ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # AP 322508

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

PIN # 4778 -- 78 -- 2734

APPLICANT/OWNER: WJH LLC APPLICANT ADDRESS: 9325 Center Lake Drive Ste 160 Charlotte NC 28216

SITE ADDRESS: 123 Zach Drive Harmony NC 28634 PHONE: 704-488-1100 ALT. PHONE –

SITE DIRECTIONS: Old Mocksville Rd ⓡ on Mt Bethel ⓛ into RockGate SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: RockGate Estates SECTION: 2 LOT # 12 LOT AREA: .658 Ac DESIGN FLOW: 360 L.T.A.R.: .30

Septic Tank	1000 (gal)	STB	160	Date	4-24-22	☒ New System ☐ Repair ☐ Expansion	System Type: I II ⓘ IV V VI	☒ Residence	No. Bedrooms 3
Pump Tank	(gal)	PT		Date		System Description:	Gravity 25% Reduction	☐ Business	No. Persons 6
Pump Make		Model		Serial #		Repair System Description:	Gravity 25% Reduction	☐ Other	No. Employees
# Nitrification Fields	1	# Lines	6	Linear Ft:	300	Maintenance Agreement Required:	☐ YES ☒ NO	☒ Slab	☐ Crawl Space
Trench Width	36	Trench Bottom Depth ~~(Low side)~~	24 high	Gravel Depth	–	☒ GRAVITY	☐ PRESSURE	☐ Basement w/plumbing	☐ Basement w/o plumbing

Water Supply: ☐ Private ☒ Public ☐ Community

Comments / Conditions:

INITIAL SITE SKETCH

This permit is issued pursuant to Section 11 . (C) of S.L. 2018-114 using the signed and sealed LSS Evaluation by:

Thompson Environmental Consulting Inc.

LSS # 1287 Dated Oct 19, 2021

AS BUILT SKETCH

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

Installed as drawn

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**

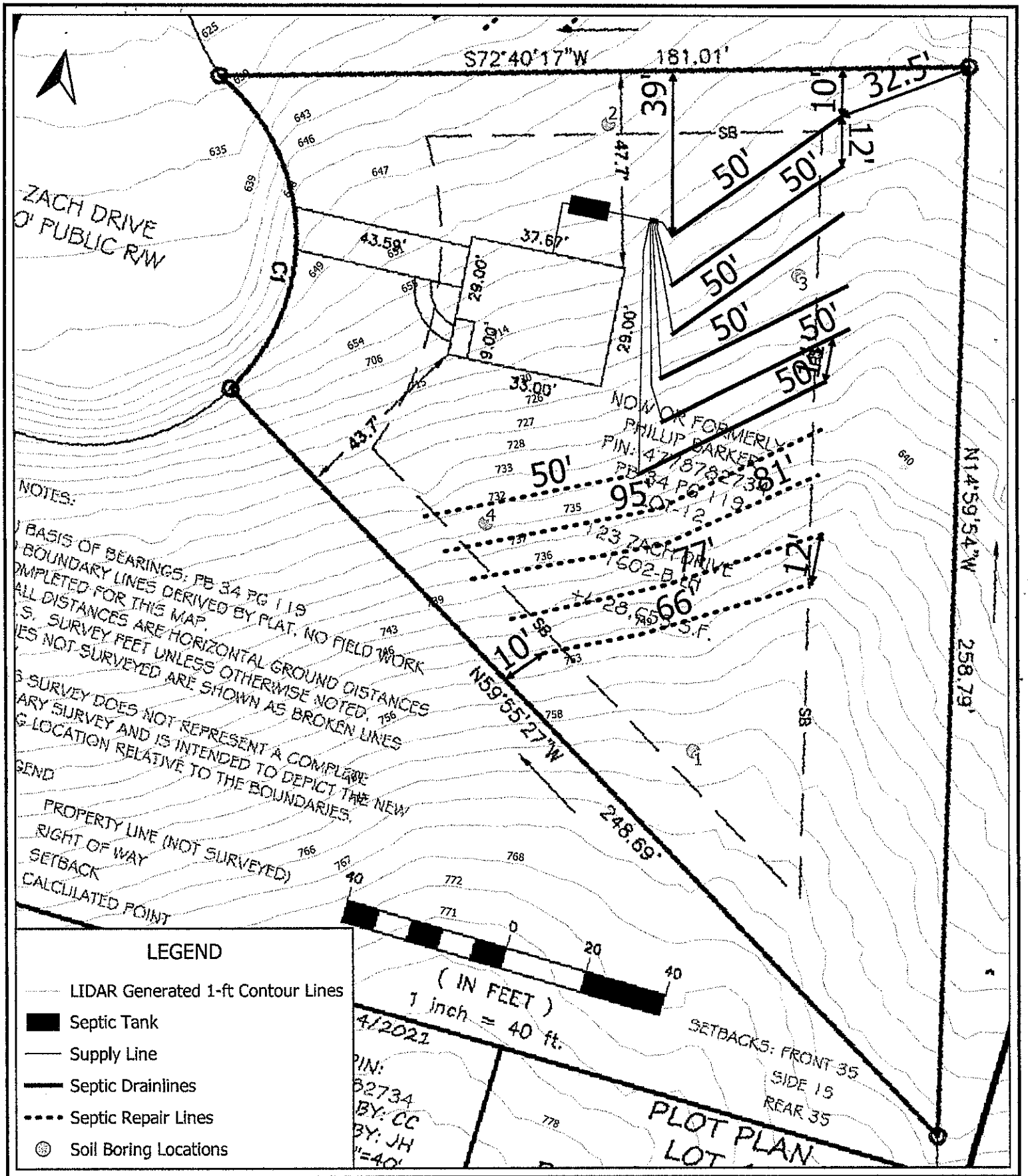
☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☒ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☒ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Date: 11.24.21 Installed by: Maiden Grading

