ICHD–ENVIRONMENTAL HEALTH DIVISION PJB

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # AP300986 ✓ ①

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

PIN # 4637711066 ✓

APPLICANT/OWNER: Darren Shaw / Jamie Light APPLICANT ADDRESS: PO Box 1703 Mooresville, NC

SITE ADDRESS: 112 Harborcrest Ln. Mooresville, NC 28117 ✓ PHONE: 704-798-0337 ALT. PHONE: —

SITE DIRECTIONS: Brawley School Rd → R on Oak Tree → R on Harborcrest → lot on R SAP CONTROLLED: ☐ YES ☑ NO

SUBDIVISION: Harborcrest ✓ SECTION: 2 ✓ LOT # 20 ✓ LOT AREA: .68 ac ✓ DESIGN FLOW: 360gpd L.T.A.R.: .3

Septic Tank 1000 (gal) STB 760 Date 2-26.
Pump Tank ____ (gal) PT ____ Date ____
Pump Make ____ Model ____ Serial # ____
Nitrification Fields 1 # Lines 4 Linear Ft 300'
Trench Width 36" Trench Bottom Depth(Low side) 34"/36" high side Gravel Depth —

☑ New System ☐ Repair ☐ Expansion System Type: I II (III) IV V VI
System Description: 25% reduction
Repair System Description: LP PPBPS
Maintenance Agreement Required: ☐ YES ☑ NO
☑ GRAVITY ☐ PRESSURE

☑ Residence No. Bedrooms 3
☐ Business No. Persons 6
☐ Other No. Employees ____
☑ Slab ☐ Crawl Space
☐ Basement w/plumbing ☐ Basement w/o plumbing

Water Supply: ☑ Private ☐ Public ☐ Community

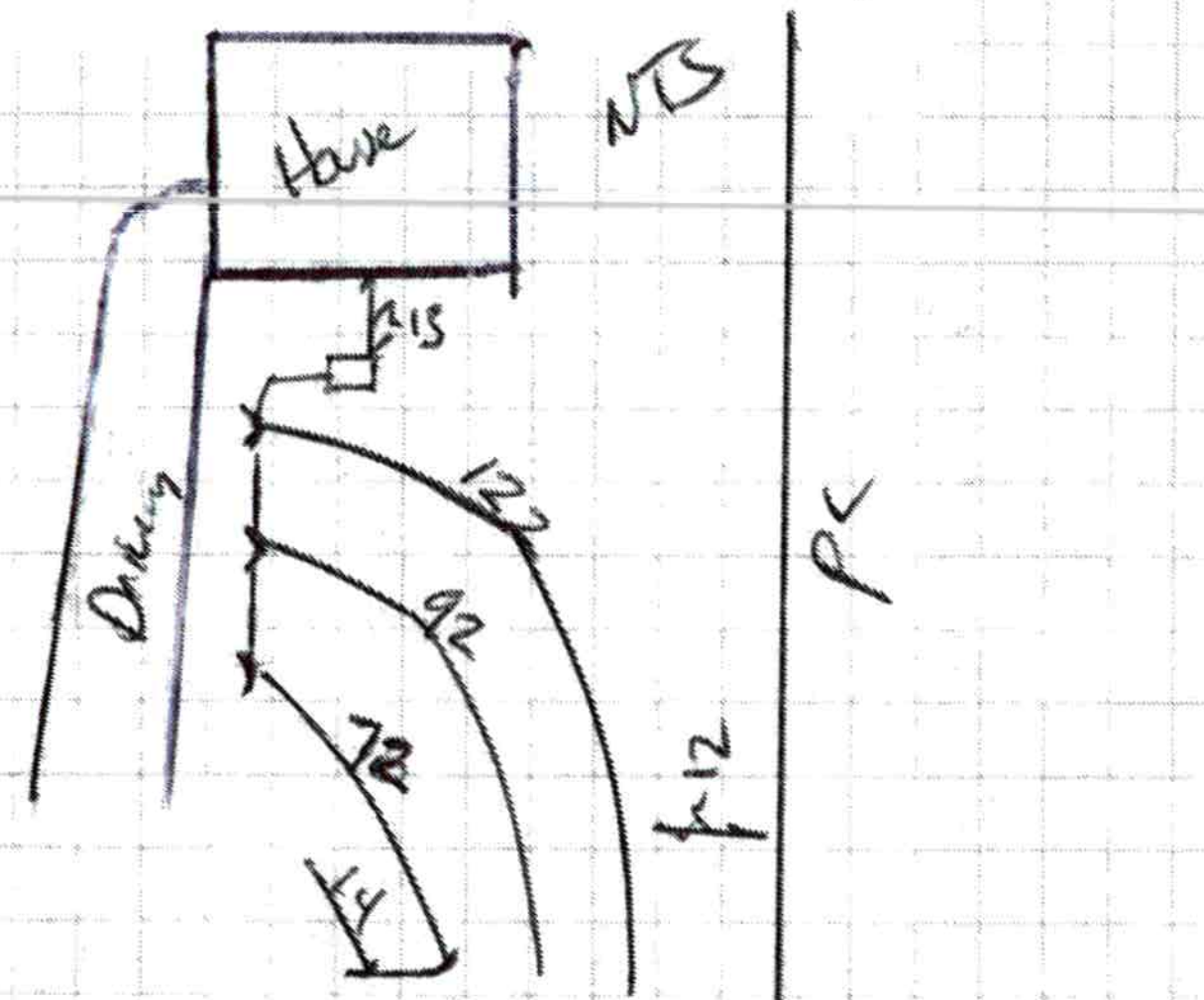
Comments / Conditions: Install 25% reduction with serial distribution and drain lines on contour. Existing well must be abandoned before issuing AC. Properly abandon existing tank + lines before home construction begins. * 10" of fill must be removed from repair area (pit 4+5) before issuing AC. Leave 1-2 mounds or benchmark for verification. A site visit will be required before issuing AC.

