IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 205843

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

PIN # 4615-89-7558.000

APPLICANT: Lake Luxury Homes APPLICANT ADDRESS:

SITE ADDRESS: 418 Barber Ln. Mooresville NC 28117 PHONE: 704-578-4951 ALT. PHONE:

SITE DIRECTIONS: I-77 to Chiverwood, L Barber Ln., Site on R

SUBDIVISION: Water Tree Landing SECTION: 3 LOT # 44 LOT AREA: .740 Acre DESIGN FLOW: 480 GPD. L.T.A.R.: .25

Septic Tank	1000 (gal)	STB	825	Date	5-4-16	☒ New System	☐ Repair	☐ Expansion	System Type: I II III IV V VI	☒ Residence	No. Bedrooms 4
Pump Tank	1000 (gal)	PT	302	Date	5-17-16	System Description: LP - PPDPS				☐ Business	No. Persons 8
Pump Make	Zoeller	Model	N163	Serial #		Repair System Description: Same				☐ Other	No. Employees
# Nitrification Fields	1	# Lines	4 @ 80'	Linear Ft:	320'	Maintenance Agreement Required:	☒ YES	☐ NO		☐ Slab	☒ Crawl Space
Trench Width	24"	Max. Trench Bottom Depth	36"	Gravel Depth	N/A		☐ GRAVITY	☒ PRESSURE		☐ Basement w/plumbing	☐ Basement w/o plumbing

Water Supply: ☒ Private ☐ Public ☐ Community

Comments / Conditions: Maintain 15' Seperation From Pool Area w/ Tanks And/or Drainfield.

If Repair is ever utilized install @ 48" Trench Bottom.

INITIAL SITE SKETCH

See Attached/Approved Design By The Oaks Group

Dated APPROVED AUG 31 2015

AS BUILT SKETCH

Checked Tanks, Lines, PM, Set 2' PH
Checked Elec. & Alarm 7-19-16
Main. Agreement 7-21-16

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**

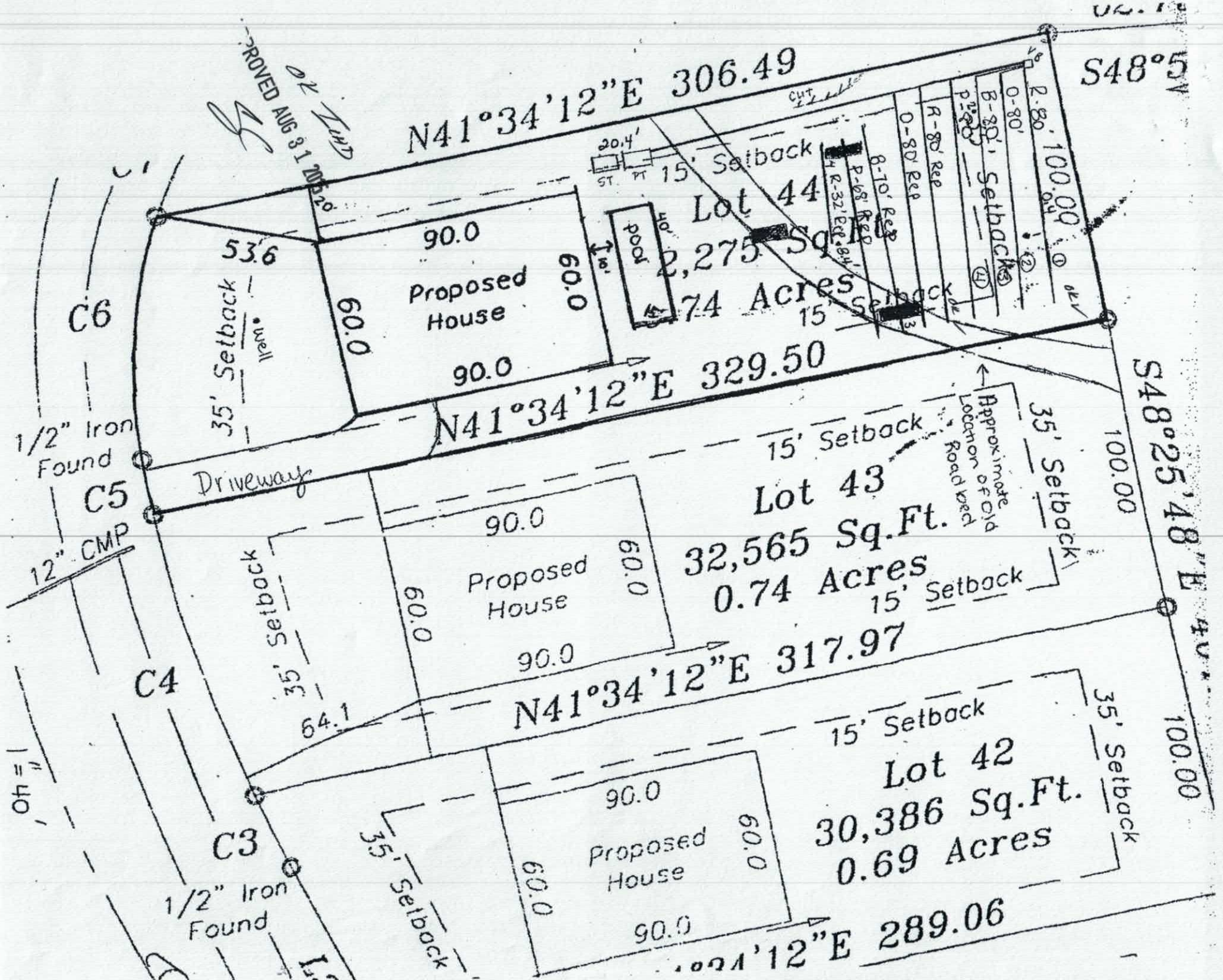
☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☒ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☒ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Date: 11/3/16 Installed by: Rowan Septic