IMPROVEMENT PERMIT by: Date: 10/25/2021 OPERATION PERMIT by: Date: 6/23/22

AUTHORIZATION TO CONSTRUCT by: Date: 11-1-2021 Existing System Inspected by: Date:

FOR SEPTIC FINAL INSPECTION: CALL 704-664-3703 between 8am-9am the day the inspection is needed.



Thompson Environmental Consulting	Prepared For: Century Complete	Proposed Septic Layout Lot 12 - Rock Gate Estates 123 Zach Drive Harmony, NC 28634 Iredell County	Date: October 2021 Scale: 0 15 30 ft TEC Job #: 21-261	Figure 1

Residential Subsurface Wastewater Treatment and Disposal System Proposal

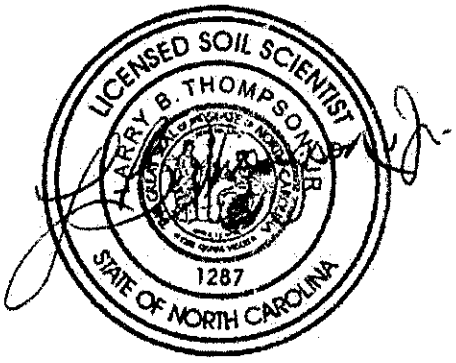
for

Lot 12 – Rock Gate Estates
123 Zach Drive
Harmony, NC 28634

Tax Parcel # 477882734.000
October 19, 2021

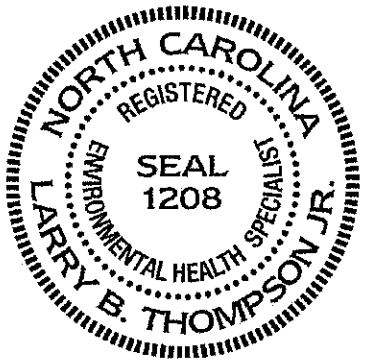
Prepared for:

Glenn Bird
Century Complete
9325 Center Lake Dr., Suite 160
Charlotte, NC 28216
1-833-791-0192



Prepared by:

Larry Thompson, REHS, LSS
Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107-0541
Phone: 704-301-4881
info@thompsonenv.com



Details

Century Complete has contracted with Thompson Environmental Consulting, Inc. (TEC) to prepare a septic proposal for a 3-bedroom single family residence to be located on Lot 12, Rock Gate Estates, Harmony, North Carolina.