INITIAL SITE SKETCH

See attached site plan by CS + SC, PLLC

AS BUILT SKETCH

* Proposed house 4' wider than house on permit. Ok to build, will not impact septic
- well abandoned + COC completed 11/5/19
- fill was removed + confirmed 11/5/19



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: [signature] Date: 9-27-19 Installed by: Shady Knoll Septic Septic - 5580

IMPROVEMENT PERMIT by: Kayla Watson Date: 9-27-19 OPERATION PERMIT by: [signature] Date: 4-27-2020

AUTHORIZATION TO CONSTRUCT by: Kayla Watson Date: 11-5-19 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.

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 20 of Harborcrest Subdivision, in
Mooresville, Iredell County, North Carolina.**

Contents: **Page**

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

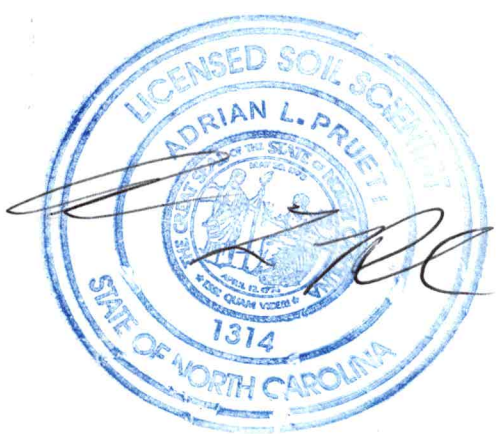
Design Information
Design Specifications---------- 2
Layout Specifications---------- 3