IMPROVEMENT PERMIT by: Date: APPROVED AUG 31 2015 OPERATION PERMIT by: Date: 7-19-16

AUTHORIZATION TO CONSTRUCT by: Date: APPROVED NOV 02 2015 Existing System Inspected by: Date:

Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK


N41°34'12"E 306.49
S48°5
Lot 44
2,275 Sq.Ft.
.74 Acres
15' Setback
90.0
Proposed House
60.0
60.0
90.0
53.6
35' Setback
well
pool
40'
10'
20.4'
ST
PT
15' Setback
R-80' Rec
O-80' Rec
B-80' Setback
R-80' Rec
P-68' Rec
R-32' Rec
B-70' Rec
O-80'
R-80' Rec
100.00
C6
C5
C4
C3
1/2" Iron Found
12" CMP
Driveway
N41°34'12"E 329.50
Approximate Location of Old Road bed
Lot 43
32,565 Sq.Ft.
0.74 Acres
35' Setback
100.00
S48°25'48"E
N41°34'12"E 317.97
64.1
Lot 42
30,386 Sq.Ft.
0.69 Acres
N41°34'12"E 289.06
1" = 40'

Lot 44 Watertree Fast Track Septic System Information

Number of Bedrooms	4
Basement or Crawl	**Crawl Space**
Design Flow (gpd)	480
LTAR (gpd/ft2)	0.25
Primary System Type	**LP PPBPS**
No. Lines	4 (See Table)
Total Linear Feet	320
Trench Width	2'
Trench Spacing	8'
Trench Depth	36"
Pump Required	Yes
Distribution Device	Gate Valve Box w/ LPP Distribution
Maintenance Agreement Required	Yes
Length and Diameter of Supply Pipe	130' of 2" SCH 40 PVC
Size of laterals	1 1/4" SCH 40 PVC
Flow Rate through the system	36 gpm
Elevation head	Approx. 26'
Pressure head	3.0'
Friction head	3.1'
20% Contingency	6.4'
Total Head	38.5'
Pump Requirements	36 gpm @ 38.5' of head To be designed by installer.
Maximum Dosing Volume	259.2 gal -2.2 doses/day @ design flow*
Volume of water pumped per dose	Calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump Run per dose	approx. 7.2 min.
Check Valve	Yes
Siphon Break hole	No
Repair System	**LP PPBPS**
Total Linear Feet	330
Repair LTAR	0.25

OK T.CHD

APPROVED AUG 31 2015

***Before placement of cap block, one panel on each line near the center of the field should be observed filling to make certain that it does not overflow top chamber into air chambers of panel. If overflow occurs, reduce floats by 25 gallons and reset until no overflow is observed.**