Based upon an investigation performed by TEC, it was determined that a sufficient amount of "Suitable" Group IV soils are available for the installation of a **Gravity Flow Accepted System** for a 3-bedroom residence (the proposed repair system will be a Gravity Flow Accepted System as well). The property will be served by a municipal water supply.

Century Complete would like to request that Iredell County Environmental Health (ICEH) issue the appropriate permits for a subsurface wastewater treatment and disposal system based upon the following proposal and the enclosed Licensed Soil Scientist Evaluation, which is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11. (c).

Location

From Statesville, take I-40 to Old Mocksville Road. Turn left onto Old Mocksville Road, left onto Mt. Bethel Road, left onto 4 Andrews Drive, and left onto Zach Drive. Lot is on the left in the cul-de-sac.

References

Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A, Section .1900, Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, April 1, 2017.

Accepted Wastewater System No. AWWS-2005-02-R6; North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, August 21, 2015.

Primary Investigator's Credentials

NC Registered Sanitarian No. 1208
NC Licensed Soil Scientist No. 1287
SC Certified Professional Soil Classifier No. 111
NC Subsurface Septic System Operator No. 22199
NC Grade IV Wastewater System Installer No. 1762
NC Certified Wastewater System Inspector No. 17621

Plans and Specifications

A. Septic Tank

1. The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and 1,000 gallons in capacity.
2. The septic tank shall be fitted with an approved effluent filter.
3. It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tanks have had time to properly cure and are free of cracks or other structural deficiencies.

B. Pipes and Fittings

1. All discharge piping, connectors and supply lines should be made of SCH 40 PVC.
2. All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
3. The supply line will be approximately 10 feet long from the second septic tank to the distribution box.

C. Distribution Method

1. The drainlines will be fed a distribution box.
2. Distribution box shall be water tested at the time of the final inspection.

D. Drainfield Installation

1. The drainfield has been previously laid out on-site utilizing metal stemmed flags. The property owner/builder should mark this area and isolate it as much as possible from construction traffic.
2. Under no circumstances shall any construction take place within the drainfield area while the soil is in a wet condition.
3. The specified system is an accepted wastewater system, specifically the Infiltrator Quick 4 chamber system or any other system with a state-approved 25% reduction in required drainline length.
4. The drainfield consists of six (6) lateral trenches to be constructed 3-foot wide by 50 feet long. Total drainline length is 300 feet.
5. The maximum trench depth for this system shall be **24 inches (high side).**
6. The laterals are to be installed on contour with the land, keeping the individual trench bottoms level from beginning to end.
7. The trenches should be left open for the final inspection by the ICEH.

E. Final Landscaping

1. Final cover over the drainfield shall be at least 6 inches deep. Additional soil cover may be required to achieve the 6 inch requirement.
2. The drainfield shall be shaped to shed rainwater and be free from low spots.

3. The drainfield area should be planted with grass as soon as possible to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

F. Utility Conflicts

1. The builder and property owner must take special care in planning for water, power, gas, telephone, and cable lines. These utilities shall be kept clear of all parts of the septic system and its proposed repair area. Improper planning for underground utilities can negatively impact the installation and, in some cases, cause irreparable damage and permit revocation. If there are any questions regarding preferred routes, contact the ICEH as soon as possible.
2. Lawn irrigation should not be placed over the drainfield area.

Maintenance

G. In General

1. The homeowner must maintain the drainfield area through periodic mowing. The drainfield must not be allowed to become overgrown.
2. The septic tank should be pumped every 4 years or when the solids within the septic tank reach an elevation that is equivalent to 25 percent of the volume of the tank. In some situations, the tanks may need to be pumped more frequently. If using a garbage disposal, it is recommended that the homeowner has the septic and pump tanks cleaned out annually.
3. When it becomes necessary to clean the effluent filter, the filter should be removed, and the accumulated debris washed back into the septic tank – not onto the lawn.
4. Any damp areas, leakages, or malfunctions in the drainfield area should be addressed immediately.
5. Divert gutter downspouts and surface water runoff away from the septic and pump tanks.

