SUPERVISOR/ADMINISTRATIVE PROFESSIONAL CHECKLIST

NEW SEPTIC ☒ NEW WELL ☐ USE EXISTING ☐ MODIFIED PLOT PLAN ☐

New Septic Fees Paid

IP ($250.00) 11/18/19 Initial/Date

CA ($200.00) AP 9.11.22 Initial/Date

OP ($200.00) AP 9.11.22 Initial/Date

(CA and OP fees need to be paid before a building permit can be issued)

New Well Fees Paid: $550.00 _____ Initial/Date

Use Existing Fees Paid: $100.00 _____ Initial/Date

Alteration Fees Paid: $300 Total $200 _____ Initial/Date (If use existing was part of payment)

Modified Plot Plan Fees Paid: $100.00 7/15/22 Initial/Date

Floor plans need to be submitted and reviewed before CA can be issued ☒ Review ☐

This site is served by septic and well. Verify each is complete before final hold is released ☐

Septic file complete ☒ AB 9-8-22

Well complete ☐ _____

Send New Permit for Signatures

Send permit for signature ☒ * Sent: 9.11.22 AP

Signature received ☐ _____

This septic system requires a certified operation contract before final hold is released ☐

Certified operator contract is on file ☐ _____

Groundwater & Wastewater Services: Septic Project File & D

GWS File #:	10487B
WASPS App #:	13285
Primary ES assigned to project:	Braedon Shelton
Secondary ES assigned to project:	
Project Type:	Modified Plot Plan
Site Evaluation Information: .1939(a)(1) - Topography and Landscape Position Recorded?	Yes
Site Evaluation Information: .1940(a-g) - Slope % Recorded?	Yes
Site Evaluation Information: .1939(a)(2) - Texture Class Recorded?	Yes
Site Evaluation Information: .1939(a)(2) - Structure Type Recorded?	Yes
Site Evaluation Information: .1939 (a)(2) - Consistence Recorded?	Yes
Site Evaluation Information: .1939(a)(2) - Mineralogy Recorded?	Yes
Site Evaluation Information: .1939(a)(3) - Soil Wetness Condition Recorded?	Yes
Site Evaluation Information: .1939(a)(4) - Soil Depth to Rock or Parent Material Recorded when Encountered?	Yes
Site Evaluation Information: .1939(a)(5) - Depth to Restrictive Horizons Recorded when Encountered?	Yes
Site Evaluation Information: .1939(a)(6) - Sufficient Available Space Recorded?	Yes
Site Evaluation Information: .1937(m) - Are the Profile Locations Shown?	Yes
Site Evaluation Information: .1939(a) - Are the S/PS Profiles in system & in repair area?	Yes
Site Evaluation Information: .1939(d), .1955, .1956, .1957 - LTAR	Yes
Improvement Permit/Construction Authorization: .1937(g), 130A-336(a) - Proposed System Type stated - Initial	Yes
Improvement Permit/Construction Authorization: .1945(b) - Proposed System Type stated - Repair	Yes
Improvement Permit/Construction Authorization: 130A-336(a)(3) - System location identifiable by setbacks - Initial	Yes
Improvement Permit/Construction Authorization: .1937(g), .1945(b) - System components shown - Initial	Yes
Information Permit/Construction Authorization: .1945(b) - Repair area shown	Yes
Improvement Permit/Construction Authorization: .1937(f)(g) - Does System design match facility, flow & WW characteristics?	Yes
Improvement Permit/Construction Authorization: .1937(f)(g) - Is System design consistent with soil/site conditions?	Yes
Improvement Permit/Construction Authorization: .1937(f)(g) - Is the System located in the approved area?	Yes
Improvement Permit/Construction Authorization: 130A-336(a) - Number of Bedrooms, employees, seats, etc. indicated?	Yes
Improvement Permit/Construction Authorization: .1937 (g) - Trench depth correct?	Yes
Improvement Permit/Construction Authorization: .1937(g) - Trench width correct?	Yes
Improvement Permit/Construction Authorization: .19379(g) - Trench length correct?	Yes

Improvement Permit/Construction Authorization: 130A-336(a)(1) - Proposed/existing well shown?	Yes
Improvement Permit/Construction Authorization: 130A-336(a)(1) - Property line lengths shown?	Yes
Improvement Permit/Construction Authorization: 130A-336(a) - Facility/appurtenance setbacks shown from fixed points?	Yes
Corrections/modifications needed?	No
Comments:	Session Law permit by Larry Thompson
IA issued date:	
OP Issued date:	
Review performed by:	Michelone
Date performed:	7/20/2022

Created at 7/20/2022 11:03 AM by Michelone, Jeremy
Last modified at 7/20/2022 11:03 AM by Michelone, Jeremy

Close

10487B

MECKLENBURG COUNTY
HEALTH DEPARTMENT #13285

APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL

1. **SEPTIC / TYPE APPLICATION:** ○ N/A ◉ ~~NEW SYSTEM~~ ○ ALTERATION ○ REPAIR ☒ MODIFIED PLOT PLAN

2. **WELL / TYPE APPLICATION:** ○ N/A ◉ NEW WELL ○ MAJOR REPAIR ○ ABANDONMENT

x Initial MJL
Date 8/11/22

3. **JOB LOCATION INFORMATION:**
TAX PARCEL NUMBER: 13709505
STREET ADDRESS: 6650 Lake Road
CITY: Charlotte
STATE: NC ZIP: 28227
SUBDIVISION NAME: Wilgrove Farms
LOT #: 46 and 47 LOT SIZE (acres): _____
TOWNSHIP:
○ MECKLENBURG ○ CORNELIUS ○ HUNTERSVILLE
○ DAVIDSON ◉ CHARLOTTE ○ PINEVILLE
○ MATTHEWS ○ MINT HILL

4. **BUILDING INFORMATION:**
BUILDING TYPE:
○ SINGLE MOBILE HOME ○ MODULAR HOME
○ DOUBLE WIDE ○ MULTIPLE FAMILY
◉ HOUSE ○ OTHER _____
HEATED SQUARE FOOTAGE: 3,111
NUMBER OF BEDROOMS: 4
NUMBER OF OCCUPANTS: 3
FOUNDATION TYPE:
◉ CONCRETE SLAB ○ BASEMENT WITH PLUMBING
○ CRAWL SPACE ○ BASEMENT WITH NO PLUMBING

5. **IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION:** ☑ N/A

NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. **WATER SUPPLY:** ○ MUNICIPAL ◉ PRIVATE WELL ○ PUBLIC WELL ○ SHARED WELL ○ OTHER _____

7. **PROPOSED USE OF WELL:** ○ N/A ○ IRRIGATION ◉ POTABLE (DRINKING WATER) ○ OTHER _____

8. **PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE** *(1-MOST DESIRED 5-LEAST DESIRED):*

☐ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☑ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____

8A. **RANK:** ____ ____ ____ ____ ____

9. **DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.**

BURIED CABLES, LANDFILLS, STUMPHOLES	○ YES ◉ NO	GRADING/SOIL REMOVAL PERFORMED	○ YES ◉ NO
EXISTING WASTEWATER (SEPTIC) SYSTEMS	○ YES ◉ NO	JURISDICTIONAL WETLANDS	○ YES ◉ NO
WELLS, SPRINGS, OR WATER LINES	○ YES ◉ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	○ YES ◉ NO
EASEMENTS OR RIGHT-OF-WAYS	○ YES ◉ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	○ YES ◉ NO
CHEMICAL/PETROLEUM STORAGE TANKS	○ YES ◉ NO	KNOWN UNDERGROUND CONTAMINATION	○ YES ○ NO
WASTE STORAGE	○ YES ◉ NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	○ YES ◉ NO

10. **WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?** 6/23/50 ☐ UNKNOWN

11. **WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?** _____ ☑ N/A

12. **PROPERTY OWNER:**
NAME: Benjamin Serrano Ramos
ADDRESS: 11702 Downy Birch Rd
CITY: Charlotte
STATE: NC ZIP: 28227
WORK PHONE: (704) 891-8208
MOBILE PHONE: (704) 891-8208
FAX: _____
E-MAIL: _____

13. **OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:**
NAME: Michael Llora
ADDRESS: 7118 Willow Bend Ln
CITY: Mint Hill
STATE: NC ZIP: 28227
WORK PHONE: _____
MOBILE PHONE: (704) 975-5318
FAX: _____
E-MAIL: mjlconstruction@gmail.com

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 980-314-1680, FAX: 704-336-6894
Email: Wellreg@MecklenburgCountyNC.gov

Revised on: 4/20/17

10487B

MECKLENBURG COUNTY
HEALTH DEPARTMENT

#13285

18 APR '22 PM 2:30

APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL

1. **SEPTIC / TYPE APPLICATION:** ○ N/A ◉ ~~NEW SYSTEM~~ ○ ALTERATION ○ REPAIR ⊗ MODIFIED PLOT PLAN

2. **WELL / TYPE APPLICATION:** ○ N/A ◉ NEW WELL ○ MAJOR REPAIR ○ ABANDONMENT

* Initial & Date _____

3. **JOB LOCATION INFORMATION:**

TAX PARCEL NUMBER: 13709505

STREET ADDRESS: 6650 Lake Road

CITY: Charlotte

STATE: NC **ZIP:** 28227

SUBDIVISION NAME: Wilgrove Farms

LOT #: 46 and 47 **LOT SIZE (acres):** _____

TOWNSHIP:

○ MECKLENBURG ○ CORNELIUS ○ HUNTERSVILLE
○ DAVIDSON ◉ CHARLOTTE ○ PINEVILLE
○ MATTHEWS ○ MINT HILL

4. **BUILDING INFORMATION:**

BUILDING TYPE:

○ SINGLE MOBILE HOME ○ MODULAR HOME
○ DOUBLE WIDE ○ MULTIPLE FAMILY
◉ HOUSE ○ OTHER _____

HEATED SQUARE FOOTAGE: 3,111

NUMBER OF BEDROOMS: 4

NUMBER OF OCCUPANTS: 3

FOUNDATION TYPE:

◉ CONCRETE SLAB ○ BASEMENT WITH PLUMBING
○ CRAWL SPACE ○ BASEMENT WITH NO PLUMBING

5. **IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION:** ☑ N/A

NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. **WATER SUPPLY:** ○ MUNICIPAL ◉ PRIVATE WELL ○ PUBLIC WELL ○ SHARED WELL ○ OTHER _____

7. **PROPOSED USE OF WELL:** ○ N/A ○ IRRIGATION ◉ POTABLE (DRINKING WATER) ○ OTHER _____

8. **PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE** *(1-MOST DESIRED 5-LEAST DESIRED):*

☐ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☑ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____

8A. **RANK:** ____ ____ ____ ____ ____

9. **DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.**

BURIED CABLES, LANDFILLS, STUMPHOLES	○ YES ◉ NO	GRADING/SOIL REMOVAL PERFORMED	○ YES ◉ NO
EXISTING WASTEWATER (SEPTIC) SYSTEMS	○ YES ◉ NO	JURISDICTIONAL WETLANDS	○ YES ◉ NO
WELLS, SPRINGS, OR WATER LINES	○ YES ◉ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	○ YES ◉ NO
EASEMENTS OR RIGHT-OF-WAYS	○ YES ◉ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	○ YES ◉ NO
CHEMICAL/PETROLEUM STORAGE TANKS	○ YES ◉ NO	KNOWN UNDERGROUND CONTAMINATION	○ YES ○ NO
WASTE STORAGE	○ YES ◉ NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	○ YES ◉ NO

10. **WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?** 6/23/50 ☐ UNKNOWN

11. **WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?** _____ ☑ N/A

12. **PROPERTY OWNER:**

NAME: Benjamin Serrano Ramos
ADDRESS: 11702 Downy Birch Rd
CITY: Charlotte
STATE: NC ZIP: 28227
WORK PHONE: (704) 891-8208
MOBILE PHONE: (704) 891-8208
FAX: _____
E-MAIL: _____

13. **OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:**

NAME: Michael Llora
ADDRESS: 7118 Willow Bend Ln
CITY: Mint Hill
STATE: NC ZIP: 28227
WORK PHONE: _____
MOBILE PHONE: (704) 975-5318
FAX: _____
E-MAIL: mjlconstruction@gmail.com

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 980-314-1680, FAX: 704-336-6894
Email: Wellreg@MecklenburgCountyNC.gov

Revised on: 4/20/17

14. SEPTIC SYSTEM PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. 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. The permit is valid for either sixty (60) months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

MJL (Initial here for septic system applications)

15. WELL PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Well Permit shall become invalid. 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. The permit is valid for a period of twelve (12) months from the date of issuance.

MJL (Initial here for well applications)

16. APPLICATION SIGNATURE SECTION:

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below. A PROPOSED PLOT PLAN is required to be submitted with each application.

Michael Llora
Property Owner's or Owner's Legal Representative Signature

4/7/22
Date

OFFICE USE ONLY

○ SURVEY PLAT TO SCALE SUBMITTED ○ SCALED SITE PLAN SUBMITTED ○ UN-SCALED SITE PLAN SUBMITTED

SEPTIC APPLICATION FEE RECEIVED: $ _____ DATE FEE RECEIVED: _____

WELL APPLICATION FEE RECEIVED: $ _____ DATE FEE RECEIVED: _____

APPLICATION PROCESSED BY: _____

GWS FILE NUMBER ASSIGNED: _____

APPLICATION ID NUMBER ASSIGNED: _____

COMMENTS:

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 980-314-1680, FAX: 704-336-6894
Email: Wellreg@MecklenburgCountyNC.gov

File #: _____

PROPOSED PLOT PLAN

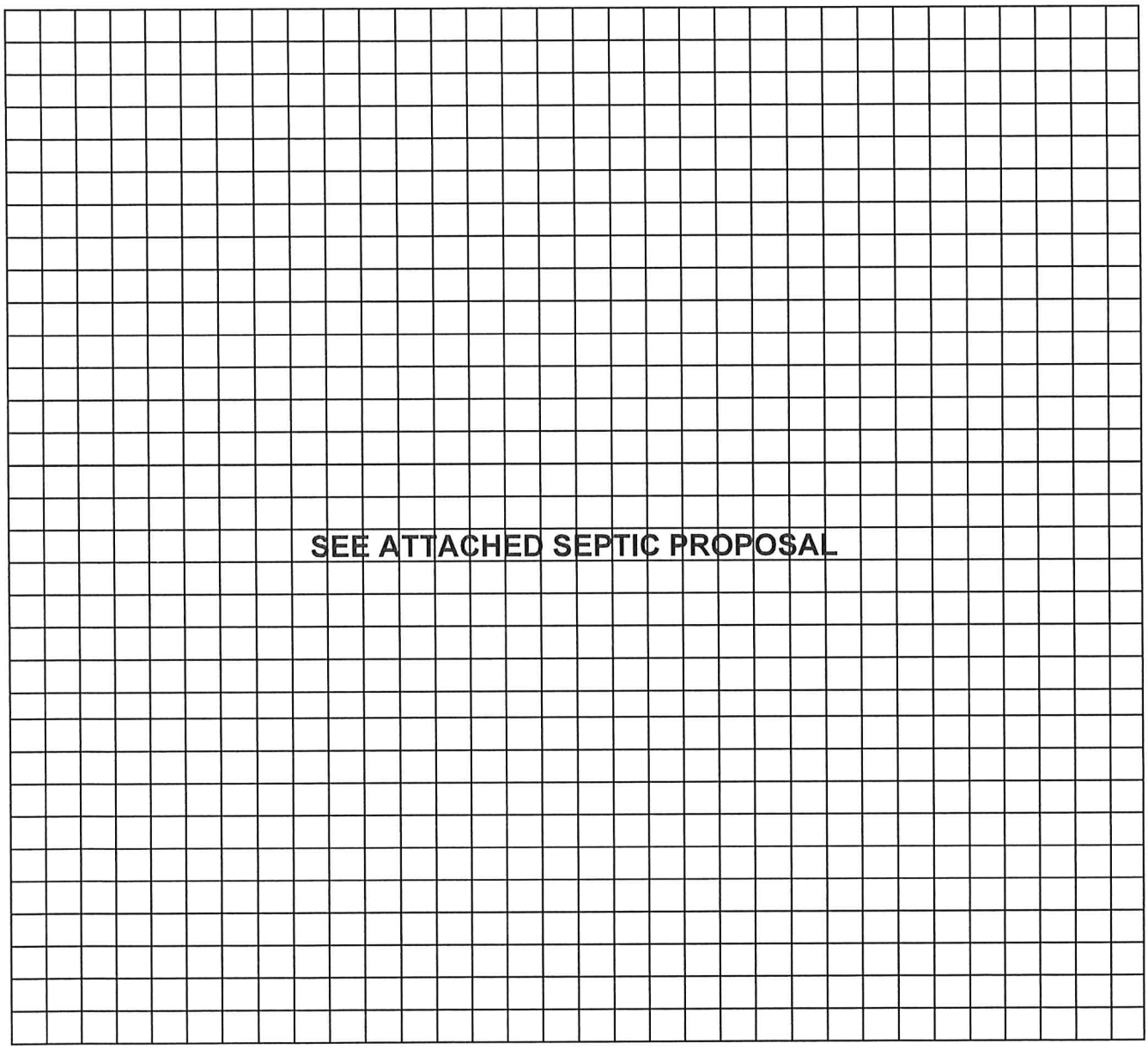
A drawing showing the locations of the following items is required: existing and proposed property lines with dimensions, easements or right-of-ways, proposed building pad(s) or existing building footprint(s), all appurtenances (garage, driveway, deck, pool, etc.), location of existing or proposed well(s), location of existing or proposed sewer lines and sewage disposal systems, surface water bodies, and any aboveground or underground storage tanks. Provide names for all roads that adjoin the property.

