SUPERVISOR/ADMINISTRATIVE PROFESSIONAL CHECKLIST

☒ NEW SEPTIC ☐ REPAIR ☐ USE EXISTING ☐ MODIFIED PLOT PLAN ☐ ALTERATION

File Number: 6547A

Assigned Inspector: Patrick M.

☒ IP $250.00: QO 4/24 Initial/Date

☐ IP Commercial $450.00: _____ Initial/Date

☐ CA & OP $400.00: _____ Initial/Date

☐ Alteration Fees $300: _____ Initial/Date

☐ Modified Plot Plan Fees $100.00: _____ Initial/Date

☐ Use Existing Fees $100.00: _____ Initial/Date

☐ Use Existing Approved ☐ Use Existing Denied

☒ Send IP permit for signature: 5/1/24 MQ ☒ Signature received: 5/3/24 MQ

☒ Floor plans reviewed

☐ Generate CA ☐ Approve as Noted in Winchester

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

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

☐ Certified operator contract is on file: _____

☒ Septic file complete: _____

☐ Release final hold in Winchester: _____

Comments:

6547A/14592

MECKLENBURG COUNTY
HEALTH DEPARTMENT

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: 00117754
STREET ADDRESS: 20101 Knox Road
CITY: Cornelius
STATE: NC **ZIP:** 28031
SUBDIVISION NAME:
LOT #: **LOT SIZE (acres):** 2.07

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: 3,000
NUMBER OF BEDROOMS: 4
NUMBER OF OCCUPANTS: 8

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?** _____ ☑ UNKNOWN

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

12. **PROPERTY OWNER:**

NAME: Allen Darby
ADDRESS: 20101 Knox Road
CITY: Cornelius
STATE: NC ZIP: 28031
WORK PHONE:
MOBILE PHONE:
FAX:
E-MAIL:

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

**Owner's Authorization form is required if legal representative is submitting application*

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

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
3205 Freedom Drive, Suite 8000, Charlotte, NC 28208
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.

AD (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.

Allen Darby

Property Owner's or Owner's Legal Representative Signature

3/27/2024

Date

OFFICE USE ONLY

O SURVEY PLAT TO SCALE SUBMITTED O SCALED SITE PLAN SUBMITTED O 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 Drive, Suite 8000, Charlotte, NC 28208
OFFICE: 980-314-1680, FAX: 704-336-6894 Email: Wellreg@MecklenburgCountyNC.gov