Design Specifics

Daily Design Flow:	360 GPD – 3 bedroom house
Septic Tank Size:	1,000 Gallons (minimum)
Effluent Loading Rate:	0.3 GPD per sq. ft.
Drainfield Type:	Accepted 25% Reduction
Distribution Method:	Distribution Box

Number of Drainlines:	(6) 3' Wide x 50' Long
Total Trench Length:	300 Linear Feet
Maximum Trench Depth:	24 Inches (high side)
Final Cover Requirement:	6 Inches

Repair Option

Effluent Loading Rate:	0.3 GPD per sq. ft.
Drainfield Type:	Accepted
Required Linear Footage:	300 Linear Feet
Available Linear Footage:	369 Linear Feet
Maximum Trench Depth:	24 Inches (high side)
Installation Depth:	6 Inches

To: Iredell County Environmental Health

From: WJH LLC

Regarding: Lot 12 – Rock Gate Estates (Session Law 2018-114 Permit Package)

The NC LSS evaluation attached to these applications is to be used to produce a design and construction features for permitting in accordance with Session Law 2018-114 Section 11. (c).

Project Manager

10.20.21

Date

Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107

Sheet 1 of 1
PROPERTY ID #: 4778782734.000
COUNTY: Iredell

SOIL/SITE EVALUATION
***for* ON-SITE WASTEWATER SYSTEM**

OWNER: WJH LLC
ADDRESS: 3091 Governors Lake Dr, Ste 300 Peachtree City, GA
PROPOSED FACILITY: Lot PROPOSED DESIGN FLOW (.1949): 360 gpd
LOCATION OF SITE: 123 Zach Drive, Harmony, NC 28634
DATE EVALUATED: 3-21-21
PROPERTY SIZE:
PROPERTY RECORDED:

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

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	LS 4%	0-14 14-40+	SBK/sc SBK/c	FR/ss/sp/sd FI/sl/sp/sd	—	40+	—	—	PS 0.3
2	LS 11%	0-40	SBK/c	FR/s/p/sd	—	40+	—	—	PS 0.3
3	LS 19%	0-12 12-40+	SBK/sc SBK/c	FR/ss/sp/sd FI/s/p/sd	—	40+	—	—	PS 0.3
4	LS 7%	0-12 12-40+	SBK/sc SBK/c	FR/ss/sp/sd FI/ss/sp/sd	—	40+	—	—	PS 0.3

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	Yes	Yes
System Type(s)	Accepted	Accepted
Site LTAR	0.3	0.3

OTHER FACTORS (.1946): None observed
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Michael Wood
OTHER(S) PRESENT: L. Thompson

LICENSED SOIL SCIENTIST — LARRY R. THOMPSON, JR. — 1287 — STATE OF NORTH CAROLINA

COMMENTS:

Updated February 2014

The LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c).

RECEIVED OCT 2 1 2021

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

AP- 322508

Iredell County Health Department – Environmental Health Division

PAGE 1: *APPLICATION FORM* SessionLaw Paid $500.00

Application For:
( ) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
( ) Septic Improvement Permit (X) 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: WJH LLC **Address:** 9325 Center Lake Drive Ste 160 Charlotte NC 28216 **Zip:** _____
Applicant Email: katie.dyess@centurycommunities.com **Phone:** 704-488-1100 **Alt. Phone:** _____
Owner Name: Phillip P Barker (WJH LLC is under contract to purchase this lot) **Address:** 2904 Harmony Hwy- Harmony NC 28634 **Zip:** _____
Owner Email: _____ **Phone:** _____ **Alt. Phone:** _____

Property Information:

Street Address: 123 Zach Dr
Rock Gate
Subdivision Name: _____ **Section/Phase:** _____ **Lot Number:** 12
Driving Directions: Turn right onto Kelly St, Turn right onto Feimster St, Take I-40 E and Old Mocksville Rd to Mt Bethel Rd, Turn left onto N Center St, Turn right to merge onto I-40 E, Take exit 154 for Old Mocksville Rd, Turn left onto Old Mocksville Rd, Turn left onto Mt Bethel Rd. Drive and turn left into Rock Gate Development