Street Address: 6650 Lake Road

Tax Parcel #: 13709505

Subdivision Name: Block D - Wilgrove Farms

Lot #: 46 and 47



Michael Llora

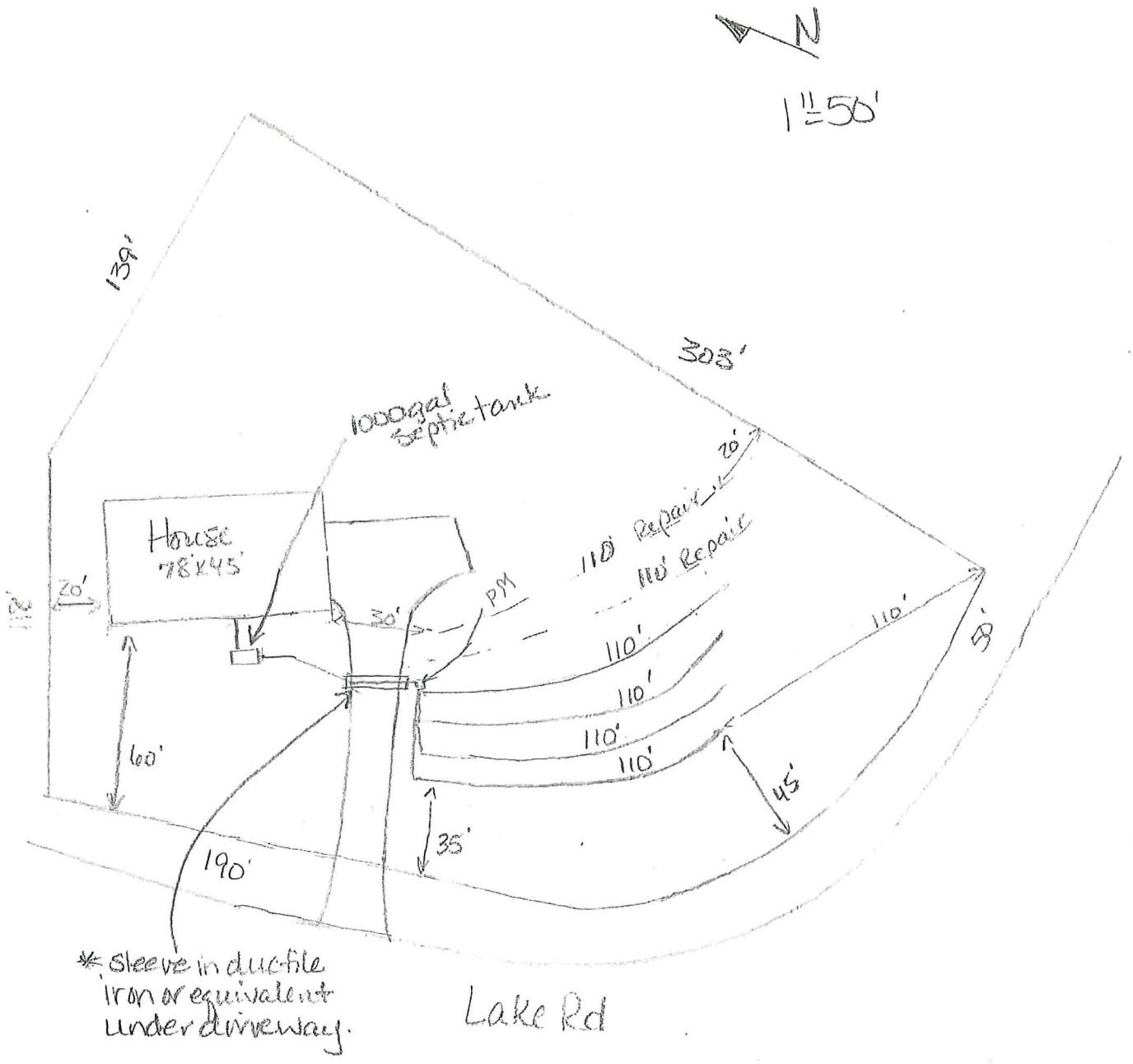
Property Owner's or Owner's Legal Representative Signature

4/7/22

Date

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 980-314-1680, FAX: 704-336-6894
Email: Wellreg@MecklenburgCountyNC.gov

Revised on: 4/20/17


N
1" = 50'
139'
303'
1000gal Septic tank
House 78'x45'
20'
30'
PM
110' Repair
110' Repair
110'
110'
110'
110'
110'
60'
35'
45'
190'
50'
* Sleeve in ductile iron or equivalent under driveway.
Lake Rd

Thompson Environmental Consulting, Inc.
P.O. Box 541
Midland, NC 28107

PROPERTY ID # 13709505
COUNTY Mecklenburg

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Ramos
ADDRESS:
PROPOSED FACILITY: Res. PROPOSED DESIGN FLOW (1949): 480
LOCATION OF SITE: 6655 Lake Dr
WATER SUPPLY: Private / Public Well Spring Other
EVALUATION METHOD: / Auger Boring Pit Cut TYPE OF WASTEWATER: / Sewage Industrial Process Mixed

DATE EVALUATED: 12/11/2021
PROPERTY SIZE: 1.29
PROPERTY RECORDED:

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	LS 3%	0-39	C sbk	vfr ss sp		43"			PS 0.3
		39-43	Cl sbk	fr ss p					
2	LS 3%	0-36	C msbk	vfr ss sp		56"			PS 0.3
		36-56	Cl sbk	fr ss p					
3	LS 5%	0-25	C msbk	vfr ss sp		50"			PS 0.3
		25-50	Cl sbk	fr ss p					
		50-53	stopped 50"						
4	LS 6%	0-24	C sbk	fr ss p		39"			PS 0.3
		24-39	Cl sbk	fr ss p					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	Exempt
System Type(s)	Accepted	
Site LTAR	0.275	

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): Provisionally Suitable
EVALUATED BY: L. Thompson, LSS
OTHER(S) PRESENT: G. Long, REHS

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

COMMENTS:

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

Updated February 2014

Sheet 2 of 2

SOIL/SITE EVALUATION

(Continuation Sheet Complete all fields as fully as possible)

PROPERTY ID # 1370505

DATE OF EVALUATION 12/14/2021

COUNTY Mecklenburg

PROFILE #	1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (1941) STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (1941) CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS 1942 SOIL WETNESS/ COLOR	1943 SOIL DEPTH	1956 SAPRO CLASS	1944 RESTR HORIZ	PROFILE CLASS & FLAW
5	LS 3%	0-24	C a-sbk	vfr/fissp		49"			PS 0.3
		24-49	cl sbk	fissp					
6	LS 4%	0-22	fill + buried Bt2 material	vfr/svp		37"			PS 0.275
		22-32	C wsbk	fissp					
		32-37	Cl wbk	fissp (BC)					
7	LS 1%	0-15	C mass	vfr/svp		37"			PS 0.275
		15-37	c sbk	fissp					
		37	Rock						

COMMENTS:

Updated February 2013

Ramos 6450 Lake Dr

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL 1955 LTAR*	LPP 1997 LTAR*	MINERALOGY CONSISTENCE	STRUCTURE
CC (Concave Slope)	I	S (Sand)	1.2 - 0.8	0.5 - 0.4	SEXP (Slightly Expansive)	GR (Single Grain)
CV (Convex Slope)		LS (Loamy Sand)			EXP (Expansive)	MAS (Massive)
D (Depressional Way)						CB (Cobbly)
DS (Drainage Slope)	II	SL (Sandy Loam)	0.8 - 0.6	0.4 - 0.3		GR (Granular)
FP (Flood Plain)		L (Loam)				SBK (Subangular Blocky)
FS (Foot Slope)						ABK (Angular Blocky)
H (Head Slope)	III	Si (Silt)	0.6 - 0.5	0.3 - 0.15		PL (Platy)
L (Linear Slope)		SiL (Silty Clay Loam)				PR (Prismatic)
N (None Shape)		CL (Clay Loam)				
R (Ridge)		SCL (Sandy Clay Loam)			MOIST	WET
S (Shoulder Slope)		SiCL (Silt Loam)				
T (Terrace)					VFR (Very Friable)	NS (Non-sticky)
	IV	SC (Sandy Clay)	0.4 - 0.1	0.2 - 0.05	FR (Friable)	SS (Slightly Sticky)
		SiC (Silty Clay)			FI (Firm)	ST (Sticky)
		C (Clay)			VFI (Very Firm - Very Sticky)	VS (Very Sticky)
		O (Organics)	None	None	EFI (Extremely Firm)	NP (Non-plastic)
						SP (Slightly Plastic)
						P (Plastic)
						VP (Very Plastic)

*Adjust LTAR for: 1) depth, consistence, structure, soil wetness, landscape position, wastewater flow and quality

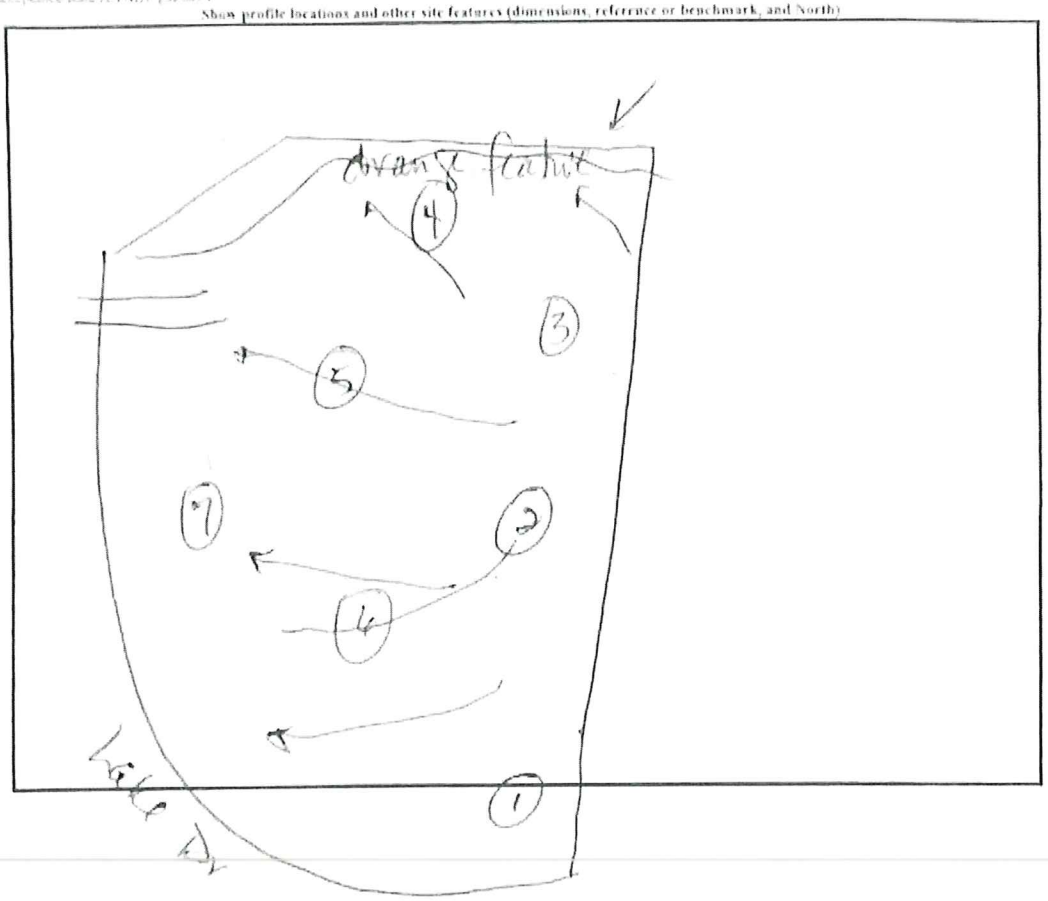
NOTES

HORIZON DEPTH	Inches below natural soil surface
DEPTH TO SHI	Inches from land surface
RESTRICTIVE HORIZON	Thickness and depth from land surface
SAPROLITE	S (suitable) or U (unsuitable)
SOIL WETNESS	Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less; record Munsell color chip designation
CLASSIFICATION	S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

Evaluation of saprolite shall be by pits

Long-term Acceptance Rate (LTAR): gal/day/ft²

Show profile locations and other site features (dimensions, reference or benchmark, and North)



Department of Environment, Health, and Natural Resources
Division of Environmental Health
On-site Wastewater Section

Sheet: 1 of 2
Property ID: 137-095-05
Lot #: NA
File #: 10487B
AppID: 10862

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Property Owner: Joaquin Lopez Lucero
Address: 322 Stilwell Oaks Circle, Charlotte, NC 28212
Proposed Facility: 4 Bedroom House
Design Flow (.1949): 480 GPD
Location of Site: 6650 Lake Rd, Mint Hill, NC 28227
Water Supply: [ ] Public [ ] Individual [ ] Well
Evaluation Method: [X] Auger Boring [ ] Pit
Type of Wastewater: [X] Sewage [ ] Industrial Process

Applicant: owner
Date Evaluated: 1/29/2020
Property Size: 1.15 ac
Property Recorded: August 1950
[ ] Spring [X] Municipal
[ ] Cut
[ ] Mixed

PROFILE #	.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	General Comments	Profile Class & LTAR	Maximum Trench Bottom Depth for 3' Wide Conventional Trench
Boring #1	LS 6%	0 - 5	sbk CL	SS SP FR SEXP	>50"	50	NA	NA		PS IV 0.275	36"
		5 - 41	sbk/abk C	S P FR SEXP							
		41 - 50	sbk CL	SS SP FR SEXP							
Boring #2	LS 6%	0 - 6	sbk CL	SS SP FR SEXP	>50"	50	NA	NA		PS IV 0.3	36"
		6 - 45	sbk/abk C	S P FR SEXP							
		45 - 50	sbk CL	SS SP FR SEXP							
Boring #3	LS 6%	0 - 5	sbk CL	SS SP FR SEXP	>50"	50	NA	NA		PS IV 0.3	36"
		5 - 50	sbk C	S P FR SEXP							
Boring #4	LS 6%	0 - 4	sbk CL	SS SP FR SEXP	>50"	50	NA	NA	weathered rock inclusions 28 - 40"	PS IV 0.275	26"
		4 - 34	sbk C	S P FR SEXP							
		34 - 40	sbk CL	SS SP FR SEXP							
		40	Rock	SS SP FR SEXP							
Boring #5	LS 6%	0 - 4	sbk CL	SS SP FR SEXP	>50"	50	NA	NA		PS IV 0.275	34"
		4 - 48	sbk/abk C	S P FR SEXP							

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)	Mgb	IVa
Site LTAR (gpd/sq ft)	0.275	0.275

Other Factors (.1946):
Soil Evaluation By: Jacob Presley, REHS, LSS
Others Present:
Site Classification (.1948): PS
Site Evaluation By: Heather Reay
Others Present: Matt Hall

COMMENTS: 100% repair not required.

Landscape Position
R-Ridge
SS-Shoulder Slope
LS-Linear Slope
FS-Foot Slope
NS-Nose Slope
HS-Head Slope
CC-Concave Slope
CV-Convex Slope
T-Terrace
FP-Flood Plain
D-Drainage Way

Group	Texture	.1955 LTAR
I	S-Sand LS-Loamy Sand	1.2 - 0.8
II	SL-Sandy Loam L-Loam	0.8 - 0.6
III	Si-Silt SiCL-Silty Clay Loam CL-Clay Loam SCL-Sandy Clay Loam SiL-Silt Loam	0.6 - 0.3
IV	SC-Sandy Clay SiC-Silty Clay C-Clay	0.4 - 0.1

Structure
sg-Single Grain
mass-Massive
cr-Crumb
gr-Granular
sbk-Subangular Blocky
abk-Angular Blocky
pl-Platy
pr-Prismatic
Sap-Saprolite

Structure Prefixes
w-weak
m-moderate
s-strong
f-fine
m-medium
c-coarse

Consistence
Moist
VFR-Very Friable
FR-Friable
FI-Firm
VFI-Very Firm
EFI-Extremely Firm

Consistence
Wet
SS-Slightly Sticky
S-Sticky
VS-Very Sticky
NP-Non-Plastic
SP-Slightly Plastic
P-Plastic
VP-Very Plastic

Mineralogy
SEXP-Slightly Expansive
EXP-Expansive

Classification
US-Unsuitable
PS-Provisionally Suitable
S-Suitable
NA-Not Applicable

Sketch of Soil Evaluation Locations



Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: 30013285 GWS File #: 10487B Tax Parcel #: 137-095-05

- This IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be NO grading, filling, or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

I. This Improvement Permit Shall: Expire in Five (5) Years **Expiration Date (If Applicable):** 7/19/2027

Type of Installation: Residential - Modified Plot Plan Lot Number: 0

Structure Type: HOUSE Size (ft^2): 3111 # Bedrooms: 4 Max. Occup.: 8

Building Foundation: Concrete Slab Water Supply: Private Well

II. Initial System Type: Pump to Accepted **System Classification:** IIIb

Initial System Specifications:

Design Flow (gpd):	480	LTAR (gpd/ft^2):	0.275	Septic Tank Size (gal):	1000	Pump Tank Size (gal):	1000
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1440	Total Trench Length (ft):	440
Maximum Trench Depth (in):	24	Depth of Media (in):	12	Distribution Device:	Pressure Manifold		

III. Repair System Type: PPBPS (pressurized) **System Classification:** IVa

Repair System Specifications:

Design Flow (gpd):	480	LTAR (gpd/ft^2):	.275	Septic Tank Size (gal):	1000	Pump Tank Size (gal):	1000
Trench Width (ft):	3	Trench Spacing (ft):	8	Absorption Area (ft^2):	873	Total Trench Length (ft):	291
Maximum Trench Depth (in):	24	Depth of Media (in):	N/A	Distribution Device:	Pressure Manifold		

IV. Permit Conditions/Comments:

(Please See the Following Page for Permit Conditions.)

