220
-300
-580
-558
22

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
on Lot 42 of Lakewood Estates Subdivision, in
Davidson, 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

July 26, 2018
Job Number: 18086
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 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:	Judith Riggs
Address:	761 Barry Oak Rd. Cleveland, NC 27013
Phone:	
Buyer:	Forster Fry
County:	Iredell
Location:	Lakewood Estates lot 42

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

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:	33 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:	33 in.

Septic Tank Size:	1000 gal.

Estimated Supply Line Length:	21
Supply Line Diameter:	3 in. SCH 40 PVC
Supply Line Volume:	7.56
Dosing Volume:	NA
Supply Manifold:	SERIAL DISTRIBUTION

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

LAKEWOOD ESTATES LOT 42
FIELD LAYOUT SPECIFICATIONS

LAYOUT FOR 3 BEDROOM RESIDENCE

July 26, 2018

LINE #	FLAG COLOR	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM			NA		
HOUSE CRN		NA	NA		
P. TANK		NA	NA		
1	*PINK*	*NA*	*NA*	*31*	*31*
2	*BLUE*	*NA*	*NA*	*41*	*41*
3	*ORANGE*	*NA*	*NA*	*49*	*49*
4	*YELLOW*	*NA*	*NA*	*60*	*60*
4	YELLOW	NA	NA	69	69
5	*RED*	*NA*	*NA*	*62*	*62*
5	RED	NA	NA	29	29
6	*ORANGE*	*NA*	*NA*	*57*	*57*
7	BLUE	NA	NA	34	34
8	PINK	NA	NA	16	16
9	RED	NA	NA	34	34
10	ORANGE	NA	NA	20	20
11	BLUE	NA	NA	25	25
			Total	**527**	**527**

	LINE LENGTH	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH SYSTEM	DISTRIBUTION
System	*300*	*ACCEPT.*	*0.300*	*25% RED.*	*GRAVITY*
Repair	227	*MOD.*	0.275	PPBPS	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 LAKEWOOD ESTATES

Lot No: 42

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	21 ft.
Supply Line Volume	7.56 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.

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

Sheet 1 OF 1
PROP. ID #: 4723663225
COUNTY: IREDELL

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

OWNER: JUDITH RIGGS
ADDRESS: 761 BARRY OAK RD. CLEVELAND, NC
PROPOSED FACILITY: SFR PROPOSED DESIGN FLOW (.1949): 360
LOCATION OF SITE:
WATER SUPPLY: PRIVATE X PUBLIC WELL SPRING OTHER:
EVAL. METHOD: A. BORING X PIT CUT WASTEWATER TYPE X SEWAGE INDUSTRIAL PROCESS MIXED

APPLICATION DATE: 7/26/2018
DATE EVALUATED: 7/26/2018
PROPERTY SIZE: .37 AC
PROPERTY RECORDED: YES

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/COLOR	.1943 SOIL DEPTH	.1956 SAPROLITE CLASS	.1944 RESTR HORIZON	
1	LS/7%	0-14	BRSL,W,SBK	VFR,NS,NP,SEXP	FEW Y/BR 0-14 & 33-52	52	NA	52+	0.275
		14-19	BR/RSCL,M,SBK	FR,SS,SP,SEXP					
		19-52	RC,S,ABK	FI,S,P,SEXP					
2	LS/7%	0-9	BRSCL,W,SBK	VFR,SS,SP,SEXP	FEW Y/BR 0-28	48	NA	48+	0.275
		9-28	RC,S,ABK	FR,S,SP,SEXP					
		28-48	RCL,W,SBK	FR,SS,SP,SEXP					
3	LS/7%	0-10	BRSCL,W,SBK	VFR,SS,SP,SEXP	FEW LITHOCHROMIC Y/BR	49	NA	49+	0.3
		10-27	RC,S,ABK	FI,S,P,SEXP					
		27-38	RC,M,ABK	FI,S,SP,SEXP					
		38-49	RC,W,SBK	FI,S,SP,SEXP					
4	LS/7%	0-11	BRSCL,W,SBK	VFR,SS,SP,SEXP	NA	57	NA	57+	0.3
		11-29	RC,S,ABK	FI,S,SP,SEXP					
		29-57	RCL,W,SBK	FI,S,SP,SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
AVAILABLE SPACE (.1945)	PS	PS
SYSTEM TYPE(S)	GRAVITY 25% REDUCTION	PPBPS
SITE LTAR	0.3	0.275
COMMENTS		

OTHER FACTORS (.1946): NA
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: BEN ALDRIDGE
OTHER(S) PRESENT: JACOB CONRAD, DAVID BEANE

237604 $350.00

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM

Application For: ( ) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
(X) 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 (X) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information: (PRINT CLEARLY)

