ICHD–ENVIRONMENTAL HEALTH DIVISION

PJB

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

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

PERMIT # AP-3030630

PIN # 4639321463

APPLICANT/OWNER: IQ Custom Construction

APPLICANT ADDRESS: 840 Edmiston Rd Mt Ulla, NC

SITE ADDRESS: 951 Fern Hill Rd. Mooresville NC

PHONE: 704-578-4951

ALT. PHONE: —

SITE DIRECTIONS: Perth Rd. → L on Fern Hill Rd → lot on L

SAP CONTROLLED: ☐ YES ☑ NO

SUBDIVISION: Woodleaf

SECTION: 2 LOT # 64 LOT AREA: 1.223ac

DESIGN FLOW: 480gpd L.T.A.R.: .25

Septic Tank	1000	(gal)	STB	825	Date	8-3-2020	☑ New System	☐ Repair	☐ Expansion	System Type: I II III (IV) V VI	
Pump Tank	1000	(gal)	PT	302	Date	9-5-2020	System Description:	LP PPBPS			
Pump Make	Cisco		Model	710	Serial #	-	Repair System Description:	LP PPBPS			
# Nitrification Fields	1		# Lines	4	Linear Ft	330'	Maintenance Agreement Required:	☑ YES	☐ NO		
Trench Width	36"		Trench Bottom Depth(Low side)	48"	Gravel Depth	—		☐ GRAVITY	☑ PRESSURE		

☑ Residence — No. Bedrooms: 4
☐ Business — No. Persons: 8
☐ Other — No. Employees:
☐ Slab ☐ Crawl Space
☑ Basement w/plumbing ☐ Basement w/o plumbing

Water Supply: ☑ Private ☐ Public ☐ Community

Comments / Conditions: Divert surface water runoff away from septic.
Air vents will be needed every 25' due to deep installation.

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:

The Oaks Group

LSS # 1313

AS BUILT SKETCH

*Installed as permitted.

	Date	Initials
Drain Lines Checked	10/7	BB
Tanks Checked	10/7	BB
Pressure Manifold or Valve Box Checked	10/7	BB
Pressure Head Set	10/7	BB
Electrical Checked		
Floats Set	10/7	BB
Alarm Checked	11-20-20	BB
Maintenance Contract (Y)N	11-23-20	BB
Comments:		

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: Kathleen Saunders Date: 12-30-19