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment, and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Braedon Shelton Owner/Legal Agent: Michael Llora
(Print Name)

Signature: Braedon Shelt Signature:

Date Issued: 7/19/2022

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30013285** GWS File #: **10487B**

IV. Permit Conditions/Comments:

- This type of septic system requires an inspection once every 5 years by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- Upon completion of the project the system designer shall provide Groundwater & Wastewater Services with a letter certifying that the system was installed in accordance with the approved design.
- The permitted system design requires a pressure manifold with varying tap diameters and/or pipe schedules. The contractor should review the specification detail provided by the system designer prior to bidding the project.
- This permit is issued pursuant to Section 11.(c) of SL 2018-114 using the signed and sealed LSS Evaluation attached here.

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Braedon Shelton

Signature: Braedon Shelton

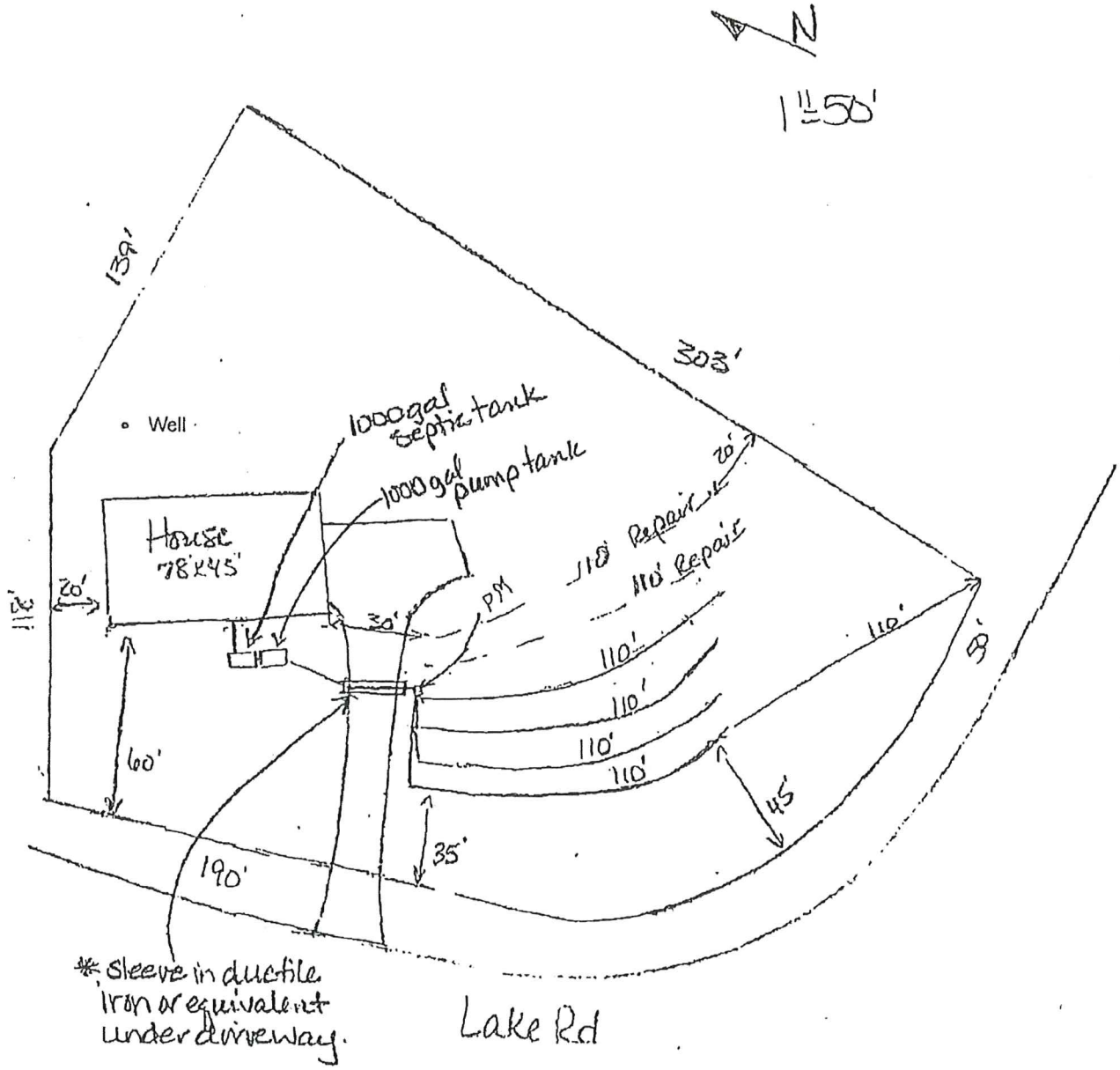
Date Issued: 7/19/2022

Owner/Legal Agent: Michael Llora
Print Name

Signature: Michael Llora

Signature: Michael Llora

Digitally signed by Michael Llora
Date: 2022.08.11 15:51:32 -04'00'



Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr. Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

Septic System Pre-Construction Meeting Checklist

File # 10487B App# 13285 Tax Parcel# 137-095-05

Property Owner: Benjamin Ramos

Job Location Address: 6650 LAKE Rd

City: Charlotte State: NC Zip Code: 28227

1. Does System design match facility, flow & wastewater characteristics?

   ☑ YES ☐ NO

   Comments: _____

2. Is there sufficient available space for the septic systems initial and repair areas?

   ☑ YES ☐ NO

   Comments: _____

3. Can the septic system be installed per the permit conditions and drawing on file?

   ☑ YES ☐ NO

   Comments: Session Law (Larry Thompson)

*If "NO" is checked for any of the above the existing permit may need to be revoked.

Permission is hereby given to ☐ install ☐ alter ☐ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge meeting all of the construction requirements of 15A NCAC 18A .1900 which are in effect on the date of granting this approval. **System shall not be installed while soils are in wet condition.**

Braedon Shelton — Authorized Agent

8/31/22 — Date

Carlos (Lago Vista) — Others Present

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 10487B Permit #: 13285 Tax Parcel #: 137-095-05

Property Owner: Ramos

Job Location Address: 6650 Lake Rd

City: Charlotte State: NC Zip Code: 28227

Operation Permit Issuance Date: 9/8/22 Contractor Name: Lago Vista

Permitted Design Flow: 480 GPD Liquid Capacity of Dosing Tank: NA gallons

Liquid Capacity of Septic Tank: 1000 gallons Tank Manufacture Shoaf Effluent Pump Model: NA STB-760

Drainfield Installation ☐ N/A

Trench Depth: 24 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 440 feet

# of Lines: 4 @ 110 feet

Depth of Media: 12 inches (Type) Chambers

Depth of Cover: 12 inches

Distribution Device: D-Box

Bed Installation *(For Repair Installations ONLY.)* ☑ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

Water Supply Source

☐ Municipal ☐ Private Well ☐ Community Well

☐ Other _____

System Installation Setbacks

Distance from Building Foundation: 5 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 10 feet

Inspection Dates

Tank(s) Inspected: 9/1/22

Excavation Inspected: 9/1/22

Pump & Controls Inspected: NA

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)

Installed according to consultant design.

Approved gravity system

The undersigned has inspected the Septic Tank System described above, and certifies it has been ☑ installed ☐ altered ☐ repaired ☐ as detailed in the plot above ☑ in accordance with the permit issued and meets the provisions of 15A NCAC 18A. 1900, "Laws and Rules for Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. The issuance of this Operation Permit does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 15A NCAC 18A. 1900 in addition to those listed below under "Comments." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the Suspension or Revocation of this permit.

Comments: System Classification & Type: III, / CHM 36 / Na / Nc

DENR Authorized Agent: Byron Dayvault Signature: Byron Dayvault

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 104873 Permit #: 13285 Tax Parcel #: 137-095-05

Property Owner: Ramos

Job Location Address: 6650 Lake Rd

City: Charlotte State: NC Zip Code: 28227

OPERATION PERMIT CONDITIONS:

I. Performance: System shall perform in accordance with 15A NCAC 18A .1961.

II. Monitoring: System shall be monitored as required by 15A NCAC 18A .1961.

III. Maintenance: Ground absorption sewage treatment and disposal systems shall be checked, and the contents of the septic tank removed, periodically from all compartments, to ensure proper operation of the system. The contents shall be pumped whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.

IV. Operation: System shall be operated in accordance with 15A NCAC 18A .1961.

System Classification: IIIg

*Operation Permits for Type V and VI systems expire five (5) years from the date of issuance (in accordance with Table V(a)). The system owner must contact GWS six (6) months prior to expiration for permit renewal.

Subsurface system operator required: Yes ☐ No ☑

☐ This type of system requires the system owner to maintain a contract with a certified operator to perform system inspection, maintenance, and reporting as required in 15A NCAC 18A .1961. and Table V(a). The system owner is responsible for all fees associated with these services.

☑ System does not require inspection by GWS on a routine frequency.

☐ System requires inspection by GWS once every five (5) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every three (3) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every twelve (12) months. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every six (6) months. The system owner is responsible for all fees associated with the inspection.

V. Other:

DENR Authorized Agent: Bryan Davenport Date: 5/8/22

Signature: Bryan Davenport

THOMPSON ENVIRONMENTAL CONSULTING, INC.
WATER ♦ WASTEWATER ♦ WETLANDS

September 5, 2022

Braedon Shelton, REHS
Valerie C. Woodard Center
3205 Freedom Drive, Suite 8000
Charlotte, NC 28208

Dear Mr. Shelton,

The purpose of this letter is to inform you that I have performed an inspection of the wastewater treatment and disposal system that has been installed for 6650 Lake Road, Charlotte, North Carolina, and I am satisfied with the final installation.

Prior to the installation, a preconstruction conference determined that this system could be installed without the need for a pump. The attached as-built plans show the general layout of the actual installation. Please feel free to call on me if you have any further questions or concerns regarding this project.

Sincerely,

Larry B. Thompson, Jr., NCEHS, LSS

PO BOX 541 • MIDLAND, NC • 28107-0541
PHONE: 704-301-4881 • FAX: 206-350-8895
E-MAIL: LARRY@THOMPSONENV.COM
WEB: WWW.THOMPSONENV.COM

Residential Subsurface Wastewater Treatment and Disposal System Proposal

for

Block D, lots 46 & 47 - Willgrove Farms
6650 Lake Road
Charlotte, NC 28227

Tax Parcel # 13709505
March 25, 2022

Prepared for:

Michael Llora
4614 Wilgrove-Mint Hill Road N.
Mint Hill, NC 28227
704-975-5318



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

Mr. Llora has contracted with Thompson Environmental Consulting, Inc. (TEC) to develop a proposal for an on-site wastewater treatment and disposal system that would allow for the construction of a 4-bedroom single family residence served by a private well to be located at 6650 Lake Road, Charlotte, North Carolina.

Based upon an investigation performed by TEC, it was determined that a sufficient amount of "Suitable" Group IV soil is available within the project study area for the installation, of a **Gravity-Flow Accepted System** for a 4-bedroom residence. The combined lots would be considered repair exempt, however, there is room for a partial repair (Prefabricated Permeable Block Panel System).

Mr. Llora would like to request that the Mecklenburg County Groundwater and Wastewater Services (MCGWS) issue an Improvement Permit and Construction Authorization for a 3-bedroom residence 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 Charlotte, take US-74 East, bear left onto NC-27 East, turn right onto right on Pine Grove Ave, and right on Lake Rd, lot is located on the left.

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 (minimum) in capacity.
2. The septic tank will 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 tank has had time to properly cure and is free of cracks or other structural deficiencies.

B. Pipe, Fittings and Supply Line

1. All discharge piping, connectors and supply lines should be made of SCH 40 PVC and fitted with pressure rated couplings.
2. All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
3. Supply line will be constructed of 2-inch SCH 40 PVC pipe with pressure fittings and sleeved underneath the driveway crossing.

C. Distribution Method

1. A distribution box will be used to distribute effluent to each of the drainlines.
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 four (4) lateral trenches 3-foot wide by 110-ft long. Total trench length is 440 feet.
5. The trench depth for this system shall be **24 inches**.
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 health department.

E. Final Landscaping

1. The final soil cover over the drainfield shall be a minimum of 6 inches deep.
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.
2. Lawn irrigation should not be placed over the drainfield area.
3. If there are any questions regarding preferred routes, contact the health department as soon as possible.

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:	480 GPD – 4 Bedroom Home
Septic Tank Requirements:	1,000 Gallon Septic Tanks
Effluent Loading Rate:	0.275 GPD per sq. ft.
Drainfield Type:	Infiltrator Quick4 Plus Standard (Saprolite System)
Distribution Method:	Distribution Box

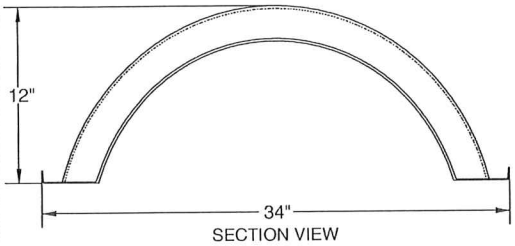
Number of Drainlines:	4
Drain Lines:	3-ft Wide x 110-ft Long
Total Trench Length:	440 Linear Feet
Trench Depth:	24 Inches
Final Cover Requirement:	6 Inches (minimum)

Repair Option

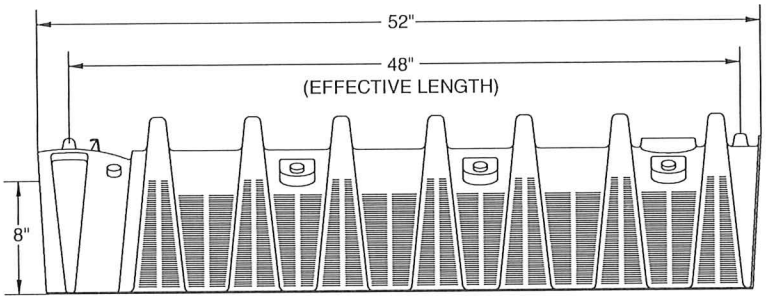
Effluent Loading Rate:	0.275 GPD per sq. ft.
Drainfield Type:	PPBPS
Available Linear Footage:	220 Feet
Trench Depth:	24 Inches

Quick4™
STANDARD CHAMBER

Quick4 Standard Chamber

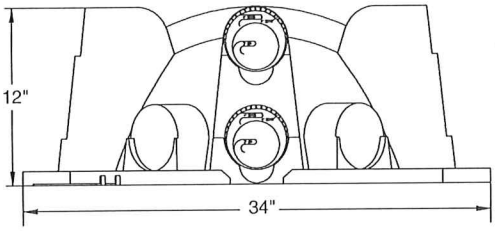


SECTION VIEW

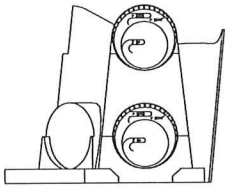


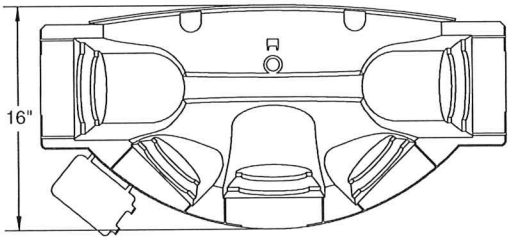
SIDE VIEW

MultiPort End Cap



FRONT VIEW


SIDE VIEW



TOP VIEW

Quick4 Standard Chamber Nominal Specifications

Size (W x L x H)	34" x 52" x 12"
Effective Length	48"
Invert Height	8"

MultiPort End Cap Nominal Specifications

Size (W x L x H)	34" x 16" x 12"
Invert Height	8" or 1.25"

INFILTRATOR SYSTEMS, INC. STANDARD LIMITED WARRANTY

(a) The structural integrity of each chamber, end plate, wedge and other accessory manufactured by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty.

Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

.....

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

INFILTRATOR® SYSTEMS INC

Environmental Onsite Wastewater Solutions℠

6 Business Park Road • P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • FAX 860-577-7001

800-221-4436

U.S. Patents: 4,759,661; 5,017,041; 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,716,163; 5,588,778; 5,839,844
Canadian Patents: 1,329,959; 2,004,564 Other patents pending.

Infiltrator, Equalizer and SideWinder are registered trademarks of Infiltrator Systems Inc. Infiltrator is a registered trademark in France. Infiltrator Systems Inc. is a registered trademark in Mexico. Contour, Contour Swivel Connection, MicroLeaching, PolyTuff, SnapLock, ChamberSpacer, PosiLock, QuickCut, QuickPlay and Quick4 are trademarks of Infiltrator Systems Inc. © 2003 Infiltrator Systems Inc. Printed in U.S.A.

RECYCLED PAPER

Q011203HP-0

AGENT AUTHORIZATION FORM

PROPERTY LEGAL DESCRIPTION:

LOT NO. 46 and 47 PHASE Block D PARCEL ID: 13709505

STREET ADDRESS: 6650 Lake Road (Willgrove Farms)
Charlotte, NC 28227

Please print:

Property Owner: Benjamin Serrano Ramos

Property Owner: _____

The undersigned, registered property owners of the above noted property, do hereby authorize

Larry Thompson, LSS (Contractor / Agent), of Thompson Environmental Consulting, Inc. (Name of consulting firm)

to act on my behalf and take all actions necessary for the processing, issuance and acceptance of this permit or certification and any and all standard and special conditions attached.

Property Owner's Address (if different than property above):
11702 Downy Birch Rd, Charlotte, NC 28227

Telephone: 704-975-5318

We hereby certify the above information submitted in this application is true and accurate to the best of our knowledge.