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

CHECK FOUNDATION TYPE
( ) Crawl Space Foundation
(X) 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 (X) Conventional ( ) Innovative ( ) 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?
(X) 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: Katie Dyess for WJH LLC 10-20-21
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

(Check and sign only ONE of the options below)

☒ **1. * APPLICANT AND OWNER ARE THE SAME. *** (*Sign here*) WJH LLC

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.

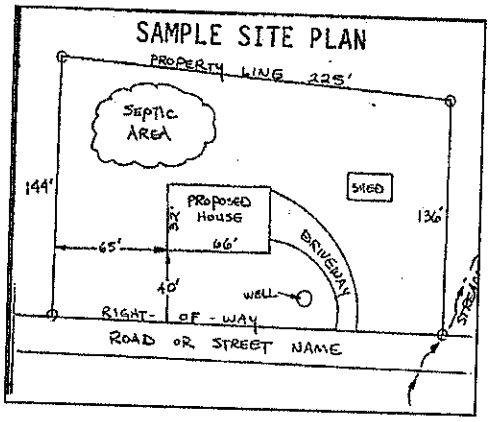
_____ 10-20-21
Signature of Owner(s) Date

Mooresville - Environmental Health
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

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

IREDELL COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
PAGE 2: ***SITE PLAN WORKSHEET***

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



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

- (X) Property Line measurements are clearly identified
- (X) All proposed structures are indicated
- (x) Front and side setbacks from property line
- (X) Preferred driveway location and well location
- (X) Area you prefer your septic system to be placed
- (x) North arrow, or other sufficient indicator of direction

Circle N/A on the following if appropriate:

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

USE THIS SPACE TO DRAW YOUR SITE PLAN

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 session Permit paperwork

Signature: Katie Dyess for WJH LLC

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

6-18-21

DATE

Acknowledgement Of Plans Submittal ONLY!

Date 11-1-2021

Date 11-5-21

WALL LEGEND

FULL HEIGHT
2X4 WOOD STUD PARTITION

FULL HEIGHT
2X6 WOOD STUD PARTITION

STONE VENEER

DRYWALL OPENING WIDTH
AS NOTED ON PLAN, 8'-8" HDR HT.

BRICK VENEER

1 ROD & SHELF

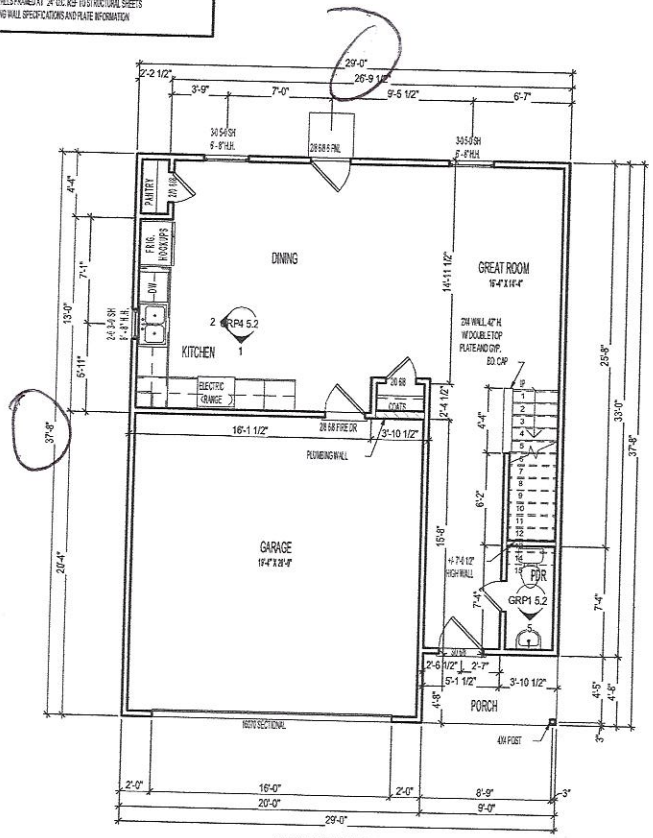
STUD WALL BELOW
HEIGHT AND STUD SIZE AS NOTED