Table 1: Summary of Primary and Repair Nitrification Line Specifications

Line No.	Use	Line Color	System Type	Line Length (Ft.)	Rod Reading Elev. (Ft.)	Panels	Holes	Hole Spacing	Hole Size (In.)
1	System	Red	LPPPBPS	80 endfed	0.4	18	18	1 per panel	5/32"
2	System	Orange	LPPPBPS	80 endfed		18	18	1 per panel	5/32"
3	System	Blue	LPPPBPS	80 endfed		18	18	1 per panel	5/32"
4	System	Pink	LPPPBPS	80 endfed		18	18	1 per panel	5/32"
5	Repair	Red	LPPPBPS	80					
6	Repair	Orange	LPPPBPS	80					
7	Repair	Blue	LPPPBPS	70					
8	Repair	Pink	LPPPBPS	68					
9	Repair	Red	LPPPBPS	32	8.4				
						Total: 72	Total: 72 (1 in each panel turned up)		

Total System:	320'
Total Repair:	330'

Tank	orange	1000 gal (2 compartment)	20.4
Pump Tank	orange	1000 gal.	
House	staked		

Note: **All Rod Readings should be verified by installer prior to installation of system**
Location of tanks and/or distribution devices can be moved at the ICHD's discretion
Install repair system with a 48" TB to stay below the fill material in the old roadbed

epartment of Environment, Health, and Natural Resources
ivision of Environmental Health
n-site Wastewater Section

Sheet: 1
Property ID:
Lot #: 44
File #:
AppID:

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

wner: Lake Luxury Homes
ddress: 418 Barber Loop
roposed Facility:
Design Flow (.1949)
ocation of Site: Lot 44

Applicant:
Date Evaluated: 8/13/15
Property Size: 0.74
Property Recorded:

Water Supply:	[X] Public	[X] Individual	[X] Well	[ ] Spring	[ ] Other
valuation Method:	[X] Auger Boring		[X] Pit	[ ] Cut	
ype of Wastewater:	[ ] Sewage		[ ] Industrial Process	[ ] Mixed	

	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	L	0-48	Mo SBK C	Fi S/P	DK R Some ABK ~10"-30"				0.25 ok IcHD SC
2	L	0-32	Mo SBK C	Fi S/P	DK R				0.25
		32-48	WK SBK C	Fi S/P	DK R				
3	L	0-22	Fill						0.25 48" TB ok IcHD SC
		22-46	Mo SBK C	Fi S/P	DK R				
		46-75	WK SBK C	Fi S/P	DK R				
4	L	0-31	Mo SBK C	Fi S/P	DK R				0.25 48" TB
		31-72	WK SBK C	FR SS/SP	DK R; C sap				

Description	Initial System	Repair System
vailable Space (.1945)		
ystem Type(s)	LP PPBPS	LP PPBPS
ite LTAR	0.25	0.25

Other Factors (.1946): Slope ~11%
Soil Evaluation By: KMS
Others Present: ELH
Site Classification (.1948):
Site Evaluation By: KMS
Others Present: ELH

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet ___ of ___
PROPERTY ID #: _____
COUNTY: _____

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: _____ APPLICATION DATE _____
ADDRESS: _____ DATE EVALUATED 5/22/08
PROPOSED FACILITY: _____ PROPOSED DESIGN FLOW (.1949): _____ PROPERTY SIZE: _____
LOCATION OF SITE: Watertree Landing Lot 44 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)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
E 1 (Repair)	6-7% L	0-48	MSbK DRRed C	FrSSSpSap	few firm peds				P5 .3
2									
3									
4									

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

OTHER FACTORS (.1946): Easements area for repair
SITE CLASSIFICATION (.1948): _____
EVALUATED BY: Anthony C. + Brady F. (Rollans LSS)
OTHER(S) PRESENT: _____

SOIL/SITE EVALUATION

(Continuation Sheet)

Sheet ___ of ___

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

Watertree lot 44

PROPERTY ID #: _____
DATE OF EVALUATION: _____
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	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
A	LSS 5-10%	0-6	BSL cl	fri SSSP Smp	–	48"	–	–	.25
		6-24	BRC ABk	fi SP Smp					
		24-48	RBC MWSBk	fri SP Smp					
B	LSS 5-10%	0-4	BSL cl	fri SSSP Smp	–	48	–	–	.3
		4-28	RC SBk	fri SSSP Smp					
		28-48	RCL WSBk	fri SSSP Smp					
C	LSS 5-10%	0-6	BSL cl	fri SSSP Smp	–	48	–	–	.3
		6-26	RC SBk	fri SSSP Smp					
		26-48	RCL WSBk	fri SSSP Smp					
D	LSS 10-15%	0-8	BSL cl	fri SSSP Smp	–	48	–	–	.25
		8-48	RBC MABk	fi SP Smp					