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

Owner Signature: Benjamin Serrano Ramos
Benjamin Serrano Ramos (Apr 7, 2022 13:03 EDT)

Date: Apr 7, 2022

Owner Signature: _____

Date: _____

Residential Subsurface Wastewater Treatment and Disposal System Proposal

for

Block D, lots 46 & 47 - Willgrove Farms
6650 Lake Road
Charlotte, NC 28227

Tax Parcel # 13709505
March 25, 2022

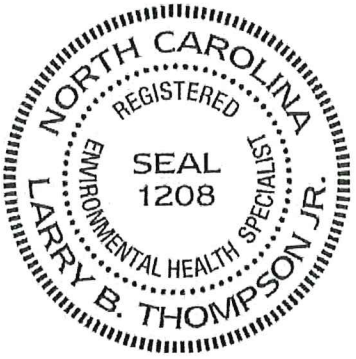
Prepared for:

Michael Llora
4614 Wilgrove-Mint Hill Road N.
Mint Hill, NC 28227
704-975-5318



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

Mr. Llora has contracted with Thompson Environmental Consulting, Inc. (TEC) to develop a proposal for an on-site wastewater treatment and disposal system that would allow for the construction of a 4-bedroom single family residence served by a private well to be located at 6650 Lake Road, Charlotte, North Carolina.

Based upon an investigation performed by TEC, it was determined that a sufficient amount of "Suitable" Group IV soil is available within the project study area for the installation, of a **Pump-To Accepted System** for a 4-bedroom residence. The combined lots would be considered repair exempt, however, there is room for a partial repair (Prefabricated Permeable Block Panel System).

Mr. Llora would like to request that the Mecklenburg County Groundwater and Wastewater Services (MCGWS) issue an Improvement Permit and Construction Authorization for a 4-bedroom residence 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 Charlotte, take US-74 East, bear left onto NC-27 East, turn right onto right on Pine Grove Ave, and right on Lake Rd, lot is located on the left.

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 (minimum) in capacity.
2. The septic tank will 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 tank has had time to properly cure and is free of cracks or other structural deficiencies.

B. Pump Tank

1. The pump tank shall be State approved, of one-piece construction, watertight, structurally sound and 1,000 gallons in capacity. Again, it is the responsibility of the septic tank contractor to thoroughly inspect each pump tank prior to accepting delivery.
2. All pipe penetrations into the tank shall be booted (i.e., C-293 boot with a stainless-steel strap).
3. The pump tank shall have access risers that extend, at a minimum, 6 inches above finished grade and must have less than 36 inches of fill over its top once finished grade has been established (a reinforced concrete tank will be required if finished soil cover is 36 inches or greater in depth).
4. The pump and alarm controls shall be provided with manual circuit disconnects within a watertight, corrosion resistant, Nema 4x rated control panel. Pump and float control wiring should be long enough to reach from the tank to the control panel without splicing, routed through wire conduit, and sealed at the openings within the pump tank as well as the control panel enclosure. It is paramount that the conduit is properly sealed to prevent the escape of flammable gases from the pump tank. Furthermore, there must be two electrical circuits for the pump tank controls: one for the pump and one for the alarm controls.
5. Panel and control equipment shall include lightning protection, be protected from unauthorized access, and always remain accessible to the system operator.
6. The pump removal system will be via a pump tether made of nylon rope or its equivalent. The tether material should be resistant to mildew and rot.

C. Pipe, Fittings and Supply Line

1. All discharge piping, connectors and supply lines should be made of SCH 40 PVC and fitted with pressure rated couplings.
2. All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
3. Supply line will be constructed of 2-inch SCH 40 PVC pipe with pressure fittings and sleeved underneath the driveway crossing.

D. Pressure Manifold

1. A pressure manifold shall be used to evenly distribute the wastewater.
2. The pressure manifold shall be contained within an adequately sized box/vault that will allow future repair lines to be installed and is designed to allow for drainage of effluent that may accumulate in it during flushing and head pressure adjustments. The box should be placed upon a gravel base.
3. A gate valve shall be provided at the pressure manifold box to allow for final pressure adjustment (2 foot of head pressure as per design).
4. The pressure manifold shall be constructed of SCH 80 PVC.
5. There shall be 4 taps (SCH 40 PVC).
6. The connecting pipe between the pressure manifold taps and the drainfield shall be constructed of PVC.

E. 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 four (4) lateral trenches 3-foot wide by 110-ft long. Total trench length is 440 feet.
5. The trench depth for this system shall be **24 inches**.
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 health department.

F. Final Landscaping

1. The final soil cover over the drainfield shall be a minimum of 6 inches deep.
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.

G. 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.

2. Lawn irrigation should not be placed over the drainfield area.
3. If there are any questions regarding preferred routes, contact the health department as soon as possible.

Maintenance

H. 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:	480 GPD – 4 Bedroom Home
Septic Tank Requirements:	1,000 Gallon Septic Tanks
Pump Tank Requirements:	1,000 Gallon Pump Tank
Effluent Loading Rate:	0.25 GPD per sq. ft.
Drainfield Type:	Infiltrator Quick4 Plus Standard (Saprolite System)
Distribution Method:	Pressure Manifold
Number of Taps:	4 (½ Inch SCH 40 PVC)
Number of Drainlines:	4
Drain Lines:	3-ft Wide x 110-ft Long
Total Trench Length:	440 Linear Feet
Trench Depth:	24 Inches

Final Cover Requirement:	6 Inches (minimum)
Pump Requirements from Barn:	28.44 GPM at 12 Feet TDH
Recommended Pump:	Liberty FL30 (or equivalent)
Dose Volume:	240 Gallons
Pump Run Time:	8.43 Minutes
Pump Tank Draw Down:	Approximately 11.43 Inches

Repair Option

Effluent Loading Rate:	0.275 GPD per sq. ft.
Drainfield Type:	PPBPS
Available Linear Footage:	220 Feet
Trench Depth:	24 Inches

PRELIMINARY SOIL AND SITE EVALUATION

Block D, Lots 46 and 47 – Wilgrove Farms
6650 Lake Road
Charlotte, NC 28227

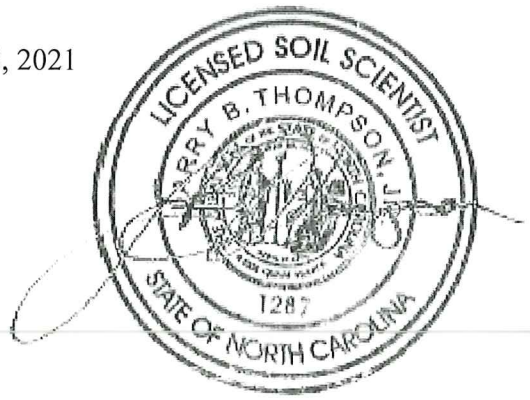
Prepared For:

Michael Llora
4614 Wilgrove-Mint Hill Road N,
Mint Hill, NC 28227

Prepared By:

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

December 18, 2021



INTRODUCTION & SITE DESCRIPTION

This Soil and Site Evaluation was performed on a 1.235-acre lot located at 6650 Lake Road, Charlotte, North Carolina (Mecklenburg County Tax Parcel: 13709505). The lot appears in a plat recorded with the Mecklenburg County Register of Deeds Office in 1950 and would be considered exempt from repair area requirements per 15A NCAC 18A .1945 AVAILABLE SPACE.

Thompson Environmental Consulting, Inc. (TEC) was retained to determine whether the soils were suitable for onsite subsurface wastewater treatment and disposal. The property was evaluated in accordance with North Carolina statutes for waste disposal ("Laws and Rules for Sewage Treatment and Disposal Systems", amended April 1, 2017).

INVESTIGATION METHODOLOGY & SITE PHYSICAL CHARACTERISTICS

Individual soil borings were evaluated, and soil color was determined with a Munsell Soil Color Chart. Observations of the landscape (slope, drainage patterns, etc.) as well as soil properties (depth, texture, structure, seasonal wetness, restrictive horizons, etc.) were recorded.

The project study is currently undeveloped and is vegetated with mixed deciduous trees.

FINDINGS

A field survey was conducted on December 11, 2021, by Larry Thompson, LSS. Seven soil borings were advanced with a hand-held auger, and their locations noted in the attached Figure 1.

All borings were rated as Provisionally Suitable for the installation of a subsurface wastewater treatment and disposal system utilizing Accepted System or Prefabricated Permeable Block Panel System drainfield product and are denoted in the attached Figure as green points. Surfaces typically exhibited firm clay textures with moderate, medium, subangular blocky structure 22 to 39 inches in depth. Upper subsurface horizons exhibited firm clay loam textures with moderate, medium, subangular blocky structure to a depth of 37 to 53 inches before encountering friable loam saprolite. A long-term acceptance rate (LTAR) of 0.275 gal./day/sq. ft. would be recommended for these soils.

DISCUSSION

The soils observed within the project study area will support the installation of a subsurface wastewater treatment and disposal system utilizing Accepted System or Prefabricated Permeable Block Panel System drainfield products. It is estimated that 3,300 square feet of suitable soil area would need to be allocated and left completely available for the installation of an Accepted System serving a 4-bedroom single family residence.

The required drainfield area can be reduced by 25% if using Prefabricated Permeable Block Panel System drainfield product.

CONCLUSION

The findings presented herein represent TEC's professional opinion based on our Soil and Site Evaluation and knowledge of the current laws and rules governing on-site wastewater systems in North Carolina. Soils naturally change across a landscape and contain many inclusions. As such, attempts to quantify them are not always precise and exact. Due to this inherent variability of soils and the subjectivity when determining limiting factors, there is no guarantee that a regulating authority will agree with the findings of this report.

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30013285** GWS File #: **10487B** Tax Parcel #: **137-095-05**

- This IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be **NO** grading, filling, or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

I. This Improvement Permit Shall: Expire in Five (5) Years **Expiration Date (If Applicable):** 7/19/2027

Type of Installation: Residential - Modified Plot Plan Lot Number: 0

Structure Type: HOUSE Size (ft^2): 3111 # Bedrooms: 4 Max. Occup.: 8

Building Foundation: Concrete Slab Water Supply: Private Well

II. Initial System Type: Pump to Accepted **System Classification:** IIIb

Initial System Specifications:

Design Flow (gpd): 480 LTAR (gpd/ft^2): .275 Septic Tank Size (gal): 1000 Pump Tank Size (gal): 1000

Trench Width (ft): 3 Trench Spacing (ft): 9 Absorption Area (ft^2): 1440 Total Trench Length (ft): 440'

Maximum Trench Depth (in): 24 Depth of Media (in): 12 Distribution Device: Pressure Manifold

III. Repair System Type: PPBPS (pressurized) **System Classification:** IVa

Repair System Specifications:

Design Flow (gpd): 480 LTAR (gpd/ft^2): .275 Septic Tank Size (gal): 1000 Pump Tank Size (gal): 1000

Trench Width (ft): 3 Trench Spacing (ft): 8 Absorption Area (ft^2): 873 Total Trench Length (ft): 291

Maximum Trench Depth (in): 24 Depth of Media (in): N/A Distribution Device: Pressure Manifold

IV. Permit Conditions/Comments:

(Please See the Following Page for Permit Conditions.)

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment, and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Braedon Shelton Owner/Legal Agent: _____
Print Name

Signature: Braedon Shelton Signature: _____

Date Issued: 7/19/2022

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30013285** GWS File #: **10487B**

IV. Permit Conditions/Comments:

- This type of septic system requires an inspection once every 5 years by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- Upon completion of the project the system designer shall provide Groundwater & Wastewater Services with a letter certifying that the system was installed in accordance with the approved design.
- The permitted system design requires a pressure manifold with varying tap diameters and/or pipe schedules. The contractor should review the specification detail provided by the system designer prior to bidding the project.
- This permit is issued pursuant to Section 11.(c) of SL 2018-114 using the signed and sealed LSS Evaluation attached here.

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Braedon Shelton

Signature: Braedon Shelton

Date Issued: 7/19/2022

Owner/Legal Agent: _____
Print Name

Signature: _____

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	07/15/22	**Amount:**	100.00
Receipt #:	136833	**Tendered:**	100.00
Check / Auth #:	VISA 077945	**Returned:**	0.00
Received By:	PLACILJ		

Account Information

Account #: 200000
Contractor: MICHAEL LLORA
Attn: MJL CONSTRUCTION
Address:
Address:
City/State/Zip: ,

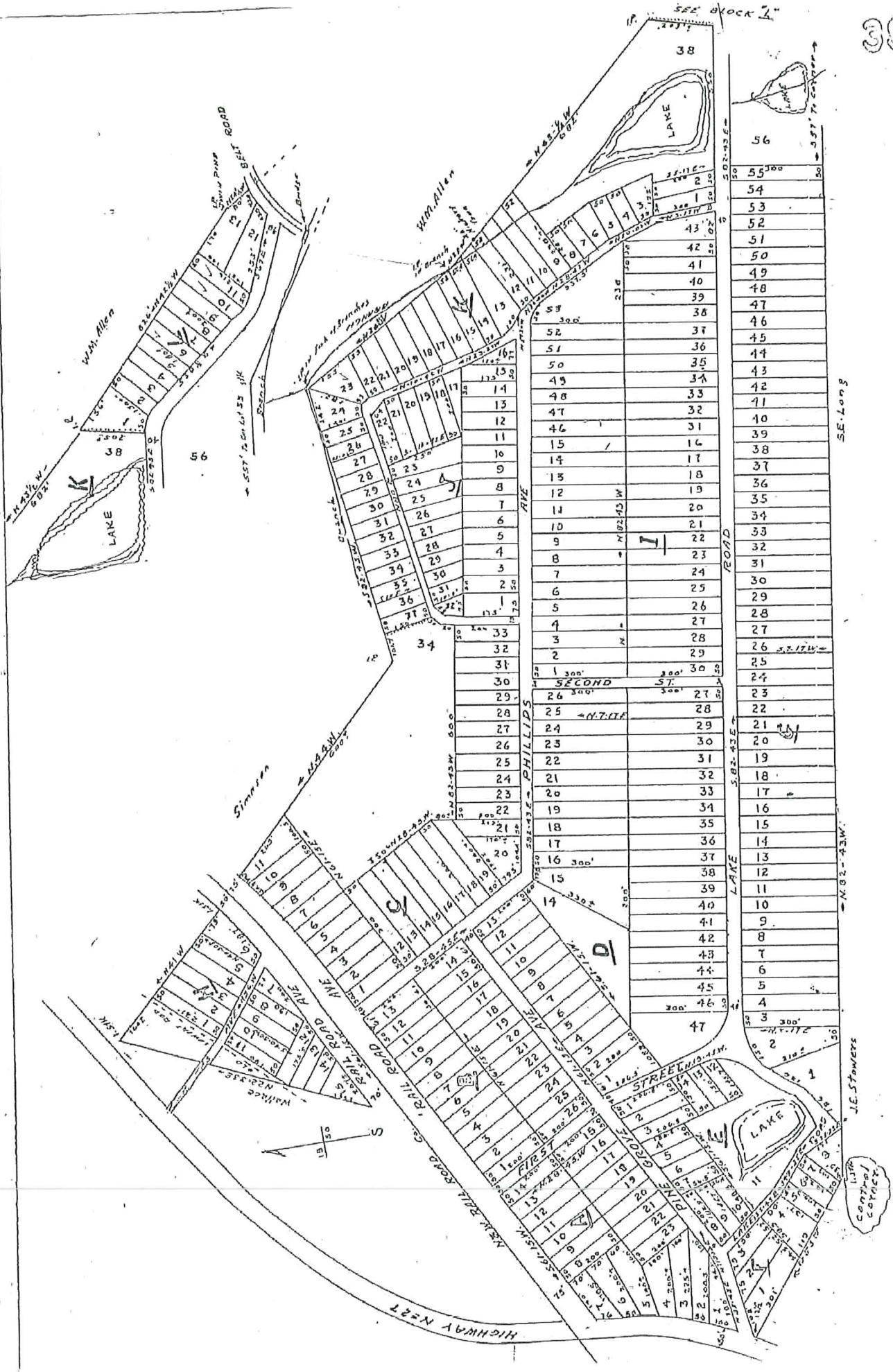
Item	Description	Permit#	Quantity	Unit Price	Total Price
0704	Change in Plot Plan 6650 LAKE RD		1	100.00	100.00

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance



Thompson Environmental Consulting WATER • WASTEWATER • WETLANDS	Prepared For: Michael Llora	Soil and Site Evaluation 6650 Lake Road Charlotte, NC 28227 Mecklenburg County	Date: December 2021 Scale: 0 20 40 ft TEC Job #: 21-305	Figure 1



WILGROVE

PLANS

CLEAR CREEK TWP. MECKLENBURG, Co. N.C.