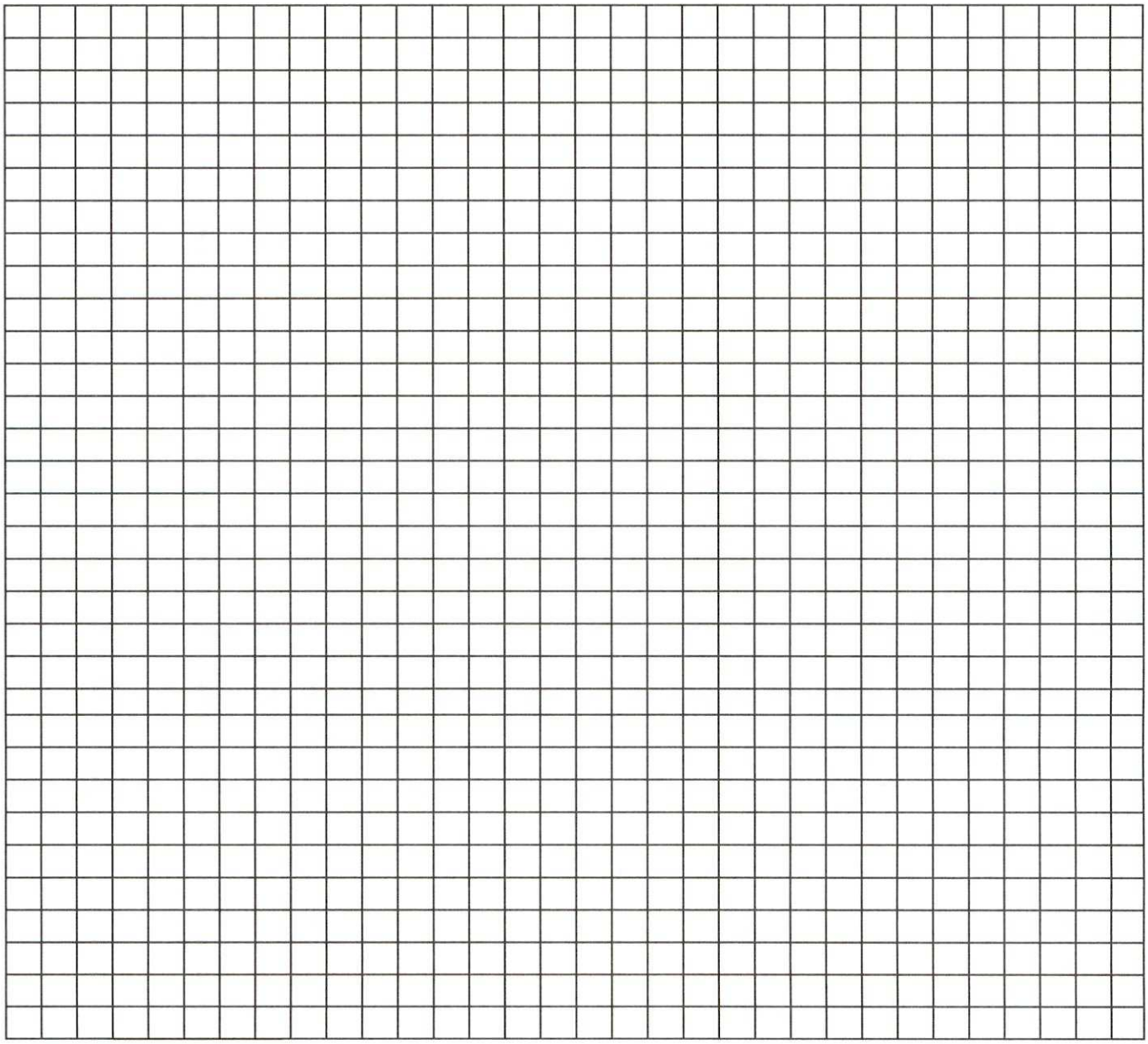
File #: _____

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: 20101 Knox Road Tax Parcel #: 00117754