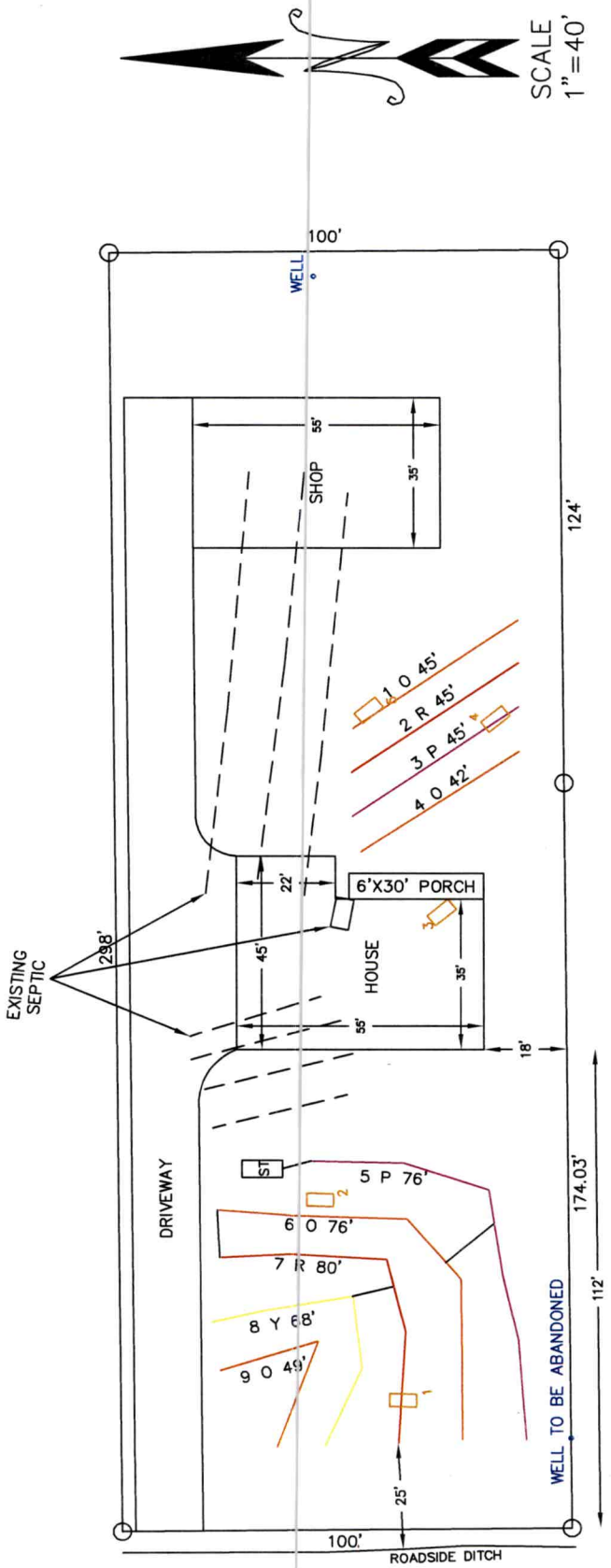
Site Plan/System Plan---------- 4

Dosing Calculations---------- 5

Soil Profile Descriptions---------- 6

September 4, 2019
Job Number: 19165
Design By: Ben Aldridge, REHS





HARBORCREST

APPROVED SEP 27 2019
KW

OWNER INFORMATION

Owner: Jamie and Alice Light
Address: 112 Harborcrest Lane
Mooresville, NC 28117
Buyer: Darren Shaw
Phone: 704-202-9396
County: Iredell
Location: HARBORCREST LOT 20

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: 24-36 in.
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: 45 in.
Repair Trench Width: 24 in.

Septic Tank Size: 1000 gal.

Estimated Supply Line Length: 7
Supply Line Diameter: 3 in. SCH 40 PVC
Supply Line Volume: 2.52
Dosing Volume: NA
Supply Manifold: SERIAL DISTRIBUTION

Additional Comments: Soil suitability was performed by Ben Aldridge, REHS

APPROVED SEP 27 2019
KW

HARBORCREST LOT 20
FIELD LAYOUT SPECIFICATIONS

LAYOUT FOR 3 BEDROOM RESIDENCE — September 4, 2019

LINE #	FLAG COLOR	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM			NA		
HOUSE CRN		NA	NA		
P. TANK		NA	NA		
1	ORANGE	NA	NA	45	45
2	RED	NA	NA	45	45
3	PINK	NA	NA	45	45
4	ORANGE	NA	NA	42	42
5	***PINK***	***NA***	***NA***	***100***	***76***
6	***ORANGE***	***NA***	***NA***	***98***	***76***
7	***RED***	***NA***	***NA***	***80***	***80***
8	***YELLOW***	***NA***	***NA***	***68***	***68***
9	ORANGE	NA	NA	49	49
			Total	**572**	**526**

	LINE LENGTH	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH SYSTEM	DISTRIBUTION
System	***300***	***ACCEPT.***	***0.300***	***25% RED.***	***GRAVITY***
Repair	226	*MOD.*	0.300	PPBPS	LOW PRESSURE

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

Comments: **Stay 25' from storm drainage along front property line.**
Pump, crush and fill/remove old tank.
10" ~~12"~~ **of fill and compaction to be removed from around pits 4 and 5.**
Repair trench bottom of 45" before 12" of fill/compaction has been removed.
Iredell County has CS&SC's permission to change septic tank location and distribution type