COMMENTS: _____

RECEIVED NOV 2 2015

IREDELL COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

PAGE 1: *APPLICATION FORM*

#205843

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:

Place an (X) beside whichever is submitted if applicable

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

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

Applicant Information:

Applicant Name: Lake Luxury Homes **Address:** _____ **Phone:** _____

Owner Name: _____ **Address:** Contact Kathleen Saunders, LSS **Phone:** 704-578-495

Property Information:

Street Address: 418 Barber Loop Mooresville

Subdivision Name: Watertree Landing **Section/Phase:** 3 **Lot Number:** 44

Driving Directions: Brawley School Rd, R Chuckwood, L Barber Loop

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

(X) 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: _____

(X) 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:

(X) 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 (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: Kathleen Saunders
Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

11/2/15
DATE

Paid $475.00 11-3-15 RECEIVED AUG 2 4 2015
$25.00 11-3-15 Paid $350.00

IREDELL COUNTY HEALTH DEPARTMENT

County copy

ENVIRONMENTAL HEALTH DIVISION

PAGE 1: *APPLICATION FORM*

Comp. Relayout #205843

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

Place an (X) beside whichever is submitted if applicable

Applicant Information:

Applicant Name: Lake Luxury Homes Address: _____ Phone: _____

Owner Name: Same as applicant Address: Contact Kathleen Saunders Phone: (704)578-4951

Property Information:

Street Address: 418 Barber Loop Mooresville

Subdivision Name: Water Tree Landing Section/Phase: 3 Lot Number: 44

Driving Directions: Brawley School Rd, Right on Chuckwood, Left on Barber Loop.

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

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

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

(X) 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:

(X) 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 (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: Emma Holt
Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

08/14/15
DATE

AUTHORIZATION TO ACT AS AGENT FOR OWNER

Any application/document/permit requiring a signature must be signed by the property owner or their authorized agent. This form shall be provided by the owner to allow specified individuals to act as agents for the owner. This form allows the specified individuals to sign or receive any application/document/permit on behalf of the owner. This form allows the authorized agent to make decisions on behalf of the owner pertaining to modifications of permits in the field. It is the responsibility of the owner to assure that any/all permit conditions specified on permits issued by this Division are followed.

I, Ray Short, am the legal owner of the property located at 418 Barber Loop, identified as PIN(Parcel Identification Number) 4615897558.000, located in Iredell County, North Carolina.

I do hereby authorize (print authorized agent/company name) The Oaks Group, _____, _____, _____, _____, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