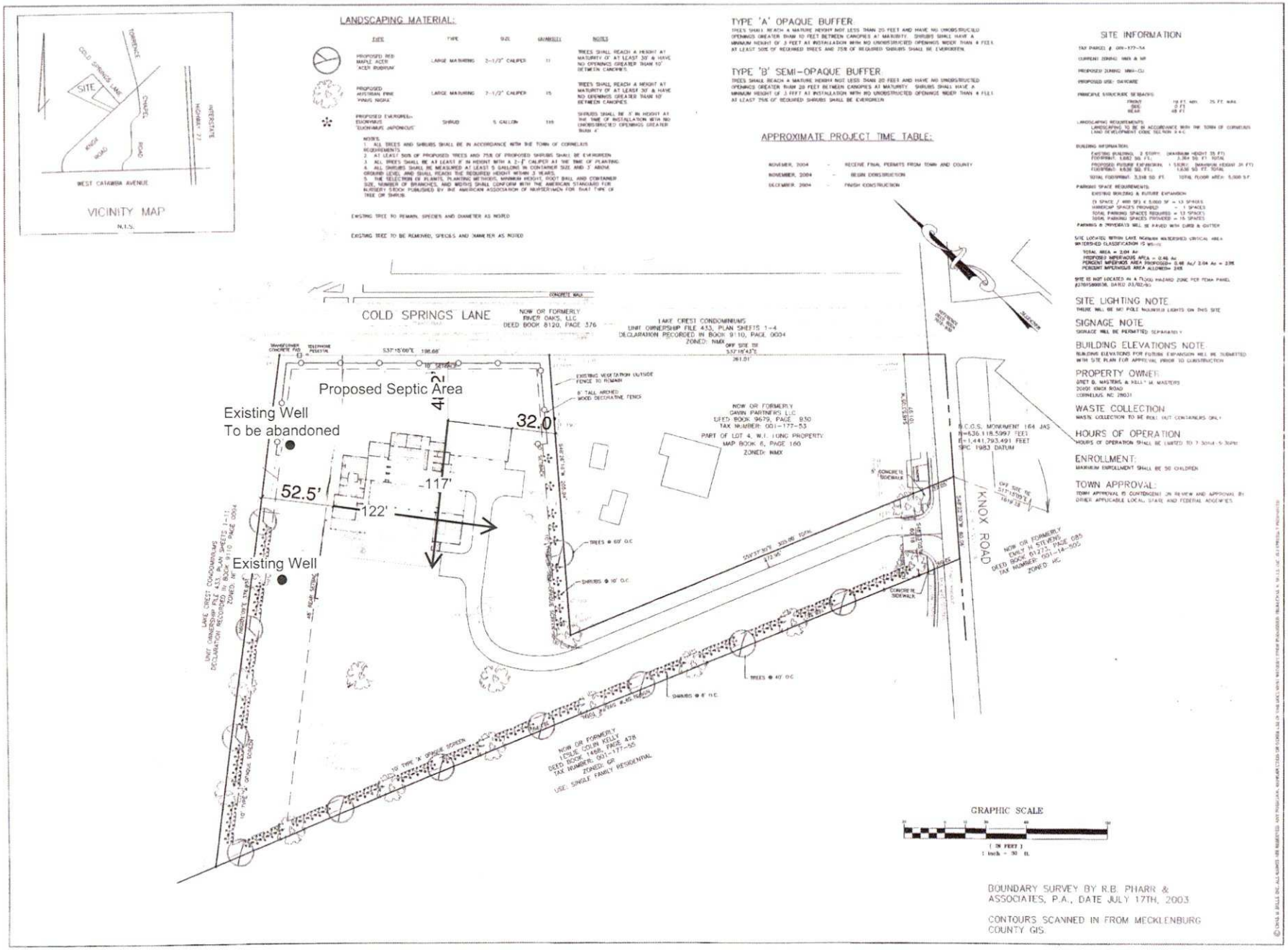
Subdivision Name: Channel View Lot #: _____



Allen Darby
Property Owner's or Owner's Legal Representative Signature

3/27/2024
Date

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
3205 Freedom Drive, Suite 8000, Charlotte, NC 28208
OFFICE: 980-314-1680, FAX: 704-336-6894 Email: Wellreg@MecklenburgCountyNC.gov



BOUNDARY SURVEY BY R.B. PHARR & ASSOCIATES, P.A., DATE JULY 17TH, 2003.

CONTOURS SCANNED IN FROM MECKLENBURG COUNTY GIS.

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	04/15/24	**Amount:**	250.00
Receipt #:	148419	**Tendered:**	250.00
Check / Auth #:	MC 46094Z	**Returned:**	0.00
Received By:	ALVARJS		

Account Information

Account #: 200000
Contractor: ALLEN DARBY
Attn:
Address:
Address:
City/State/Zip:

Item	Description	Quantity	Unit Price	Total Price
0701	Improvment Permit App-Residen 20101 KNOX RD	1	250.00	250.00

Permit#

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

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
625.00	2,495.00	747.50		555.00	

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	08/12/24	**Amount:**	200.00
Receipt #:	150348	**Tendered:**	200.00
Check / Auth #:	VISA 06838D	**Returned:**	0.00
Received By:	PLACILJ		

Account Information

Account #: 200000
Contractor: AR TAYLOR
Attn:
Address:
Address:
City/State/Zip: ,

Item	Description	Quantity	Unit Price	Total Price
0703	Septic Operational Permit 20101 KNOX RD	1	200.00	200.00

Permit#

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

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
		2,737.50			

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date: 08/12/24
Receipt #: 150349
Check / Auth #: VISA 06838D
Received By: PLACILJ

Amount: 200.00
Tendered: 200.00
Returned: 0.00

Account Information

Account #: 200000
Contractor: AR TAYLOR
Attn:
Address:
Address:
City/State/Zip: ,

Item	Description	Quantity	Unit Price	Total Price
0734	Septic Construction Authorizat 20101 KNOX RD	1	200.00	200.00

Permit#

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

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
		2,737.50			

MECKLENBURG COUNTY
Health Department

Raynard Washington, PhD, MPH
Health Director

(704) 336-4700

Addendum to Application for
New Well or Septic System Installation
Abandonment or Repair of Existing Well or Septic System

Your signature below confirms the following:

1. The information on the application is true, complete and accurate.

2. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliances with applicable laws and rules.