APPROVED SEP 27 2019
KW

DOSING CALCULATIONS

Location HARBORCREST

Lot No: 20

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	7 ft.
Supply Line Volume	2.52 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 SEP 27 2019
KW

PROP. ID #: 4637711066
COUNTY: IREDELL

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

OWNER: JAMIE & ALICE LIGHT
ADDRESS: 112 HARBORCREST LN MOORESVILLE NC 28117
PROPOSED FACILITY: SFR PROPOSED DESIGN FLOW (.1949): 360 GPD
LOCATION OF SITE: 112 HARBORCREST LN MOORESVILLE NC

APPLICATION DATE:
DATE EVALUATED: 8/27/2019
PROPERTY SIZE: .68 AC
PROPERTY RECORDED: YES

WATER SUPPLY: 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/COLOR	.1943 SOIL DEPTH	.1956 SAPROLITE CLASS	.1944 RESTR HORIZON	
1	LS 2%	0-11	BR SCL WSBK	VFR SS SP SEXP	N/A	48"	N/A	N/A	0.3
		11-19	R/B C WSBK	FR SS SP SEXP					
		19-48	R C MABK	FI S SP SEXP					
2	LS 5%	0-8	BR C SABK	FI SS SP SEXP	N/A	53"	FEW TO COMMON 26-53"	N/A	0.3
		8-17	R/B C SABK	FI S SP SEXP					
		17-26	R C MABK	FI S SP SEXP					
		26-53	R C WSBK	FR SS SP SEXP					
3	LS 6%	0-21	FILL/COMPACTION		N/A	60"	FEW TO COMMON 34-60"	N/A	0.3
		18-34	R C SABK	FI S S SEXP					
		34-60	R C WSBK	FI S SP SEXP					
4	LS 5%	0-9	FILL	FI S SP SEXP	N/A	58"	COM TO MANY 37-58"	N/A	0.3
		9-37	R C SABK	FI S SP SEXP					
		37-58	Y/R C MABK	FI S SP SEXP					

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

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

SOIL SCIENTIST JORDAN L. PRUETT SEAL OF THE STATE OF NORTH CAROLINA 1314

APPROVED SEP 27 2019
KW

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

PROP. ID #: 4637711066

COUNTY: IREDELL

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	
5	0-12KW ← LS/5%	0-18	FILL/COMP		NA	63	COMMON MICA 25-63	NA	0.3
		18-25	RC,S,ABK	FI,S,SP,SEXP					
		25-33	RC,M,SBK	FI,S,SP,SEXP					
		33-63	RCL,W,SBK	FR,SS,SP,SEXP					

COMMENTS	

APPROVED SEP 27 2019
KW

PLEASE NOTIFY CS&SC BEFORE GOING TO SITE

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM $550 + $350 + $175 AP 300986 pd

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: Darren Shaw/CS&SC Address: PO BOX 1703 MOORESVILLE, NC Zip: 28115
Applicant Email: BALDRIDGECSSC@GMAIL.COM Phone: 704-798-0337 Alt. Phone: _____
Owner Name: Jamie Light Address: 112 Harborcrest Ln. Mooresville, NC Zip: 28117
Owner Email: _____ Phone: _____ Alt. Phone: _____

Property Information:

Street Address: 112 Harborcrest Ln. Mooresville, NC
Subdivision Name: Harborcrest Section/Phase: _____ Lot Number: 20
Driving Directions: Brawley School Rd., TR Oak Tree, TR Harborcrest, on right

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: 6
( ) 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: Adandoning the existing well
( ) 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: BALdig 9-16-19
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

DocuSign Envelope ID: DD52191E-7D7B-43E3-80A2-30733A85674F

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

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, Jaime Light Alice Light, am the legal owner(s) of the property located at 112 Harborcrest In, Mooresville NC 28117, identified as PIN (Parcel Identification Number) 4637-71-1066.000, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) CAROLINA SOIL & SEPTIC CONSULTING, 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.