Aug., 1950 1" = 200' S. Leon Hartley Surveyor

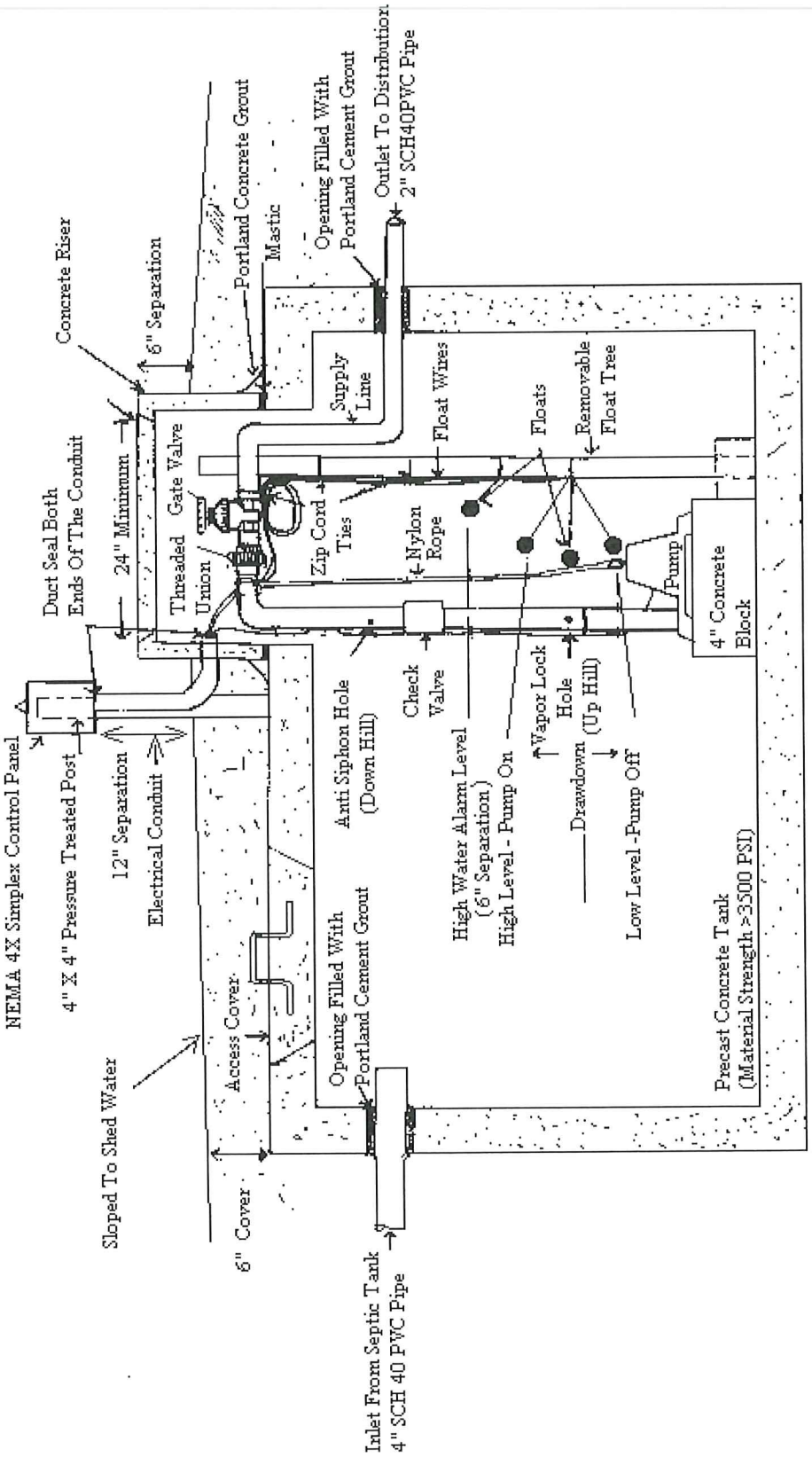
Thompson Environmental Consulting, Inc
PO Box 541
Midland, NC 28107-0541

Tax ID Number: 13709505

Location: 6650 Lake Road

Date: April 4, 2022

Recommended Pump Tank Design



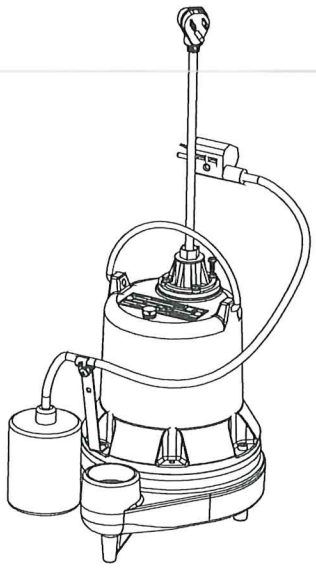
Liberty Pumps®

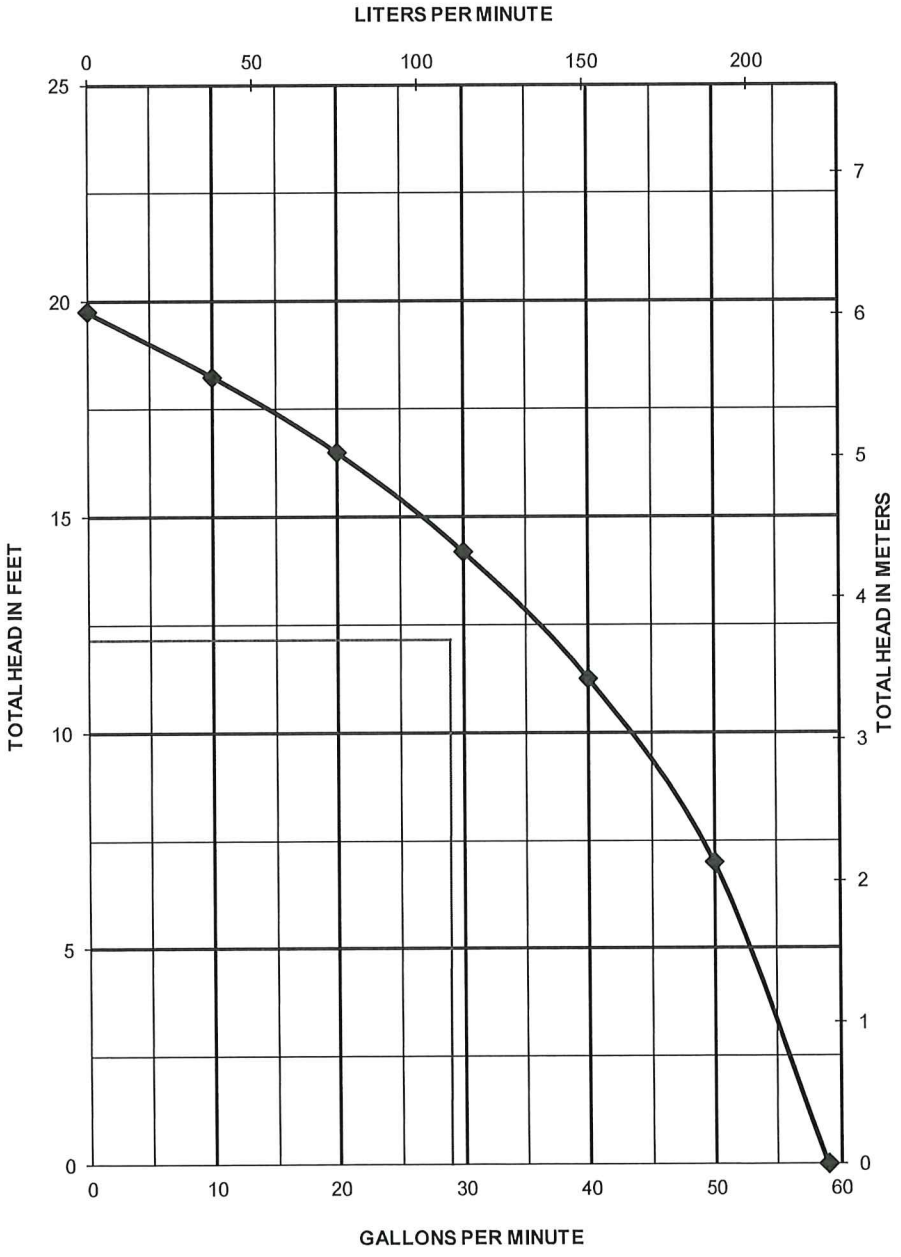
A Family and Employee Owned Company

Pump Specification

FL30-Series

1/3 HP Submersible Effluent Pumps

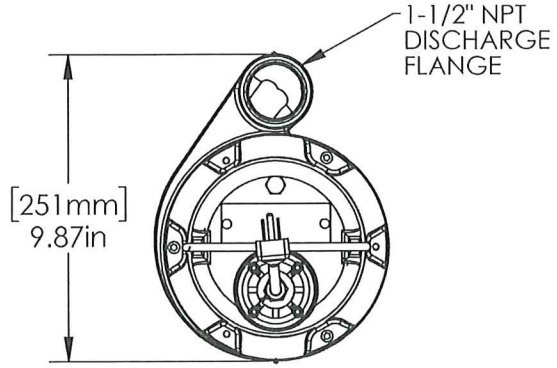


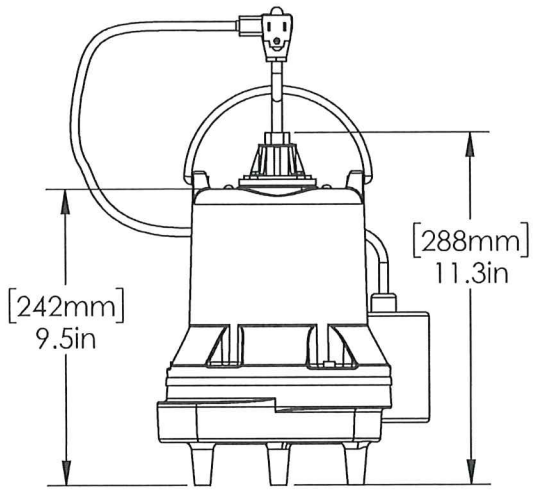


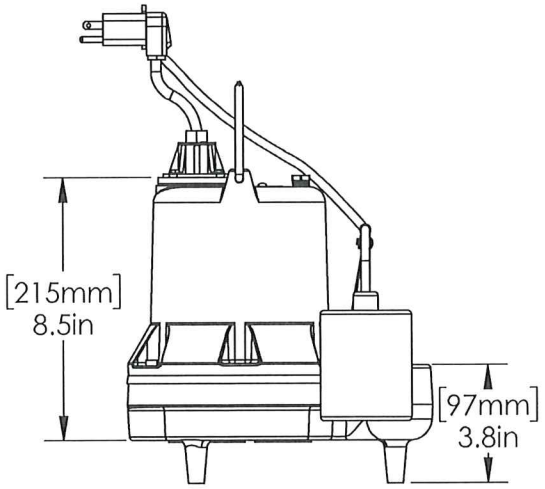
Copyright © Liberty Pumps, Inc. 2019 All rights reserved. Specifications subject to change without notice.

7000 Apple Tree Avenue Bergen NY 14416 ■ **Phone** *800-543-2550* ■ **Fax** *585-494-1839* ■ **Email** *Liberty@LibertyPumps.com* ■ **Web** *www.LibertyPumps.com*

FL30-Series Dimensional Data







Liberty Pumps

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LIBERTY PUMPS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF LIBERTY PUMPS IS PROHIBITED.

APPLICATION	DO NOT SCALE DRAWING	DWG. NO. FL30 SERIES DIMENSIONAL	
		SIZE A / DATE:	REV. A
		SCALE:1:4 / WEIGHT: LBS	SHEET 1 OF 1

Copyright © Liberty Pumps, Inc. 2019 All rights reserved. Specifications subject to change without notice.

7000 Apple Tree Avenue Bergen NY 14416 ■ Phone 800-543-2550 ■ Fax 585-494-1839 ■ Email Liberty@LibertyPumps.com ■ Web www.LibertyPumps.com

FL30-Series Electrical Data

MODEL	HP	VOLTAGE	PHASE	FULL LOAD AMPS	LOCKED ROTOR AMPS	THERMAL OVERLOAD TEMP	STATOR WINDING CLASS	CORD LENGTH	PUMP DISCHARGE	AUTOMATIC
FL31A	1/3	115	1	10.5	26	105°C / 221°F	B	10'	1-1/2" NPT	YES
FL31A-2	1/3	115	1	10.5	26	105°C / 221°F	B	25'	1-1/2" NPT	YES
FL31A-3	1/3	115	1	10.5	26	105°C / 221°F	B	35'	1-1/2" NPT	YES
FL31M	1/3	115	1	10.5	26	105°C / 221°F	B	10'	1-1/2" NPT	NO
FL31M-2	1/3	115	1	10.5	26	105°C / 221°F	B	25'	1-1/2" NPT	NO
FL31M-3	1/3	115	1	10.5	26	105°C / 221°F	B	35'	1-1/2" NPT	NO
FL31M-5	1/3	115	1	10.5	26	105°C / 221°F	B	50'	1-1/2" NPT	NO
FL32A	1/3	208–230	1	5.5	12	105°C / 221°F	B	10'	1-1/2" NPT	YES
FL32A-2	1/3	208–230	1	5.5	12	105°C / 221°F	B	25'	1-1/2" NPT	YES
FL32A-3	1/3	208–230	1	5.5	12	105°C / 221°F	B	35'	1-1/2" NPT	YES
FL32M	1/3	208–230	1	5.5	12	105°C / 221°F	B	10'	1-1/2" NPT	NO
FL32M-2	1/3	208–230	1	5.5	12	105°C / 221°F	B	25'	1-1/2" NPT	NO
FL32M-3	1/3	208–230	1	5.5	12	105°C / 221°F	B	35'	1-1/2" NPT	NO
FL32M-5	1/3	208–230	1	5.5	12	105°C / 221°F	B	50'	1-1/2" NPT	NO

Copyright © Liberty Pumps, Inc. 2019 All rights reserved. Specifications subject to change without notice.

*7000 Apple Tree Avenue Bergen NY 14416 ■ **Phone** 800-543-2550 ■ **Fax** 585-494-1839 ■ **Email** Liberty@LibertyPumps.com ■ **Web** www.LibertyPumps.com*

FL30-Series Technical Data

IMPELLER	MULTI-VANE ENGINEERED POLYMER
PAINT	POWDER COATING
MAX LIQUID TEMP	60˚C / 140˚F
MAX STATOR TEMP (1-PHASE)	130˚C / 250˚F
THERMAL OVERLOAD	105˚C / 221˚F
POWER CORD TYPE	SJTW
MOTOR HOUSING	CLASS 25 CAST IRON
VOLUTE	CLASS 25 CAST IRON
SHAFT	STAINLESS
HARDWARE	STAINLESS
O-RINGS	BUNA-N
MECHANICAL SEAL	UNITIZED CERAMIC CARBON
WEIGHT	37 LBS / 16.8 KG

Copyright © Liberty Pumps, Inc. 2019 All rights reserved. Specifications subject to change without notice.

*7000 Apple Tree Avenue Bergen NY 14416 ■ **Phone** 800-543-2550 ■ **Fax** 585-494-1839 ■ **Email** Liberty@LibertyPumps.com ■ **Web** www.LibertyPumps.com*

FL30-Series Specifications

1.01 GENERAL

The contractor shall provide labor, material, equipment, and incidentals required to provide _____ (QTY) centrifugal pumps as specified herein. The pump models covered in this specification are FL30-Series single-phase pumps. The pump furnished for this application shall be model _____ as manufactured by Liberty Pumps.

2.01 OPERATING CONDITIONS

Each submersible pump shall be rated at 1/3 hp, _____ volts, single-phase, 60 Hz, 1725 RPM. The unit shall produce _____ GPM at _____ feet of total dynamic head.

The submersible pump shall be capable of handling effluent with 3/4" solids handling capability. The submersible pump shall have a shut-off head of 19.8 feet and a maximum flow of 58 GPM @ 5 feet of total dynamic head.

The pump shall be controlled with:

_____ Piggyback style ON/OFF float switch

_____ NEMA 4X outdoor simplex control panel with three float switches and a high water alarm

_____ NEMA 1 indoor simplex control panel with three float switches and a high water alarm

_____ NEMA 4X outdoor simplex control panel with four float switches and a high water alarm

_____ NEMA 1 indoor simplex control panel with four float switches and a high water alarm

_____ NEMA 4X outdoor duplex control panel with three float switches and a high water alarm

_____ NEMA 1 indoor duplex control panel with three float switches and a high water alarm

_____ NEMA 4X outdoor duplex control panel with four float switches and a high water alarm

_____ NEMA 1 indoor duplex control panel with four float switches and a high water alarm

3.01 CONSTRUCTION

Each centrifugal effluent pump shall be equal to the $_{C}$SP$_{US}$ certified FL30-Series pumps as manufactured by Liberty Pumps, Bergen NY. The castings shall be constructed of class 25 cast iron. The motor housing shall be oil filled to dissipate heat. Air filled motors shall not be considered equal since they do not properly dissipate heat from the motor. All mating parts shall be machined and sealed with a Buna-N O-ring. All fasteners exposed to the liquid shall be stainless steel. The motor shall be protected on the top side with sealed cord entry plate with molded pins to conduct electricity, eliminating the ability of water to enter internally through the cord. The motor shall be protected on the lower side with a unitized ceramic/carbon seal with stainless steel housings and spring. The pump shall be furnished with stainless steel handle.

4.01 ELECTRICAL POWER CORD

The submersible pump shall be supplied with 10, 25, 35, or 50 feet of multiconductor power cord. It shall be cord type SJTW, capable of continued exposure to the pumped liquid. The power cord shall be sized for the rated full load amps of the pump in accordance with the National Electric Code. The power cable shall not enter the motor housing directly but will conduct electricity to the motor by means of a watertight compression fitting cord plate assembly, with molded pins to conduct electricity. This will eliminate the ability of water to enter internally through the cord by means of a damaged or wicking cord.

Copyright © Liberty Pumps, Inc. 2019 All rights reserved. Specifications subject to change without notice.

*7000 Apple Tree Avenue Bergen NY 14416 ■ **Phone** 800-543-2550 ■ **Fax** 585-494-1839 ■ **Email** Liberty@LibertyPumps.com ■ **Web** www.LibertyPumps.com*

5.01 MOTORS

Single-phase motors shall be oil filled, permanent split capacitor, class B insulated NEMA B design, rated for continuous duty. Since air filled motors are not capable of dissipating heat as effectively, they shall not be considered equal. At maximum load, the winding temperature shall not exceed 130°C unsubmerged. The pump motor shall have an integral thermal overload switch in the windings for protecting the motor. The capacitor circuit shall be mounted internally in the pump.

6.01 BEARINGS AND SHAFT

Upper and lower ball bearings shall be required. The bearings shall be a single ball/race type bearing. Both bearings shall be permanently lubricated by the oil that fills the motor housing. The motor shaft shall be made of 300 or 400 series stainless steel and have a minimum diameter of 0.500".

7.01 SEALS

The pump shall have a unitized carbon/ceramic seal with stainless steel housings and spring equal to Crane Type 6a. The motor plate/ housing interface shall be sealed with a Buna-N O-ring.