NOTE: EXTERIOR WALLS FRAMED AT 16" O.C. INTERIOR NON-BEARING WALLS FRAMED AT 24" O.C. REF TO STRUCTURAL SHEETS FOR SHEARING WALL SPECIFICATIONS AND PLATE INFORMATION

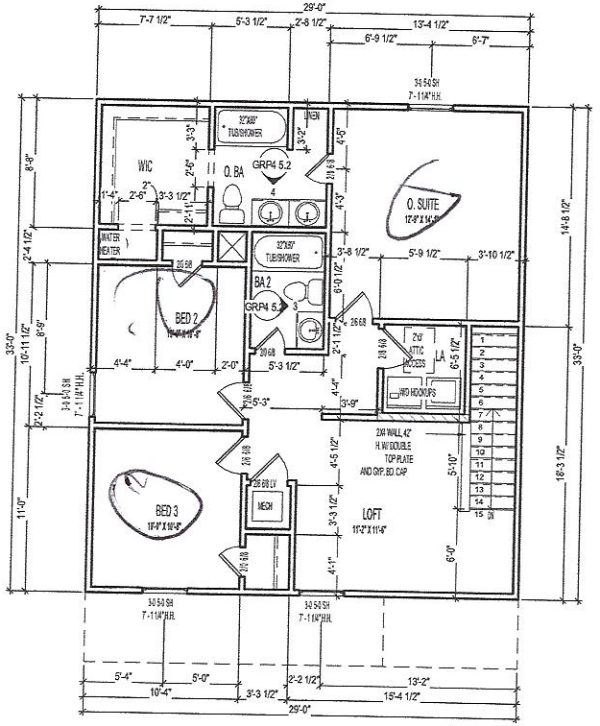
TABLE R302.6 Dwelling/Garage Separation

Separation	Material
From the residence and attics	Not less than 5/8-inch gypsum board or equivalent applied to the garage side
From all habitable rooms above the garage	Not less than 5/8-inch Type X gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than 5/8-inch gypsum board or equivalent

Lot 12 -123 Zach Dr 1602B LH



1 FIRST FLOOR PLAN ELEV 'B'
1/4" = 1'-0" AT 22" X 34" LAYOUT
1/8" = 1'-0" AT 11" X 17" LAYOUT



2 SECOND FLOOR PLAN ELEV 'B'
1/4" = 1'-0" AT 22" X 34" LAYOUT
1/8" = 1'-0" AT 11" X 17" LAYOUT

CENTURY Complete
MORE HOME • LESS MONEY
3091 GOVERNORS LAKE DR.
SUITE 300
NORCROSS, GA 30071
PHONE: 336-282-3606

WHI, LLC © 2020

GRP1 - 'B'

FLOOR PLANS

LOT #:

JOB #: COMMUNITY: ADDRESS:

PLAN # / ORIENTATION:
2921606 / LH

SERIES NAME:
DIAMOND

PLAN NAME:

LAST REVISION
2.02

SHEET #
GRP1 1.2

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

APPLICATION NUMBER
322508 Issue Date:

Permit Type: ZONING

Parcel Number	Street Address	Jurisdiction
4778782734.000	123 ZACH DR	Iredell County

Owner Information	Applicant Information
Name: WJH LLC	Name: WJH, LLC
Address:	Address: 9325 CENTER LAKE DR STE 160
	CHARLOTTE, NC 28216
Phone:	Phone: (704)488-1100

Use Requested	Zone Code
Single Family Dwelling	RA

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
0.658	35	35	15	15	N/A	NO

Remarks
sfd/need disclaimer

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.

Signature of Owner/Contractor

Date: 10/21/2021

Permit Number	322508	TOTAL FEES:	$77.25