3. I acknowledge that _____ is acting as my legal representative (agent) in the submittal of the application for a water supply well or septic permit located at

   20101 Knox Rd Cornelius NC 28031
   _____.
   Number Street Town
   (Or Parcel Number)

Allen Darby
_____
Property Owner (print name)

Allen Darby
_____
Property Owner (signature)

4/15/2024
_____
Date

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

(Complete all fields in full)

OWNER: Allan Darby DATE EVALUATED:
ADDRESS: 20101 Knox Road Cornelius, NC 28031
PROPOSED FACILITY: 4-Bedroom House PROPOSED DESIGN FLOW (.0400): 480 gpd PROPERTY SIZE: 2.07 Acres
LOCATION OF SITE: 20101 Knox Road Cornelius, NC 28031 PROPERTY RECORDED: Unknown
WATER SUPPLY: ☐ Public ☒ Single Family Well ☐ Shared Well ☐ Spring ☐ Other WATER SUPPLY SETBACK: 50'
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Domestic ☐ High Strength ☐ IPWW

PROFILE #	.0502 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY .0503 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY .0503 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .0504 SOIL WETNESS/ COLOR	OTHER PROFILE FACTORS .0505 SOIL DEPTH	OTHER PROFILE FACTORS .0506 SAPRO CLASS	OTHER PROFILE FACTORS .0507 RESTR HORIZ	.0509 PROFILE CLASS & LTAR*	.0503 SLOPE CORRECTION
AB 1	L 3-4%	0"-12"	Br CL WSBK	SS SP FR SEXP		48"			0.3	1"
		12"-48"	R C SBK	SS SP FR SEXP						
AB 2	L 3-4%	0"-12"	Br CL WSBK	SS SP FR SEXP		60"			0.3	1"
		12"-60"	R C SBK	SS SP FR SEXP						
AB 3	L 3-4%	0"-6"	Br CL WSBK	SS SP FR SEXP		48"	Few to common saprolite inclusions 33"-48".		0.3	1"
		6"-33"	R C SBK	SS SP FR SEXP						
		33"-48"	R CL WSBK	SS SP FR SEXP						
AB 4	L 23-4%	0"-2"	Br CL WSBK	SS SP FR SEXP		48"	Few to common saprolite inclusions 30"-48".		0.3	1"
		2"-30"	R C SBK	SS SP FR SEXP						
		30"-48"	R CL WSBK	SS SP FR SEXP						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.0508)	536 ft^2	642ft^2
System Type(s)	PPBPS 6' Centers	PPBPS 6' Centers
Site LTAR	0.3	0.3
Maximum Trench Depth	36"	36"

SITE CLASSIFICATION (.0509):
EVALUATED BY:
OTHER(S) PRESENT:

Comments:

Department of Health and Human Services
Environmental Health Section
On-site Water Protection Branch

Property ID: 117754
Lot #: ---
File #: 6547A
AppID: 14592

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Allen Darby
Applicant: Same
Address: 20101 Knox Rd.
Date Evaluated: 4/24/2024
Proposed Facility: 4 BR SFR
Design Flow (.0400): 480 GPD
Property Size: 2.02 ac.
Location of Site: See file
Property Recorded: After Jan. 1, 1983
Water Supply: [ ] Public [X] Single Family Well [ ] Spring [ ] Other:
Evaluation Method [X] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [X] Domestic [ ] Industrial Process [ ] High Strength