DocuSigned by: 795286024A1442A... Signature of Owner(s) — DocuSigned by: D5E8408E33464F8... Date

DocuSigned by: Signature of Witness — DocuSigned by: EE6F58F5E03043E... 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

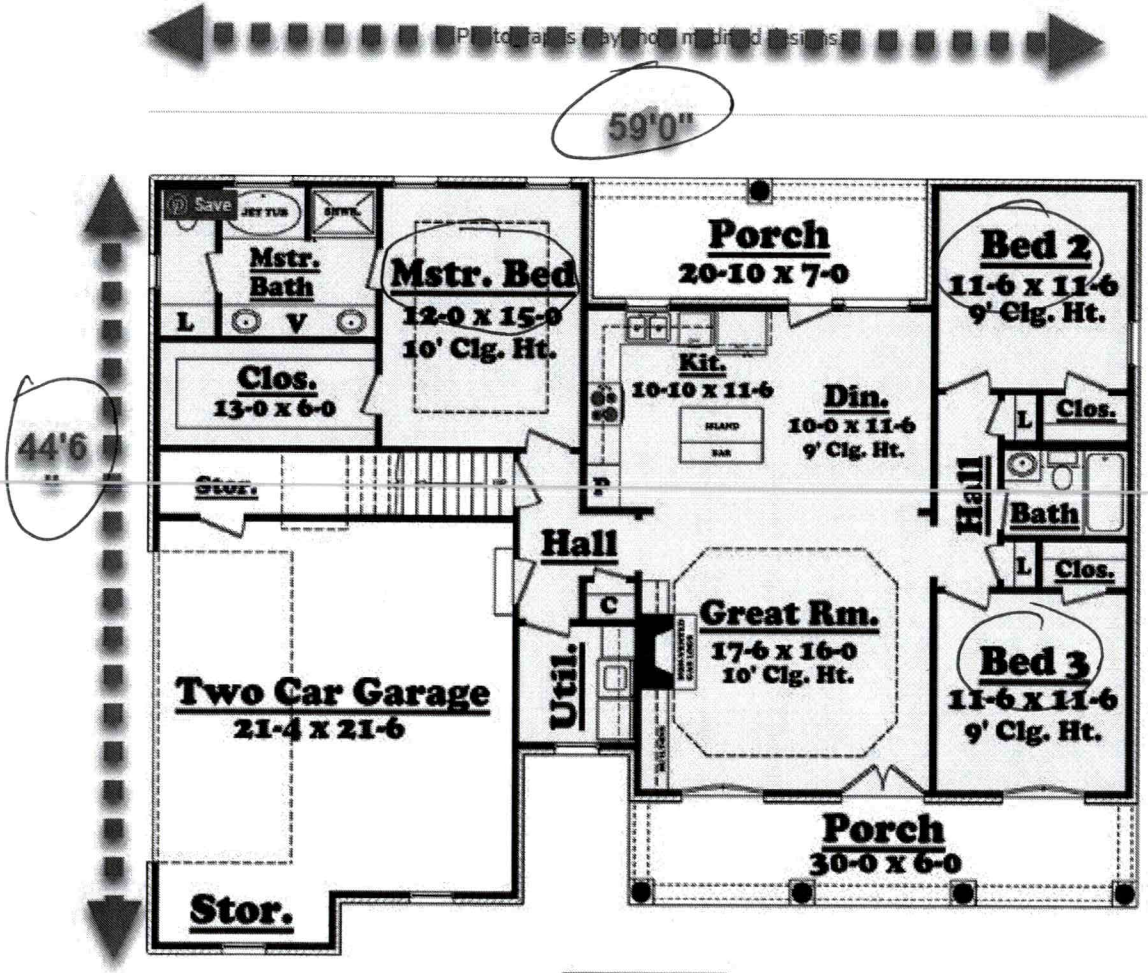
Statesville - Environmental Health
adrienne.shea@co.iredell.nc.us
Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677

TELL A FRIEND | ADD TO CART | CLOSE

REVERSE PLAN

Front Elevation

Photographs may show modified designs.



https://cdnimages.familyhomeplans.com/plans/56958/56958-1l.gif

Quick Specs

1500 Total Living Area
1500 Main Level

3 Bedrooms
2 Bathrooms
2 Car Garage
59'0" W x 44'6" D

Quick Pricing

5 Sets: $1,145.00
PDF File: $995.00
CAD File: $1,795.00

ADD TO CART

U.S. customers
1-800-482-0464

Canada customers
1-800-361-7526

- Plan Specifications +
- Plan Package Pricing +
- What's Included? +
- Modifications +
- Cost to Build +
- Previous Q & A +
- Ask a Question +

Acknowledgement of Plans Submittal ONLY!