Applicant Name: FORSTER FRY Address: 119 QUARTER LN. MOORESVILLE, NC Zip: 28117

Applicant Email: FFRY32@YAHOO.COM Phone: 704-239-3232 Alt. Phone: _____

Owner Name: JUDITH RIGGS Address: 761 BARRY OAK RD. CLEVELAND, NC Zip: 27013

Owner Email: _____ Phone: _____ Alt. Phone: _____

Property Information:

Street Address: 222 DELIGHT LOOP STATESVILLE, NC

Subdivision Name: LAKEWOOD ESTATES Section/Phase: _____ Lot Number: 42

Driving Directions: BUFFALO SHOALS, TL OLD AIRPORT, TL PARKER LAKE LOOP, TL DELIGHT, ON R

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

(X) 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: 6
( ) Swimming Pool
( ) Other Addition/Structure: _____

CHECK FOUNDATION TYPE
(X) Crawl Space Foundation
( ) Concrete Slab Foundation
( ) Basement with Plumbing
( ) Basement without Plumbing

Non-Residential Site Development: Type of Business: _____
Square Footage of Building: _____ Max. Number of Employees: _____ Max. Number of Seats/Beds/Other: _____

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

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

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

Please answer the following to the best of your ability:
( ) Yes (X) No Does the site contain any jurisdictional wetlands?
( ) Yes (X) No Is any non-domestic sewage (i.e. industrial) to be generated?
( ) Yes (X) 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: _____ 7-30-18
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

DigiSign Verified: FBA2F7B1-5EB0-45A8-9D02-3B00D0357237

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, Judith Riggs, am the legal owner(s) of the property located at 722 Delight Loop, Statesville NC., identified as PIN (Parcel Identification Number) 4723666225.000, located in Iredell County, North Carolina.

I do hereby authorize **(print legal representative/company name)** Forster Fry General Contractor, 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.

Judith Riggs — Signature of Owner(s) — 07-27-2018 — Date

Signature of Witness — 07-27-2018 — 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

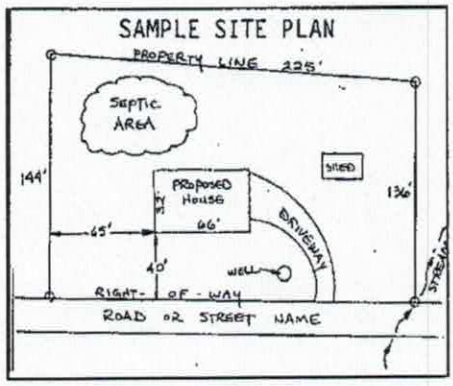
IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

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:

- (X) Property Line measurements are clearly identified
- (X) All proposed structures are indicated
- (X) Front and side setbacks from property line
- (X) Preferred driveway location
- ( ) Preferred well location
- (X) Preferred septic system location
- (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