8.01 IMPELLER

The impeller shall be engineered polymer, with pump out vanes on the back shroud to keep debris away from the seal area. It shall be threaded to the motor shaft.

9.01 CONTROLS

All units can be supplied with CSA and UL approved automatic wide angle tilt float switches. The switches shall be equipped with piggyback style plug that allows the pump to be operated manually without the removal of the pump in the event that a switch becomes inoperable. Manual pumps are operable by means of a pump control panel.

10.01 PAINT

The exterior of the casting shall be protected with powder coat paint.

11.01 SUPPORT

The pump shall have cast iron support legs, enabling it to be a freestanding unit. The legs will be high enough to allow 3/4" solids to enter the volute.

12.01 SERVICEABILITY

Components required for the repair of the pump shall be shipped within a period of 24 hours.

Copyright © Liberty Pumps, Inc. 2019 All rights reserved. Specifications subject to change without notice.

*7000 Apple Tree Avenue Bergen NY 14416 ■ **Phone** 800-543-2550 ■ **Fax** 585-494-1839 ■ **Email** Liberty@LibertyPumps.com ■ **Web** www.LibertyPumps.com*

13.01 FACTORY ASSEMBLED TANK SYSTEMS WITH GUIDE RAIL AND QUICK DISCONNECT DISCHARGE

_____ Factory mounted guide rail system with pump suspended by means of bolt-on quick disconnect that is sealed by means of nitrile grommets or O-rings. The discharge piping shall be schedule 80 PVC and furnished with a PVC check valve and shut-off ball valve. The tank shall be wound fiberglass or roto-molded plastic. An inlet hub shall be provided with the fiberglass systems.

_____ Stainless steel guide rail

_____ Zinc plated steel guide rail

_____ " diameter of basin

_____ " height of basin

_____ " distance from top of tank to discharge pipe outlet

_____ Fiberglass cover

_____ Structural foam polymer cover

_____ Steel cover

_____ Simplex system with outdoor panel and alarm

_____ Duplex system with outdoor panel and alarm

_____ Separate outdoor alarm

_____ Remote outdoor alarm

14.01 TESTING

The pump shall have a ground continuity check and the motor chamber shall be hi-potted to test for electrical integrity, moisture content, and insulation defects. The motor and volute housing shall be pressurized, and an air leak decay test performed to ensure integrity of the motor housing. The pump shall be run, voltage current monitored, and checked for noise or other malfunction.

15.01 QUALITY CONTROL

The pump shall be manufactured in an ISO 9001 certified facility.

16.01 WARRANTY

Standard limited warranty shall be 3 years.

Copyright © Liberty Pumps, Inc. 2019 All rights reserved. Specifications subject to change without notice.

*7000 Apple Tree Avenue Bergen NY 14416 ■ **Phone** 800-543-2550 ■ **Fax** 585-494-1839 ■ **Email** Liberty@LibertyPumps.com ■ **Web** www.LibertyPumps.com*

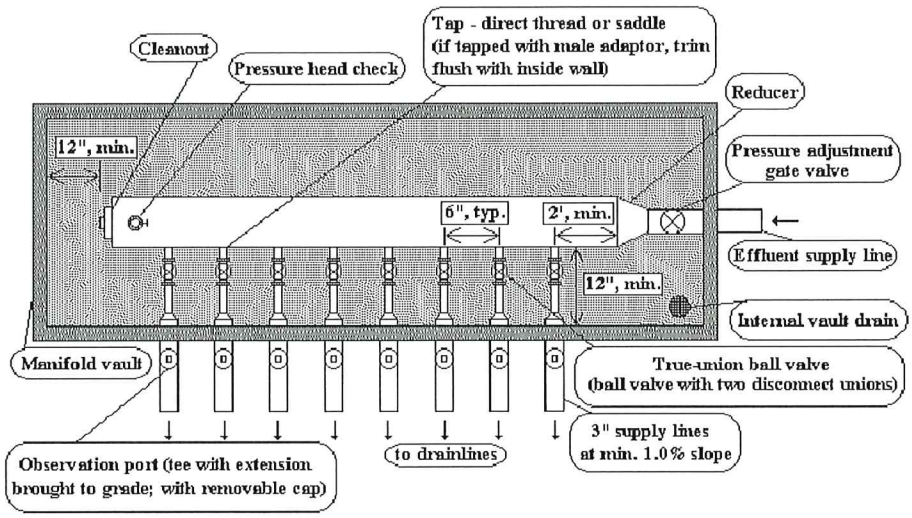
Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107-0541

Tax ID Number: 13709505

Location: 6650 Lake Road

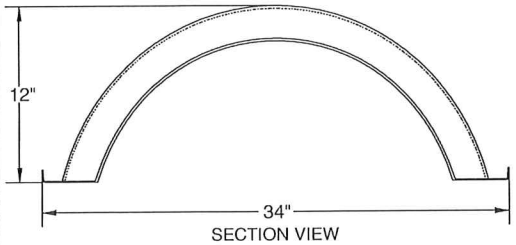
Date: April 4, 2022

Recommended Pressure Manifold Design
(Number of Taps May Vary)

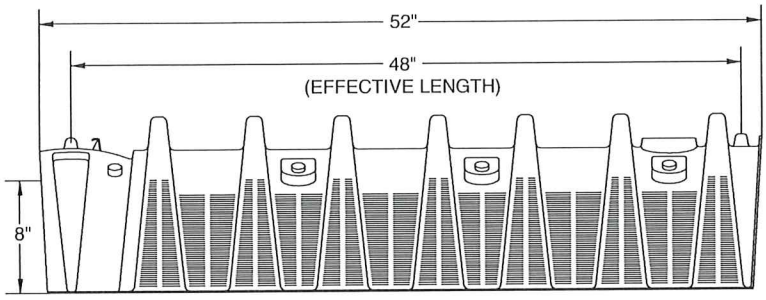


Quick4™
STANDARD CHAMBER

Quick4 Standard Chamber

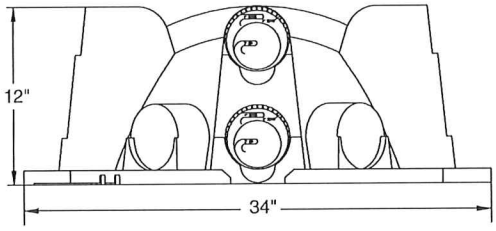


SECTION VIEW

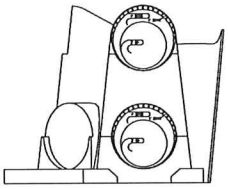


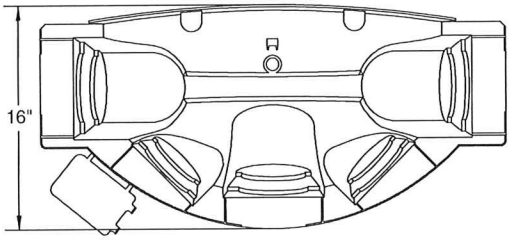
SIDE VIEW

MultiPort End Cap



FRONT VIEW


SIDE VIEW



TOP VIEW

Quick4 Standard Chamber Nominal Specifications

Size (W x L x H)	34" x 52" x 12"
Effective Length	48"
Invert Height	8"

MultiPort End Cap Nominal Specifications

Size (W x L x H)	34" x 16" x 12"
Invert Height	8" or 1.25"

INFILTRATOR SYSTEMS, INC. STANDARD LIMITED WARRANTY

(a) The structural integrity of each chamber, end plate, wedge and other accessory manufactured by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty.

Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

.....

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

INFILTRATOR® SYSTEMS INC

Environmental Onsite Wastewater Solutions℠

6 Business Park Road • P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • FAX 860-577-7001

800-221-4436

U.S. Patents: 4,759,661; 5,017,041; 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,716,163; 5,588,778; 5,839,844
Canadian Patents: 1,329,959; 2,004,564 Other patents pending.

Infiltrator, Equalizer and SideWinder are registered trademarks of Infiltrator Systems Inc. Infiltrator is a registered trademark in France. Infiltrator Systems Inc. is a registered trademark in Mexico. Contour, Contour Swivel Connection, MicroLeaching, PolyTuff, SnapLock, ChamberSpacer, PosiLock, QuickCut, QuickPlay and Quick4 are trademarks of Infiltrator Systems Inc. © 2003 Infiltrator Systems Inc. Printed in U.S.A.

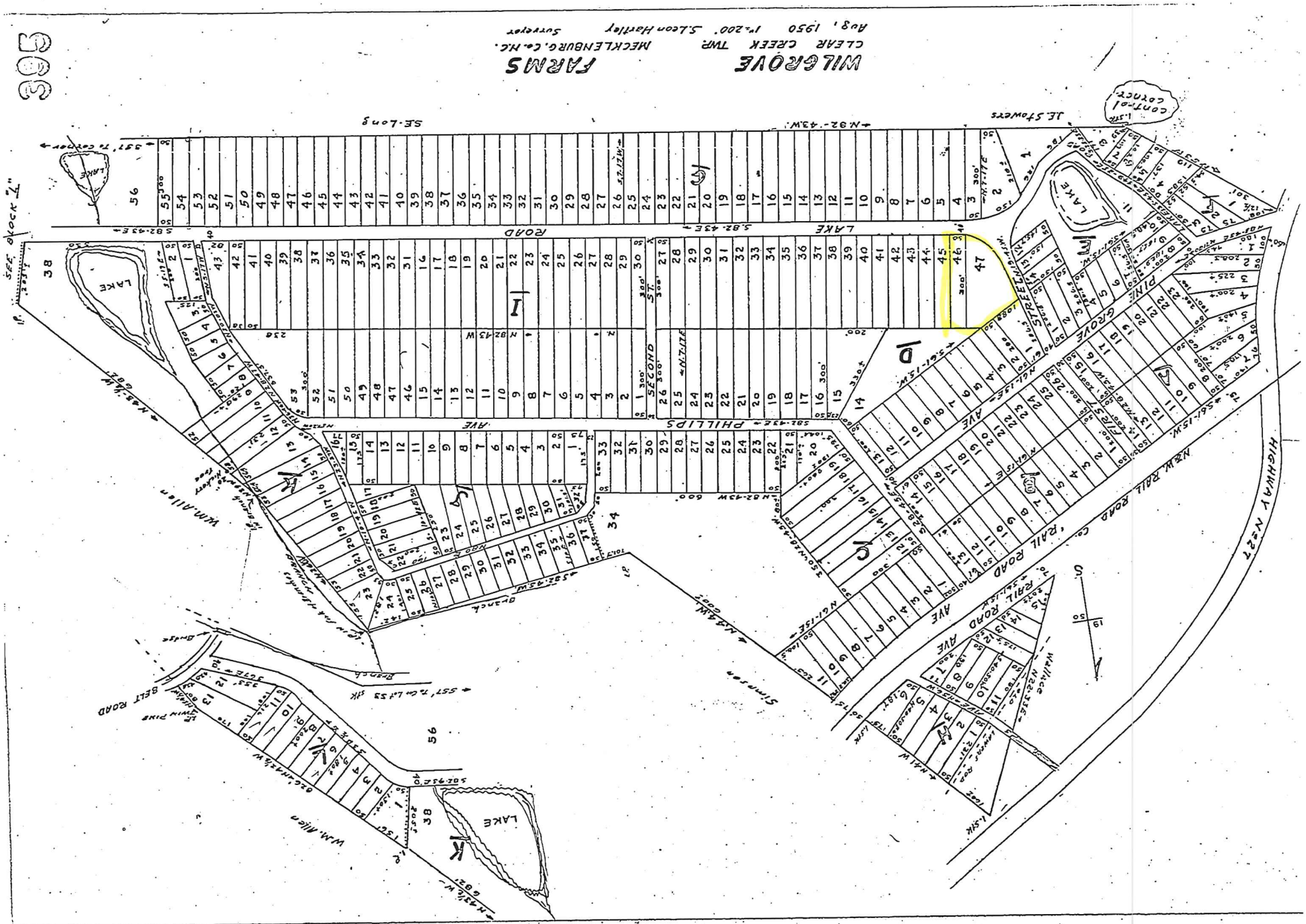
RECYCLED PAPER

Q011203HP-0

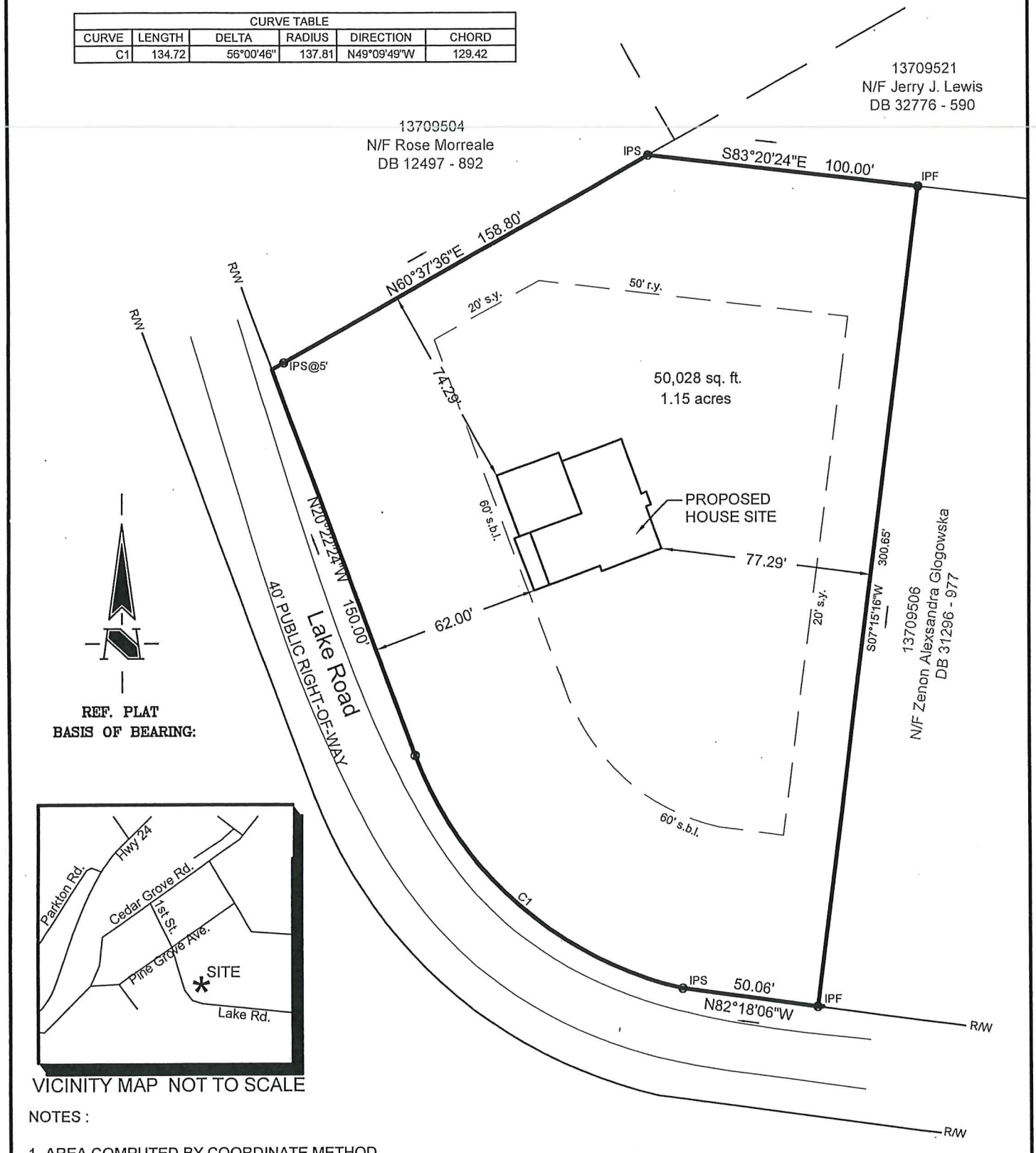
TAP CHART

PID:
File: 10487B
AppID:

Bench Mark	0.5	is = 100.00	set at				**Design Head:**	2	
Pump tank elev.				**Pump elev.**			**Manifold elev.**		
line	**color**	**rod read**	**Elevation**	**length**	**hole size**	**flow/tap**	**gal/day**	**trench area**	**LINE LTAR**
1				95	1/2in SCH 80	5.48	98.11	285	0.344
2				115	1/2in SCH 40	7.11	127.30	345	0.369
3				115	1/2in SCH 40	7.11	127.30	345	0.369
4				115	1/2in SCH 40	7.11	127.30	345	0.369
5				0	ERROR	0	0.00	0	#DIV/0!
6				0	ERROR	0	0.00	0	#DIV/0!
7				0	ERROR	0	0.00	0	#DIV/0!
8				0	ERROR	0	0.00	0	#DIV/0!
9				0	ERROR	0	0.00	0	#DIV/0!
		total	**feet =**	**440**	**gal/min =**	**26.81**		**LTAR =**	**0.28**
% of Dose Vol.		35		**Des. Flow**	480			**(ltar + 5%)**	0.29
Dose Volume		109		**Pump Run=**	17.90			**(ltar W/ INOV**	0.37
Dose Pump Time		3.73		**Tank Gal/IN**	29			**(ltar + 5%)**	0.39
Drawdown in Inches		3.8		**Elev. Head**	0.00				
Supply Line Length									


WILGROVE FARMS
CLEAR CREEK TWP MECKLENBURG. Co. NC.
Aug. 1950 1"=200' S. Leon Hartley Surveyor
SEE BLOCK "L"
LAKE ROAD
PHILLIPS AVE
SECOND STREET
GROVE PINE
RAIL ROAD AVE
HIGHWAY N-27
BELT ROAD
Wm. Allen
Branch
Simpson
LAKE
I
J
K
L
D
C
S
56
38
34