Kayla Wilson Date 10-18-19

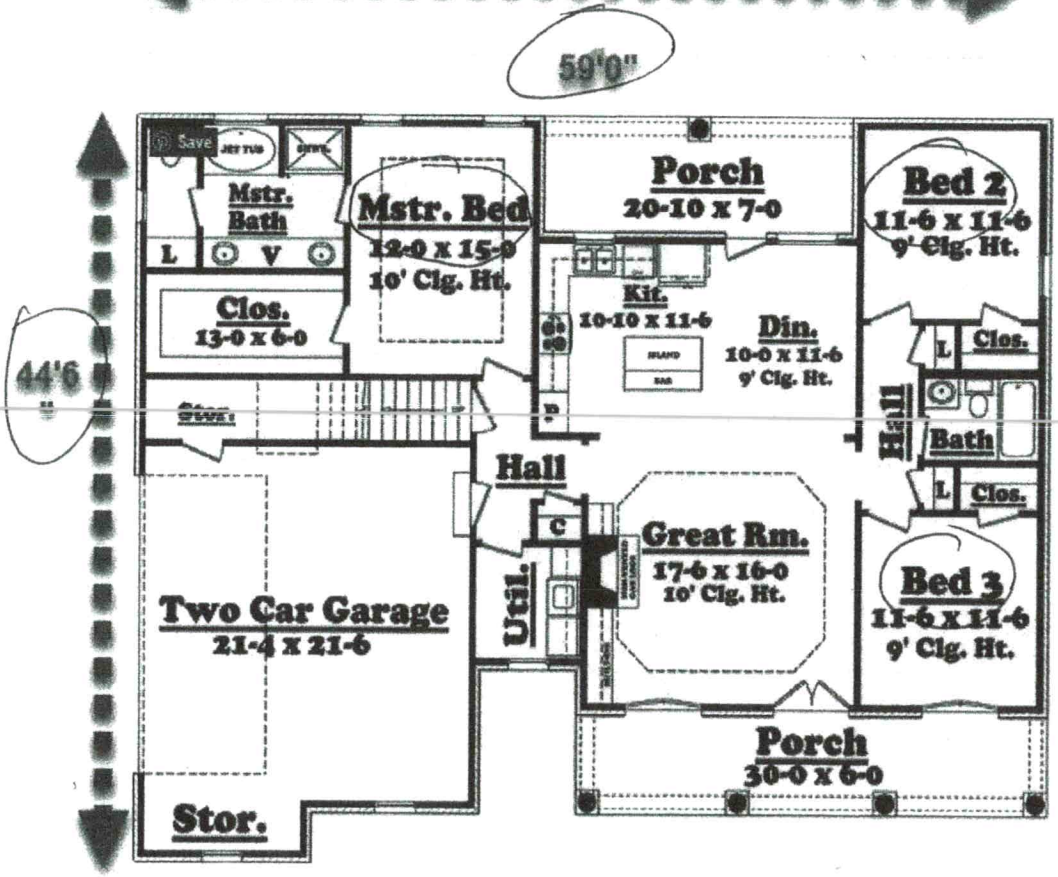
Date

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- Previous Q & A +
- Ask a Question +

Acknowledgement of Plans Submittal ONLY!

Kayla Fulton Date 10-18-19

Whonna Shaw Date 11/1/19

IREDELL COUNTY · NC

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

APPLICATION NUMBER
300986 Issue Date: 09/18/2019

Permit Type: ZONING RESIDENTIAL

Parcel Number	Street Address	Jurisdiction
4637711066.000	112 HARBORCREST LN	IREDELL COUNTY

Owner Information	Applicant Information
Name: LIGHT JAIME L+ALICE F	Name: CAROLINA SOIL SEPTIC CONSULTING, PLLC
Address:	Address: 162 WEST B ST KANNAPOLIS, NC 28081
Phone:	Phone: (704)202-5791

Use Requested	Zone Code
Single Family Dwelling	RA

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
0.68	35	35	15	15	WSIV-CA Catawba/Lake Norman	NO

Remarks
SFD

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.

Date: 09/18/2019

Signature of Owner/Contractor

Permit Number	000313	TOTAL FEES:	$77.25