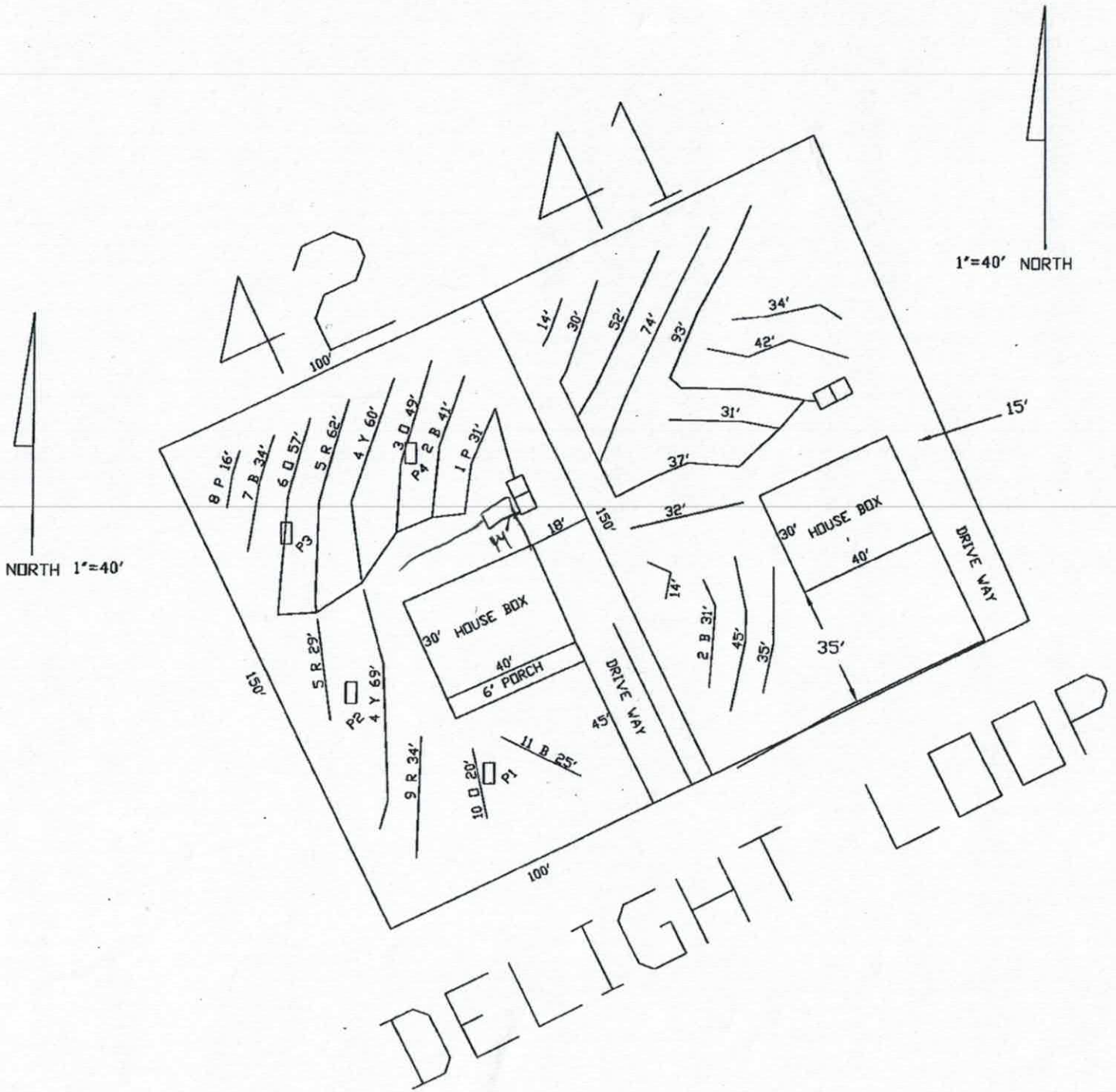
USE THIS SPACE TO DRAW YOUR SITE PLAN

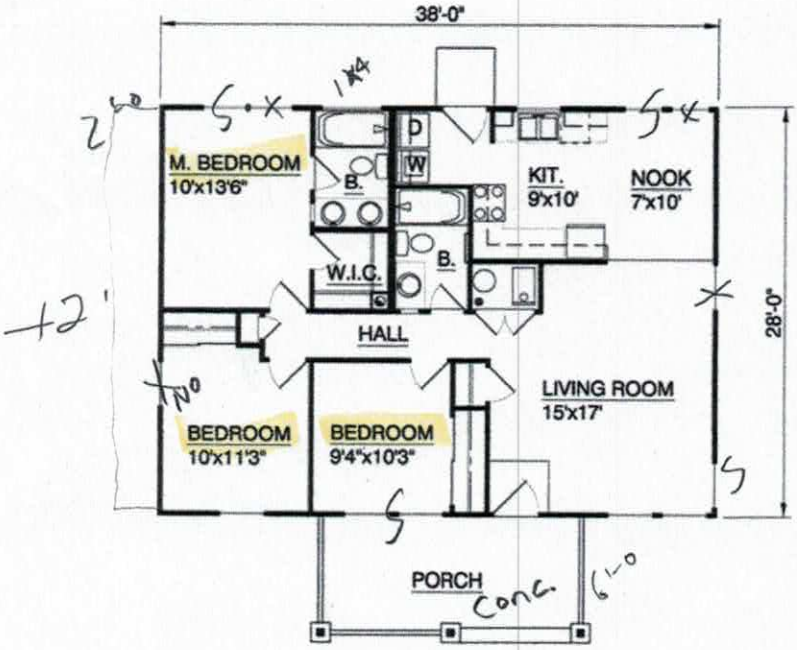
Show: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

See Attached Site Plan

Signature: _____ 7-30-18

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


1"=40' NORTH
NORTH 1"=40'
42
41
100'
8 P 16'
7 B 34'
6 O 57'
5 R 62'
4 Y 60'
3 O 49'
2 B 41'
1 P 31'
P3
P4
14'
18'
150'
30' HOUSE BOX
40'
6' PORCH
DRIVE VAY
5 R 29'
4 Y 69'
P2
9 R 34'
10 O 20'
P1
11 B 25'
45'
14'
30'
52'
74'
93'
34'
42'
31'
37'
15'
32'
30' HOUSE BOX
40'
DRIVE VAY
2 B 31'
45'
35'
35'
100'
DELIGHT LOOP



34' x 40'

Plan Number 94372 | Order Code 05WEB | First Floor Plan
FamilyHomePlans.com
U.S. customers call 1-800-482-0464 | Canadian customers call 1-800-361-7526
Click Here to Mirror Reverse

Acknowledgement Of
Plans Submittal ONLY!