PROFILE #	.0502 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .0503 Structure/ Texture	SOIL MORPHOLOGY .0503 Consistence/ Mineralogy	PROFILE FACTORS Matrix Soil Color	PROFILE FACTORS .0504 Soil Wetness/ Color	PROFILE FACTORS .0505 Soil Depth (IN.)	PROFILE FACTORS .0506 Sapro Class	PROFILE FACTORS .0507 Restr Horiz	General Comments / Other	0.0509 Profile Class & LTAR	0.0502 Slope Correction (*Max Trench Depth Low Side*)
1	L 2 - 4%	0 - 8	Wk, Sbk, SCL	Fr, SS, SP	RB	N/A	>48"	N/A	N/A	C: Sap. inclus. & fine mica flakes @ 31"+	S 0.30	36"
		8 - 31	Mo, Sbk, C	Fr, SS, SP, SEXP	R							
		31 - 48	Wk, Sbk, CL	Fr, SS, SP	R							
2	L 2 - 4%	0 - 29	Mo, Sbk, C	Fr, SS, SP, SEXP	R	N/A	>48"	N/A	N/A	F-C: Sap. inclus. & mica flakes 15 - 42" M: Sap. inclus. & mica flakes 42"+	S 0.30	36"
		29 - 42	Mo-Wk, Sbk, CL	Fr, SS, SP	R							
		42 - 48	Wk, Sbk, CL	Fr, SS, SP	R							

Description	Initial System	Repair System
Available Space (.0508)	---	---
System Type(s)	---	---
Site LTAR	0.30	0.30
Maximum Trench Depth	36"	36"

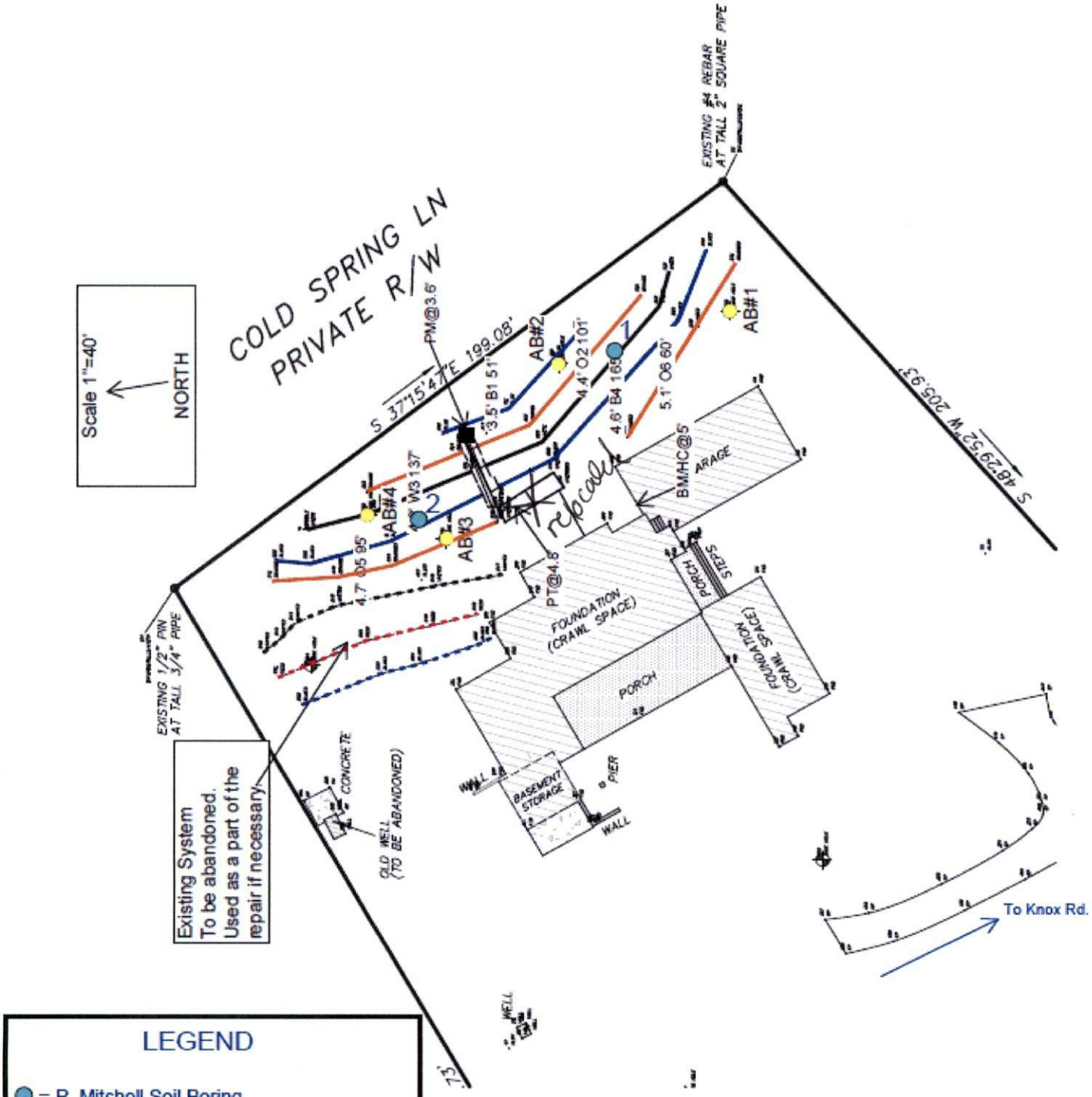
Soil Evaluation By: P. Mitchell, REHS, LSS
Soil Classification (.0502 - .0507): S
Other(s) Present: H. Ray
Site Classification (.0509): ---