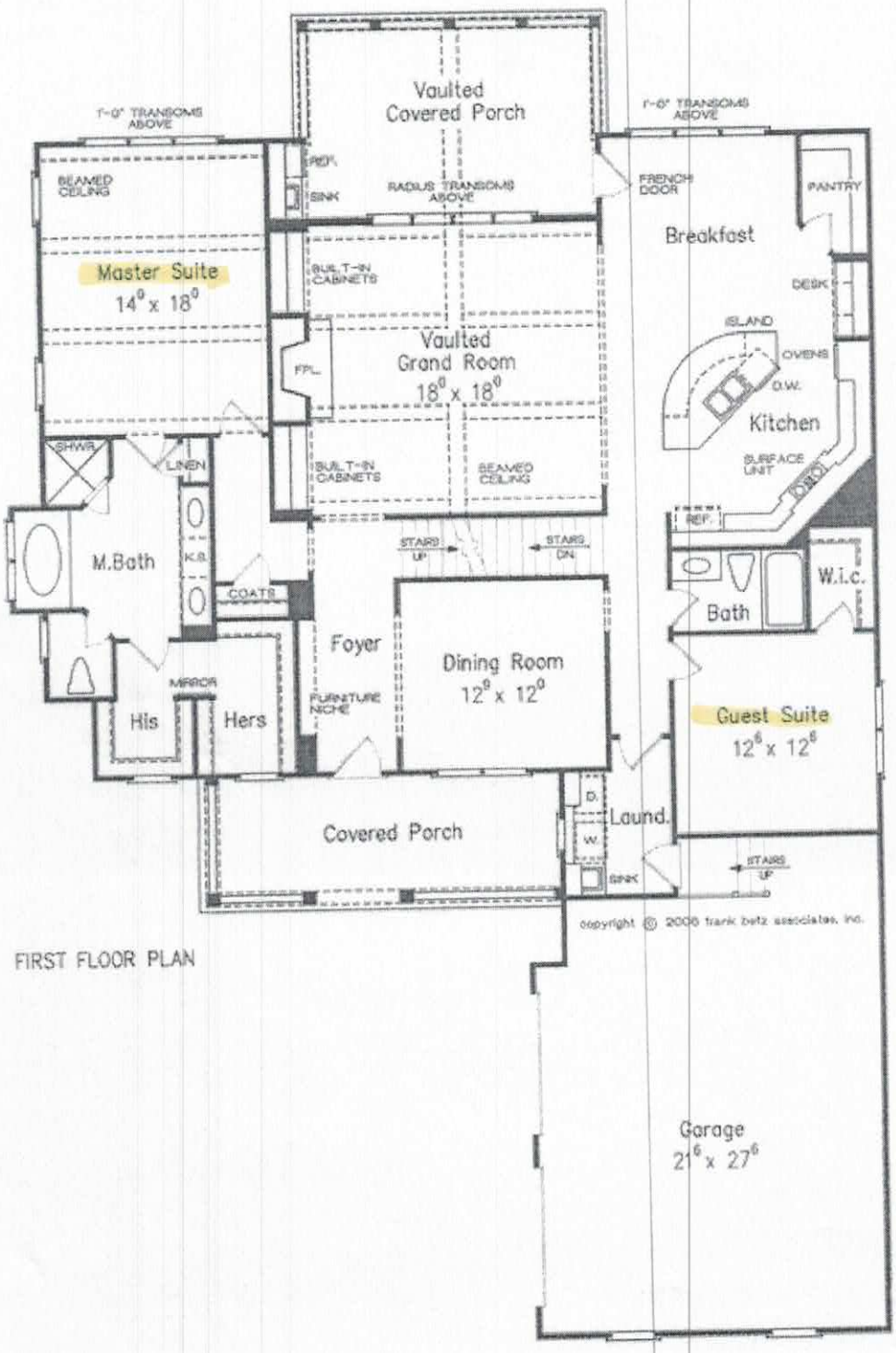
1. Improvement Permit (IP)/ Authorization to Construct (AC).
2. Application for soil-site evaluation (new/repair).
3. Application/permit for water well/well abandonment.
4. Application for existing system.
5. Application for Improvement Permit (IP)/ Authorization to Construct (AC).

I agree to abide by any and all decisions and/or conditions between the agent acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division. This form must be fully executed before the individual's specified above will be recognized as the authorized agent.

_____ 08/13/15
Signature of Owner Date

_____ _____
Signature of Witness Date

418 Barbera Ct
Lot 44 Watertree
First Floor Plan



FIRST FLOOR PLAN

87'

54'

Acknowledgement of Plans Submittal ONLY!
Kathleen Saunders Date 11/2/15
APPROVED NOV 0 2 2015

Kathleen Saunders - LSS
11/2/15

418 Barber Loop
Lot 44 Waterfree
2nd floor Plan



SECOND FLOOR PLAN

Acknowledgement of
Plans Submittal ONLY!

Kathleen Saunders Date 11/2/15

APPROVED NOV 0 2 20

IREDELL COUNTY

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

APPLICATION NUMBER
205843
Issue Date: 06/09/2015

ZONING PERMIT

Open Space

Parcel Number	Street Address	Jurisdiction
4615897558.000	418 BARBER LOOP, MOORESVILLE, NC	IREDELL COUNTY

Owner Information	Applicant Information
Owner: VANTAGE WEST LLC	Applicant: LAKE LUXURY HOMES LLC
Address: 114 MORLAKE DRIVE SUITE 102 MOORESVILLE, NC 28117	Address: PO BOX 3792 MOORESVILLE, NC 28117
Phone:	Phone: 828-478-2761

Use Requested	Zone Code
SFD REPLACING PERMIT 147080	RR

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
.740	35.00	35.00	15.00	15.00	CACL	X

Remarks:

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: _____

Permit Number	40523	TOTAL FEES:	$ 77.25