Date 8-21-18

Date 8/21/18

222 Delight Loop

IREDELL COUNTY

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

APPLICATION NUMBER
237604
Issue Date: 07/27/2018

Permit Type: IMPROVEMENT PERMIT APPLICATION

Parcel Number	Street Address	Jurisdiction
4723663225.000	222 DELIGHT LOOP	IREDELL COUNTY

Owner Information	Applicant Information	Contractor Information
Owner: JL+RUTH B HOPE ENTERPRISES LIM Address: 1120 N BARKLEY ROAD STATESVILLE, NC 28677 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.

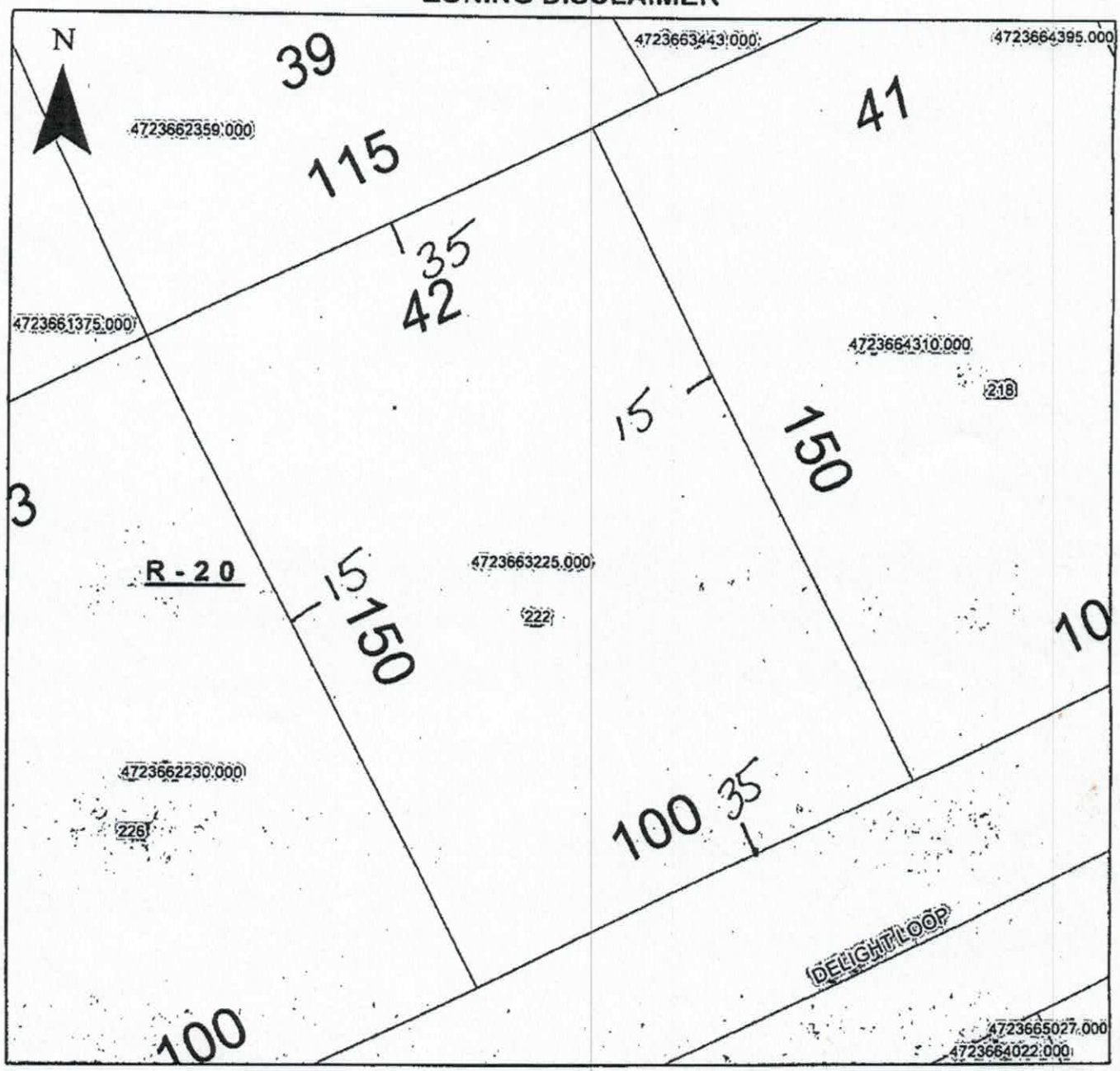
Signature of Owner/Contractor

Date: 07/27/2018

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	147045	TOTAL FEES:	$ 350.00

ZONING DISCLAIMER



Property Address 222 Delight Lp.

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. Applicant further acknowledges that the 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