CURVE TABLE					
CURVE	LENGTH	DELTA	RADIUS	DIRECTION	CHORD
C1	134.72	56°00'46"	137.81	N49°09'49"W	129.42



REF. PLAT
BASIS OF BEARING:

VICINITY MAP NOT TO SCALE

NOTES :

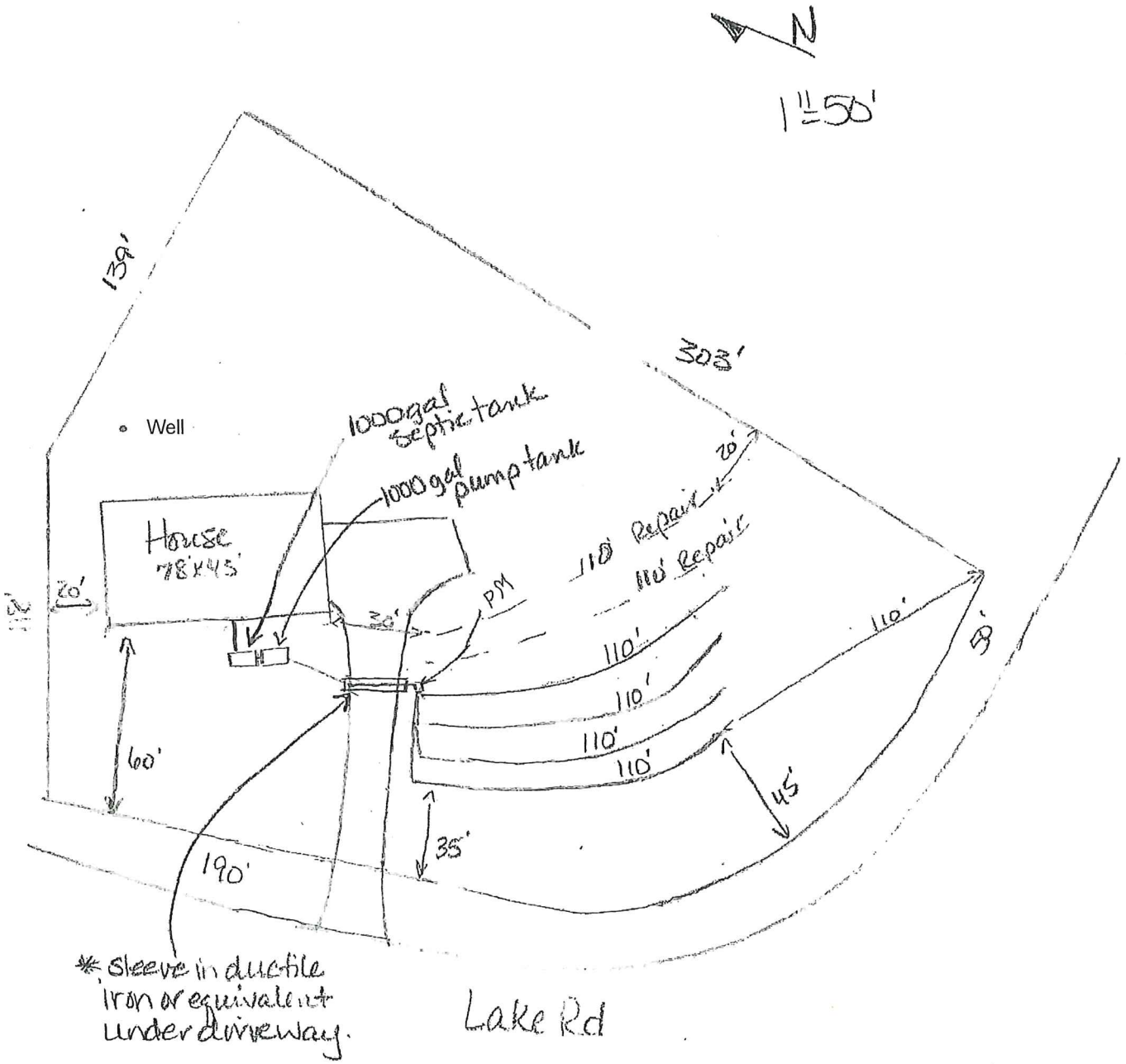
1. AREA COMPUTED BY COORDINATE METHOD.
2. THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS OR RIGHT-OF-WAYS, RECORDED AND UNRECORDED.
3. ALL DISTANCES SHOWN ARE HORIZONTAL MEASUREMENTS.
4. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. NO INVESTIGATIONS FOR EASEMENTS, ENCUMBERANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS HAVE BEEN MADE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
5. IRON PINS SET AT ALL CORNERS UNLESS OTHERWISE NOTED.
6. SUBJECT TRACT IS NOT LOCATED IN A SPECIAL FLOOD ZONE, SEE F.E.M.A.

GRAPHIC SCALE

0 25 50 100

SCALE IN FEET

SITE PLAN


N
1"=50'
139'
303'
Well
1000gal septic tank
1000 gal pump tank
House
78'x45'
20'
20'
20'
PM
110' Repair
110' Repair
110'
110'
110'
110'
110'
60'
35'
45'
190'
58'
* Sleeve in ductile iron or equivalent under driveway.
Lake Rd

MECKLENBURG COUNTY
Public Health

Gibbie Harris, MSPH, BSN **(704) 336-4700**

You have the right to a formal appeal of this decision by filing a petition for a contested case hearing with the Office of Administration Hearings, 6714 Mail Service Center, Raleigh, NC, 27699-6714. To obtain a petition form (H-06), you may write the Office of Administrative Hearings, call that office at (919) 431-3000 or get a copy of the petition form from their web site at www.ncoah.com/forms.html. The petition for a contested case hearing must be filed in accordance with the provisions of North Carolina General Statutes 130A-24, 150B-23, and all other applicable provisions of Chapter 150B. N.C. General Statute 130A-335(g) provides that your hearing would be held in the county where your property is located.

If you wish to pursue a formal appeal, you must file the petition form with the Office of Administrative Hearings **WITHIN 30 DAYS OF THE DATE OF THIS LETTER.** The date of this letter is **6/13/22.** Meeting the 30 day deadline is critical to your right to a formal appeal. Beginning a formal appeal within 30 days will not interfere with any informal review that you may request.

If you file a petition for a contested case with the Office of Administrative Hearings, you are required by law (NCGS 150B-23) to serve a copy of your petition on the Office of General Counsel, NC Department of Health and Human Services, 2001 Mail Service Center, Raleigh, NC 27699-2001.

Do not serve the petition on your local health department. Sending a copy of your petition to the local health department will not satisfy the legal requirement in NC General Statute 150B-23 that you send a copy to the Office of General Counsel, 2001 Mail Service Center, NC Department of Health and Human Services.

You may call or write the local health department if you need additional information or assistance.

Sincerely,

Braedon Shelton

Braedon Shelton, REHS
Environmental Health Specialist
980-297-3719

MECKLENBURG COUNTY
Public Health

Gibbie Harris, MSPH, BSN

(704) 336-4700

June 13, 2022

Names: Benjamin Serrano Ramos
Owners Address: 17702 Downy Birch Rd Charlotte, NC 28227

RE: **Notice of Intent to Revoke Improvement Permit**

Dear Mr. Ramos,

The Mecklenburg County Health Department inspected the site for the on-site wastewater system located at **6650 Lake rd.**, File # **10487B** for compliance with the Laws (Article 11 of Chapter 130A of the North Carolina General Statutes), Rules (15A NCAC 18A .1900 et seq.), and Improvement Permit # **30010862** conditions. As a result of this inspection, the Department has determined the following violations:

Adding a proposed pool to the property, encroaching on the septic repair area.
Rule in violation below:

15A NCAC 18A .1937 PERMITS

(g): If the installation has not been completed during the period of validity of the Construction Authorization, the information submitted in the application for a Permit or Construction Authorization is found to have been incorrect, falsified or changed, or the site is altered, the Permit or Construction Authorization shall become invalid, and may be suspended or revoked. When a Permit or Construction Authorization has become invalid, expired, suspended, or revoked, the installation shall not be commenced or completed until a new Permit or Construction Authorization has been obtained.

This is to notify you that based on these violations, the Department intends to revoke your Improvement Permit 30 days from the date of this notice.

If the health department determines that all of the violations have been corrected before thirty (30) days expire, the revocation will not go into effect. If the permit is revoked, you must apply for a new Improvement Permit and meet the current laws and rules necessary to obtain a new permit.

You have a right to an informal review of this decision. You may request an informal review by the environmental health supervisor at the local health department. You may also request an informal review by the N. C. Department of Health and Human Services Regional Soil Scientist. A request for informal review must be made in writing to the local health department.

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date: 05/11/22
Receipt #: 135781
Check / Auth #: VISA 089902
Received By: CABANLA

Amount: 200.00
Tendered: 200.00
Returned: 0.00

Account Information

Account #: 200000
Contractor: LLORA, MICHAEL
Attn:
Address:
Address:
City/State/Zip: ,

Item	Description	Permit#	Quantity	Unit Price	Total Price
0734	Septic Construction Authorizat 6650 LAKE RD		1	200.00	200.00

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date: 05/11/22
Receipt #: 135782
Check / Auth #: VISA 089902
Received By: CABANLA

Amount: 200.00
Tendered: 200.00
Returned: 0.00

Account Information

Account #: 200000
Contractor: LLORA, MICHAEL
Attn:
Address:
Address:
City/State/Zip: ,

Item	Description	Permit#	Quantity	Unit Price	Total Price
0703	Septic Operational Permit 6650 LAKE RD		1	200.00	200.00

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30010862** GWS File #: **10487B** Tax Parcel #: **137-095-05**

- This IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be **NO** grading, filling, or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

I. This Improvement Permit Shall: Expire in Five (5) Years **Expiration Date (If Applicable):** 2/20/2025

Type of Installation: Residential - New System Lot Number: 0

Structure Type: HOUSE Size (ft^2): 0 # Bedrooms: 4 Max. Occup.: 8

Building Foundation: Crawl Space Water Supply: Private Well

II. Initial System Type: Pump to Accepted **System Classification:** IIIb

Initial System Specifications:

Design Flow (gpd):	480	LTAR (gpd/ft^2):	.275	Septic Tank Size (gal):	1000	Pump Tank Size (gal):	1000
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1309	Total Trench Length (ft):	436
Maximum Trench Depth (in):	26	Depth of Media (in):	12	Distribution Device:	Pressure Manifold		

III. Repair System Type: PPBPS (pressurized) **System Classification:** IVa

Repair System Specifications:

Design Flow (gpd):	480	LTAR (gpd/ft^2):	.275	Septic Tank Size (gal):	1000	Pump Tank Size (gal):	1000
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	873	Total Trench Length (ft):	291
Maximum Trench Depth (in):	26	Depth of Media (in):	14	Distribution Device:	Pressure Manifold		

IV. Permit Conditions/Comments:

(Please See the Following Page for Permit Conditions.)

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment, and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Heather Ray Owner/Legal Agent: _____
Print Name

Signature: _____ Signature: _____

Date Issued: 2/20/2020

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30010862** GWS File #: **10487B**

IV. Permit Conditions/Comments:

- This type of septic system requires an inspection once every 5 years by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- All components of the septic system must be located at least 100 ft. (50 ft. minimum) from all private wells.
- All waterlines must be located a minimum of 10 ft. from any part of the septic system.
- The permitted system design requires a pressure manifold with varying tap diameters and/or pipe schedules. The contractor should review the specification detail provided by the system designer prior to bidding the project.
- The septic system shall be located at least 10 feet from any foundation drain.
- 95' line .5" Schedule 80 Tap 115' lines .5" Schedule 40 Tap

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Heather Ray

Signature: _____

Date Issued: 2/20/2020

Owner/Legal Agent: _____
Print Name

Signature: _____

CURVE TABLE					
CURVE	LENGTH	DELTA	RADIUS	DIRECTION	CHORD
C1	134.72	56°00'46"	137.81	N49°09'49"W	129.42

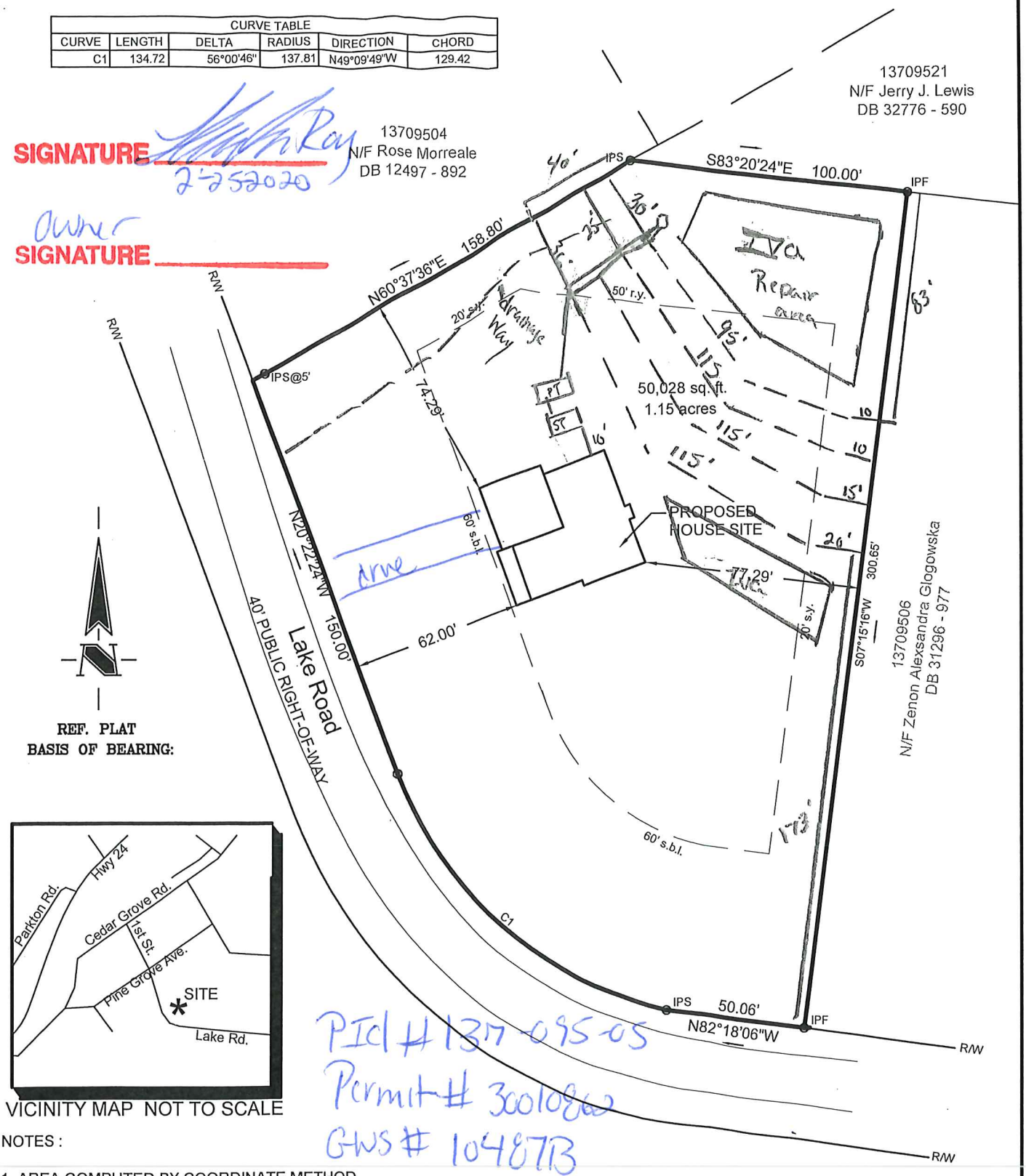
SIGNATURE Mark Ray 2-25-2020

OWNER SIGNATURE _____

13709504
N/F Rose Morreale
DB 12497 - 892

13709521
N/F Jerry J. Lewis
DB 32776 - 590

13709506
N/F Zenon Alexsandra Glogowska
DB 31296 - 977



REF. PLAT
BASIS OF BEARING:

VICINITY MAP NOT TO SCALE

PID # 137-095-05
Permit # 3001080
GWS # 104873

NOTES :

1. AREA COMPUTED BY COORDINATE METHOD.
2. THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS OR RIGHT-OF-WAYS, RECORDED AND UNRECORDED.
3. ALL DISTANCES SHOWN ARE HORIZONTAL MEASUREMENTS.
4. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. NO INVESTIGATIONS FOR EASEMENTS, ENCUMBERANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS HAVE BEEN MADE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
5. IRON PINS SET AT ALL CORNERS UNLESS OTHERWISE NOTED.
6. SUBJECT TRACT IS NOT LOCATED IN A SPECIAL FLOOD ZONE, SEE F.E.M.A.