IMPROVEMENT PERMIT by: Kayla Watson Date: 12-30-19

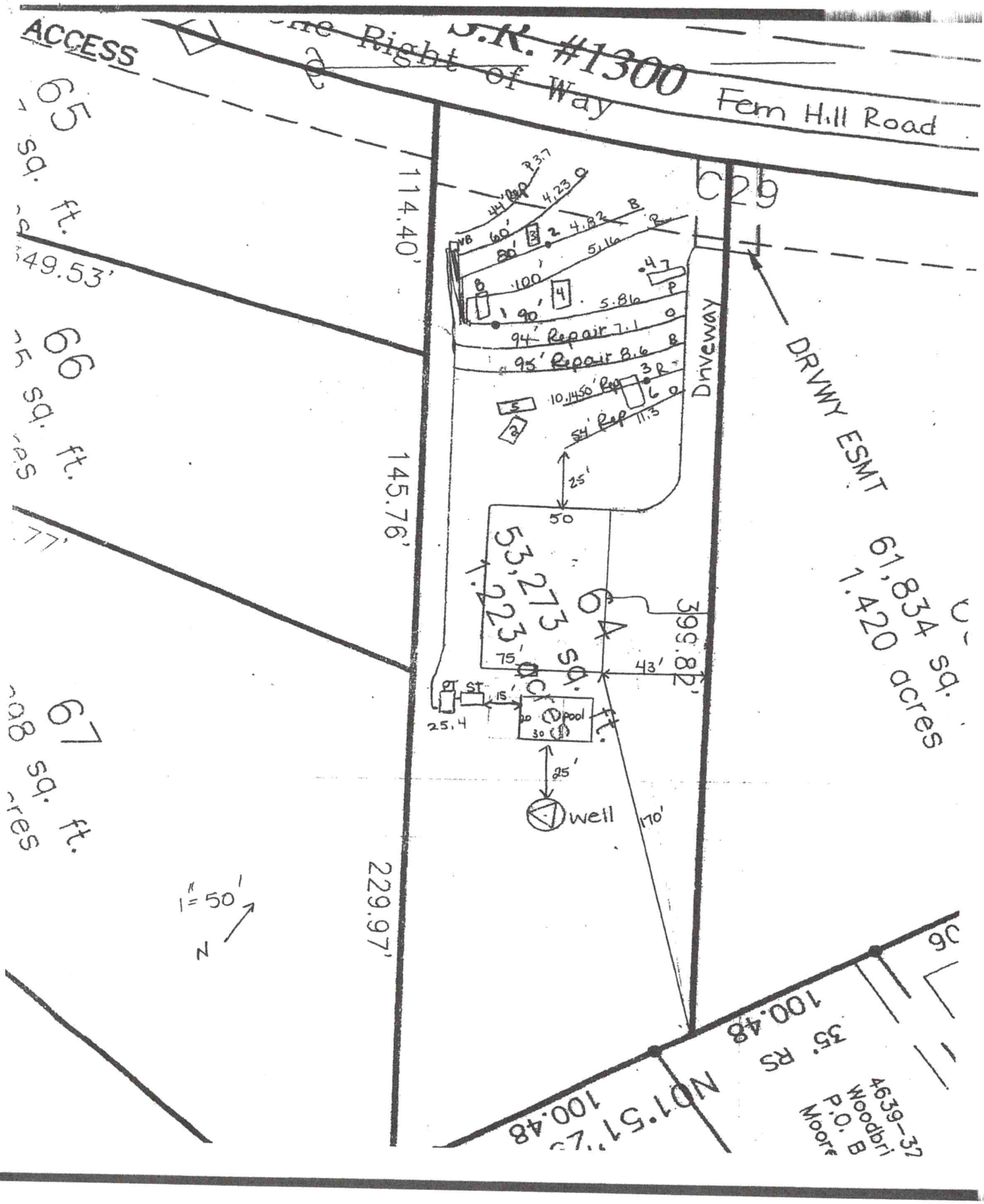
AUTHORIZATION TO CONSTRUCT by: Kayla Watson Date: 12-30-19

Installed by: Rowan Septic Tank

OPERATION PERMIT by: Date: 11-23-2020

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.


ACCESS
S.R. #1300
Fern Hill Road
Right of Way
65
sq. ft.
acres
49.53'
66
sq. ft.
acres
67
sq. ft.
acres
114.40'
145.76'
229.97'
C29
DRVWY ESMT
Driveway
61,834 sq.
1.420 acres
53,273
1.223
64
sq.
acres
399.82'
75'
43'
15'
25.4
Pool
30
25'
well
170'
1"=50'
N
N01°51'17"E
100.48
35' RS
100.48
4639-37
Woodbri
P.O. B
Moore

Lot 64 Woodleaf Phase 2 Fast Track Septic System Information

Number of Bedrooms	4
Basement or Crawl	**Basement with Plumbing**
Design Flow (gpd)	480
LTAR (gpd/ft2)	0.25
Primary System Type	**LP PPBPS**
No. Lines	4 (See Table)
Total Linear Feet	330
Trench Width	3'
Trench Spacing	9'
Max Trench Depth (Low Side)	48"
Pump Required	Yes
Distribution Device	Gate Valve Box w/ LPP Distribution
Maintenance Agreement Required	Yes
Length and Diameter of Supply Pipe	210' of 2" SCH 40 PVC
Size of laterals	1 1/4" SCH 40 PVC
Flow Rate through the system	37 gpm
Elevation head	Approx. 27.7'
Pressure head	3.0'
Friction head	6.4'
20% Contingency	7.4'
Total Head	44.5'
Pump Requirements	37 gpm @ 44.5' of head To be designed by installer.
Maximum Dosing Volume	266.4 gal -1.8 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	337
Repair LTAR	0.25
Repair Trench Depth	48"

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	Repair	Pink	LPPPBPS	44	3.7				
2	System	Orange	LPPPBPS	60 endfed	4.2	13	13	1 per panel	5/32"
3	System	Blue	LPPPBPS	80 endfed	4.8	18	18	1 per panel	5/32"
4	System	Red	LPPPBPS	100 endfed	5.2	23	23	1 per panel	5/32"
5	System	Pink	LPPPBPS	90 endfed	5.9	20	20	1 per panel	5/32"
6	Repair	Orange	LPPPBPS	94	7.1				
7	Repair	Blue	LPPPBPS	95	8.6				
8	Repair	White	LPPPBPS	50	10.1				
9	Repair	Orange	LPPPBPS	54	11.3				
						Total: 74	Total: 74 (1 in each panel turned up)		
				Total System: 330'					
				Total Repair: 337'					

Tank	Red	1000 gal (2 compartment)	25.4
Pump Tank	Red	1000 gal.	25.4
House	Blue	Right Front	14.0

Notes: Use 48" Trench Bottom Depth and divert surface flow away from drainfield
Panels will require vents every 25 ft due to deep installation

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

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

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

OWNER: IQ Custom Const
ADDRESS: 840 Edmiston Rd Mt Ulla
PROPOSED FACILITY: SFR
LOCATION OF SITE: Woodleaf 64
APPLICATION DATE ___
DATE EVALUATED: 12/2006 & 12/1c
PROPOSED DESIGN FLOW (.1949): 480
PROPERTY SIZE: 1.233 AC
PROPERTY RECORDED: yes

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	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
3	L 0-2% old pit	0-2	Mo GR SL	FR SS/SP	Br				0.3
		2-14	Mo SBK C	FR SS/SP	R				
		14-47	WK SBK CL	Fi/FR SS/SP	R; F sap				
			(Extended w/ auger to 60")			60+	N/A	N/A	
4	L 5% old pit	0-6	Mo GR SL	FR ns/np	Br				0.25 - 0.3
		6-33	Mo SBK C	FR SS/SP	R				
		33-51	Mo SBK C	FR SS/SP	R; F sap				
						51+	N/A	N/A	
			* H_2O seep @ 27"						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	IV	IV
Site LTAR	0.25	0.25

OTHER FACTORS (.1946): 48 [illegible]
SITE CLASSIFICATION (.1948): [illegible]
EVALUATED BY: KMS
OTHER(S) PRESENT: ___

COMMENTS: ___

Kathleen Saunders

LICENSED SOIL SCIENTIST
KATHLEEN M. SAUNDERS
THE GREAT SEAL OF THE STATE OF NORTH CAROLINA
1313
STATE OF NORTH CAROLINA

Updated February 2014

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

ON-SITE WATER PROTECTION BRANCH

Sheet ___ of ___
PERTY ID #: _____
COUNTY: Iredell

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

OWNER: IQ Custom Const. APPLICATION DATE _____
ADDRESS: 840 Edmiston Rd Mt Ulla DATE EVALUATED: 12/2006 4/24
PROPOSED FACILITY: SFR PROPOSED DESIGN FLOW (.1949): 480 PROPERTY SIZE: 1.233 Ac
LOCATION OF SITE: Woodleaf Lot 64 PROPERTY RECORDED: yes
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	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
5	L old pit	0-6	WK GR SL	FR SS/SP	Br R; C Br; R; F sap	F chr 3/4 50+	N/A	N/A	0.25 w/ 48" TB
		6-30	Mo ABK C	FR SS/SP					
		30-50	WK SBK CL	FR SS/SP					
6	L old pit	0-5	WK SBK SCL	FR SS/SP	Br R; F relic Mottles R; F Sap	60+	N/A	N/A	0.3
		5-25	W/Mo SBK C	FR SS/SP					
		25-50	WK SBK CL	FR SS/SP					
			(Extended by auger to 60")						
7	L old pit	0-28	Mo SBK C	FR SS/SP	R yel R; F sap	60+	N/A	N/A	0.3
		28-51	WK SBK CL	FR SS/SP					
			(Extended by auger to 60")						
8	L old pit	0-7	Mo GR SL	FR SS/SP	Br R; C Br, R; F sap	F chr 4 60+	N/A	N/A	0.25 w/ 45" TB
		7-32	Mo ABK C	FR SS/SP					
		32-57	WK SBK CL	FR SS/SP					
			(Extended by auger to 60")						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	IV	IV
Site LTAR	0.25	0.25

OTHER FACTORS (.1946): 48"+TB
SITE CLASSIFICATION (.1948): _____
EVALUATED BY: KMS in 2006
OTHER(S) PRESENT: _____

COMMENTS: _____

Kathleen Saunders

LICENSED SOIL SCIENTIST
KATHLEEN M. SAUNDERS
1313
STATE OF NORTH CAROLINA

Updated February 2014