GRAPHIC SCALE

0 25 50 100

SCALE IN FEET

SITE PLAN

Ellis, Loretta

From: Ellis, Loretta
Sent: Friday, March 13, 2020 11:06 AM
To: ZACH@ZACHSNYDERLAW.COM
Subject: 12431 MCCORD ROAD
Attachments: Auto Color0151.pdf

Second request, please sign the Improvement Permit and Plot Plan for 12431 MCCORD ROAD, and email back to me. Thank you

Loretta W. Ellis
Administrative Assistant III
Environmental Health Services
Mecklenburg County Health Department
Office 980-314-1680
Fax 704-336-6894
Email Loretta.Ellis@MecklenburgCountyNC.gov
http://Groundwater.charmeck.org
http://Meckpools.charmeck.org

Groundwater & Wastewater Services: Septic Project File & D

Edit Response | Delete Response | Manage Permissions | Workflows | Alert Me

GWS File #:	10487B
WASPS App #:	10862
Primary ES assigned to project:	Heather Ray
Secondary ES assigned to project:	
Project Type:	New System
Site Evaluation Information: .1939(a)(1) - Topography and Landscape Position Recorded?	Yes
Site Evaluation Information: .1940(a-g) - Slope % Recorded?	Yes
Site Evaluation Information: .1939(a)(2) - Texture Class Recorded?	Yes
Site Evaluation Information: .1939(a)(2) - Structure Type Recorded?	Yes
Site Evaluation Information: .1939 (a)(2) - Consistence Recorded?	Yes
Site Evaluation Information: .1939(a)(2) - Mineralogy Recorded?	Yes
Site Evaluation Information: .1939(a)(3) - Soil Wetness Condition Recorded?	Yes
Site Evaluation Information: .1939(a)(4) - Soil Depth to Rock or Parent Material Recorded when Encountered?	Yes
Site Evaluation Information: .1939(a)(5) - Depth to Restrictive Horizons Recorded when Encountered?	Yes
Site Evaluation Information: .1939(a)(6) - Sufficient Available Space Recorded?	Yes
Site Evaluation Information: .1937(m) - Are the Profile Locations Shown?	Yes
Site Evaluation Information: .1939(a) - Are the S/PS Profiles in system & in repair area?	Yes
Site Evaluation Information: .1939(d), .1955, .1956, .1957 - LTAR	Yes
Improvement Permit/Construction Authorization: .1937(g), 130A-336(a) - Proposed System Type stated - Initial	Yes
Improvement Permit/Construction Authorization: .1945(b) - Proposed System Type stated - Repair	Yes
Improvement Permit/Construction Authorization: 130A-336(a)(3) - System location identifiable by setbacks - Initial	Yes
Improvement Permit/Construction Authorization: .1937(g), .1945(b) - System components shown - Initial	Yes
Information Permit/Construction Authorization: .1945(b) - Repair area shown	Yes
Improvement Permit/Construction Authorization: .1937(f)(g) - Does System design match facility, flow & WW characteristics?	Yes
Improvement Permit/Construction Authorization: .1937(f)(g) - Is System design consistent with soil/site conditions?	Yes
Improvement Permit/Construction Authorization: .1937(f)(g) - Is the System located in the approved area?	Yes
Improvement Permit/Construction Authorization: 130A-336(a) - Number of Bedrooms, employees, seats, etc. indicated?	Yes
Improvement Permit/Construction Authorization: .1937 (g) - Trench depth correct?	Yes
Improvement Permit/Construction Authorization: .1937(g) - Trench width correct?	Yes
Improvement Permit/Construction Authorization: .19379(g) - Trench length correct?	Yes
Improvement Permit/Construction Authorization: 130A-336(a)(1) - Proposed/existing well shown?	N/A

Improvement Permit/Construction Authorization: 130A-336(a)(1) - Property line lengths shown?	Yes
Improvement Permit/Construction Authorization: 130A-336(a) - Facility/appurtenance setbacks shown from fixed points?	Yes
Corrections/modifications needed?	No
Comments:	Varying tap sizes
IA issued date:	
OP Issued date:	
Review performed by:	Jeremy Michelone
Date performed:	2/25/2020

Created at 2/25/2020 9:34 AM by Michelone, Jeremy
Last modified at 2/25/2020 9:34 AM by Michelone, Jeremy

Close

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	11/18/19	**Amount:**	250.00
Receipt #:	119452	**Tendered:**	250.00
Check / Auth #:	VISA 018059	**Returned:**	0.00
Received By:	ELLISLW		

Account Information

Account #: 200000
Contractor: LUCERO, JOAQUIN LOPEZ
Attn:
Address: 322 STILWELL OAKS CR
Address:
City/State/Zip: CHARLOTTE, NC 28212

Item	Description	Permit#	Quantity	Unit Price	Total Price
0701	Improvment Permit App-Residen 6650 LAKE ROAD		1	250.00	250.00

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance

Gibbie Harris, MSPH, BSN

MECKLENBURG COUNTY
Public Health

(704) 336-4700

June 13, 2022

Names: Benjamin Serrano Ramos
Owners Address: 17702 Downy Birch Rd Charlotte, NC 28227

RE: **Notice of Intent to Revoke Improvement Permit**

Dear Mr. Ramos,

The Mecklenburg County Health Department inspected the site for the on-site wastewater system located at **6650 Lake rd.**, File # **10487B** for compliance with the Laws (Article 11 of Chapter 130A of the North Carolina General Statutes), Rules (15A NCAC 18A .1900 et seq.), and Improvement Permit # **30010862** conditions. As a result of this inspection, the Department has determined the following violations:

Adding a proposed pool to the property, encroaching on the septic repair area.
Rule in violation below:

15A NCAC 18A .1937 PERMITS

(g): If the installation has not been completed during the period of validity of the Construction Authorization, the information submitted in the application for a Permit or Construction Authorization is found to have been incorrect, falsified or changed, or the site is altered, the Permit or Construction Authorization shall become invalid, and may be suspended or revoked. When a Permit or Construction Authorization has become invalid, expired, suspended, or revoked, the installation shall not be commenced or completed until a new Permit or Construction Authorization has been obtained.

This is to notify you that based on these violations, the Department intends to revoke your Improvement Permit 30 days from the date of this notice.

If the health department determines that all of the violations have been corrected before thirty (30) days expire, the revocation will not go into effect. If the permit is revoked, you must apply for a new Improvement Permit and meet the current laws and rules necessary to obtain a new permit.

You have a right to an informal review of this decision. You may request an informal review by the environmental health supervisor at the local health department. You may also request an informal review by the N. C. Department of Health and Human Services Regional Soil Scientist. A request for informal review must be made in writing to the local health department.

MECKLENBURG COUNTY
Public Health

Gibbie Harris, MSPH, BSN (704) 336-4700

You have the right to a formal appeal of this decision by filing a petition for a contested case hearing with the Office of Administration Hearings, 6714 Mail Service Center, Raleigh, NC, 27699-6714. To obtain a petition form (H-06), you may write the Office of Administrative Hearings, call that office at (919) 431-3000 or get a copy of the petition form from their web site at www.ncoah.com/forms.html. The petition for a contested case hearing must be filed in accordance with the provisions of North Carolina General Statutes 130A-24, 150B-23, and all other applicable provisions of Chapter 150B. N.C. General Statute 130A-335(g) provides that your hearing would be held in the county where your property is located.

If you wish to pursue a formal appeal, you must file the petition form with the Office of Administrative Hearings **WITHIN 30 DAYS OF THE DATE OF THIS LETTER.** The date of this letter is **6/13/22.** Meeting the 30 day deadline is critical to your right to a formal appeal. Beginning a formal appeal within 30 days will not interfere with any informal review that you may request.

If you file a petition for a contested case with the Office of Administrative Hearings, you are required by law (NCGS 150B-23) to serve a copy of your petition on the Office of General Counsel, NC Department of Health and Human Services, 2001 Mail Service Center, Raleigh, NC 27699-2001.

Do not serve the petition on your local health department. Sending a copy of your petition to the local health department will not satisfy the legal requirement in NC General Statute 150B-23 that you send a copy to the Office of General Counsel, 2001 Mail Service Center, NC Department of Health and Human Services.

You may call or write the local health department if you need additional information or assistance.

Sincerely,

Braedon Shelton, REHS
Environmental Health Specialist
980-297-3719

Gibbie Harris, MSPH, BSN

MECKLENBURG COUNTY
Public Health

(704) 336-4700

Voluntary Relinquishment of Administrative Appeal Rights
(Completion of Form by Property Owner)

June 13, 2022

Benjamin Serrano Ramos
17702 Downy Birch Rd
Charlotte, NC 28227

Subject: Voluntary Relinquishment of Administrative Appeal Rights

Permit ID: 30010862
Name: Benjamin Serrano Ramos
Site Location: 6650 Lake Rd. Charlotte, NC 28227
Tax ID # 137-095-05

I, Benjamin Serrano Ramos Digitally signed by Benjamin Serrano Ramos Date: 2022.07.13 22:01:44 -04'00', voluntarily relinquish my rights to pursue a formal appeal through the Office of Administrative Hearings pursuant to NC General Statute 130A-24 and 150B-23 and all other applicable provisions of Chapter 150B for the above referenced permit in order for the authorized agent/local health department to issue the applicable permit (new IP and/or CA) for the site. I understand by completing this form the previous permit issued on 2/20/20 for a system located on the above site will be "revoked" immediately by the authorized agent/local health department.

Benjamin Serrano Ramos Digitally signed by Benjamin Serrano Ramos Date: 2022.07.13 22:02:07 -04'00'

Signature of Property Owner

MECKLENBURG COUNTY
HEALTH DEPARTMENT

104873 #10862

18 NOV '19 AM 11:32

APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL

1. **SEPTIC / TYPE APPLICATION:** ○ N/A ✓ NEW SYSTEM ○ ALTERATION ○ REPAIR ○ MODIFIED PLOT PLAN

2. **WELL / TYPE APPLICATION:** ○ N/A ○ NEW WELL ○ MAJOR REPAIR ○ ABANDONMENT

3. **JOB LOCATION INFORMATION:**

TAX PARCEL NUMBER: 13709505

STREET ADDRESS: 6650 Lane rd

CITY: Mint Hill

STATE: NC ZIP: 28227

SUBDIVISION NAME: _____

LOT #: _____ LOT SIZE (acres): 1.15

TOWNSHIP:

○ MECKLENBURG ○ CORNELIUS ○ HUNTERSVILLE
○ DAVIDSON ○ CHARLOTTE ○ PINEVILLE
○ MATTHEWS ✓ MINT HILL

4. **BUILDING INFORMATION:**

BUILDING TYPE:

○ SINGLE MOBILE HOME ○ MODULAR HOME
○ DOUBLE WIDE ○ MULTIPLE FAMILY
✓ HOUSE ○ OTHER _____

HEATED SQUARE FOOTAGE: _____

NUMBER OF BEDROOMS: 4

NUMBER OF OCCUPANTS: 1

FOUNDATION TYPE:

○ CONCRETE SLAB ○ BASEMENT WITH PLUMBING
✓ CRAWL SPACE ○ BASEMENT WITH NO PLUMBING

5. **IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION:** ☐ ✓ N/A

NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. **WATER SUPPLY:** ○ MUNICIPAL ○ PRIVATE WELL ○ PUBLIC WELL ○ SHARED WELL ○ OTHER _____

7. **PROPOSED USE OF WELL:** ○ N/A ○ IRRIGATION ○ POTABLE (DRINKING WATER) ○ OTHER _____

8. **PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE** *(1-MOST DESIRED 5-LEAST DESIRED):*

☐ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____

8A. **RANK:** 1 2 3 ~~5~~ 4

9. **DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.**

BURIED CABLES, LANDFILLS, STUMPHOLES	○ YES ✓ NO	GRADING/SOIL REMOVAL PERFORMED	○ YES ✓ NO
EXISTING WASTEWATER (SEPTIC) SYSTEMS	○ YES ✓ NO	JURISDICTIONAL WETLANDS	○ YES ✓ NO
WELLS, SPRINGS, OR WATER LINES	○ YES ✓ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	○ YES ✓ NO
EASEMENTS OR RIGHT-OF-WAYS	○ YES ✓ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	○ YES ✓ NO
CHEMICAL/PETROLEUM STORAGE TANKS	○ YES ✓ NO	KNOWN UNDERGROUND CONTAMINATION	○ YES ✓ NO
WASTE STORAGE	○ YES ✓ NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	○ YES ✓ NO

10. **WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?** _____ ☑ UNKNOWN

11. **WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?** _____ ☐ N/A

12. **PROPERTY OWNER:**

NAME: Joaquin lopez lucero
ADDRESS: 322 Stillwell oaks Cir
CITY: ~~Mint Hill~~ Charlotte
STATE: NC ZIP: 28212
WORK PHONE: 704-904-3342
MOBILE PHONE: _____
FAX: _____
E-MAIL: donaldosantos@icloud.com

13. **OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:**

NAME: _____
ADDRESS: _____
CITY: _____
STATE: _____ ZIP: _____
WORK PHONE: _____
MOBILE PHONE: _____
FAX: _____
E-MAIL: _____

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208 OFFICE: (980) 314-1680, FAX: 704-336-6894

Revised on: 03/27/19

14. SEPTIC SYSTEM PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. 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. The permit is valid for either sixty (60) months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

J.L (Initial here for septic system applications)

15. WELL PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Well Permit shall become invalid. 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. The permit is valid for a period of twelve (12) months from the date of issuance.

_____ (Initial here for well applications)

16. APPLICATION SIGNATURE SECTION:

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below. A PROPOSED PLOT PLAN is required to be submitted with each application.

Joaquin Lucio Lopez — 11-18-19

Property Owner's or Owner's Legal Representative Signature — Date

---

OFFICE USE ONLY

○ SURVEY PLAT TO SCALE SUBMITTED ○ SCALED SITE PLAN SUBMITTED ○ UN-SCALED SITE PLAN SUBMITTED

SEPTIC APPLICATION FEE RECEIVED: $ _____ DATE FEE RECEIVED: _____

WELL APPLICATION FEE RECEIVED: $ _____ DATE FEE RECEIVED: _____

APPLICATION PROCESSED BY: _____

GWS FILE NUMBER ASSIGNED: _____

APPLICATION ID NUMBER ASSIGNED: _____

COMMENTS:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208 OFFICE: (980) 314-1680, FAX: 704-336-6894

Revised on: 03/27/19

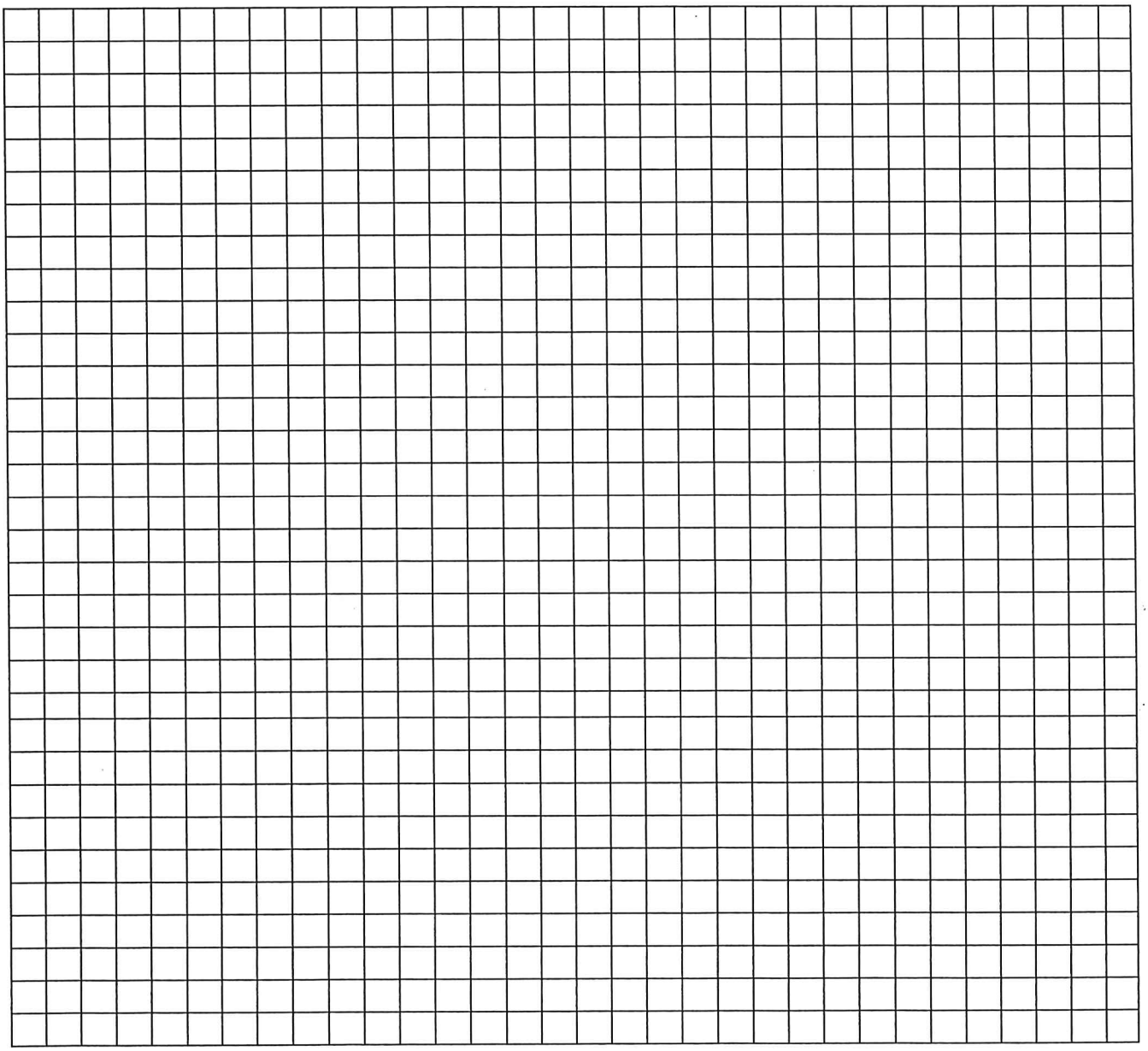
File #: _____

PROPOSED PLOT PLAN

A drawing showing the locations of the following items is required: existing and proposed property lines with dimensions, easements or right-of-ways, proposed building pad(s) or existing building footprint(s), all appurtenances (garage, driveway, deck, pool, etc.), location of existing or proposed well(s), location of existing or proposed sewer lines and sewage disposal systems, surface water bodies, and any aboveground or underground storage tanks. Provide names for all roads that adjoin the property.

Street Address: _____ Tax Parcel #: _____

Subdivision Name: _____ Lot #: _____



_____ _____

Property Owner's or Owner's Legal Representative Signature Date

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208, OFFICE: (980) 314-1680, FAX: 704-336-6894

Revised on: 03/27/19