COMMENTS:

Soil & Site Evaluation Map

Overlaid System Design Layout & Soil Borings

by Michael Athanas & Associates



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 #: 30014592 GWS File #: 6547A Tax Parcel #: 001-177-54

- 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):** 5/1/2029

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

Structure Type: HOUSE Size (ft^2): 300 # Bedrooms: 4 Max. Occup.: 8

Building Foundation: Crawl Space Water Supply: Private Well

II. Initial System Type: PPBPS-V (pressurized) **System Classification:** IIIb

Initial System Specifications:

Design Flow (gpd): 480 LTAR (gpd/ft^2): 0.3 Septic Tank Size (gal): 1000 Pump Tank Size (gal): 1000

Trench Width (ft): 2 Trench Spacing (ft): 6 Absorption Area (ft^2): 800 Total Trench Length (ft): 267

Maximum Trench Depth (in): 36 Depth of Media (in): 22 Distribution Device: Pressure Manifold

III. Repair System Type: PPBPS-V (pressurized) **System Classification:** IIIb

Repair System Specifications:

Design Flow (gpd): 480 LTAR (gpd/ft^2): 0.3 Septic Tank Size (gal): 1000 Pump Tank Size (gal): 1000

Trench Width (ft): 2 Trench Spacing (ft): 6 Absorption Area (ft^2): 1600 Total Trench Length (ft): 533

Maximum Trench Depth (in): 36 Depth of Media (in): 22 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

Signature: _____

Date Issued: 5/1/2024

Owner/Legal Agent: Allen darby
Print Name

Signature: Allen Darby

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 #: 30014592 GWS File #: 6547A

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.
- SEE CONSULANT DESIGN FOR INSTALLTION INFORMATION

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:

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- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Heather Ray

Signature:

Date Issued: 5/1/2024

Owner/Legal Agent: Allen Darby
Print Name

Signature: DocuSigned by: Allen Darby
DF587ADC1EB6422...

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

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Trench Width (ft): ~~3~~ 2 Trench Spacing (ft): ~~9~~ 6 Absorption Area (ft^2): 800 Total Trench Length (ft): 267

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III. Repair System Type: PPBPS-V (pressurized) **System Classification:** IIIb

Repair System Specifications:

Design Flow (gpd): 480 LTAR (gpd/ft^2): 0.3 Septic Tank Size (gal): 1000 Pump Tank Size (gal): 1000

Trench Width (ft): ~~3~~ 2 Trench Spacing (ft): ~~9~~ 6 Absorption Area (ft^2): 1600 Total Trench Length (ft): 533

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- 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: 5/1/2024

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

NC DHHS
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IMPROVEMENT PERMIT for a RESIDENTIAL
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- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

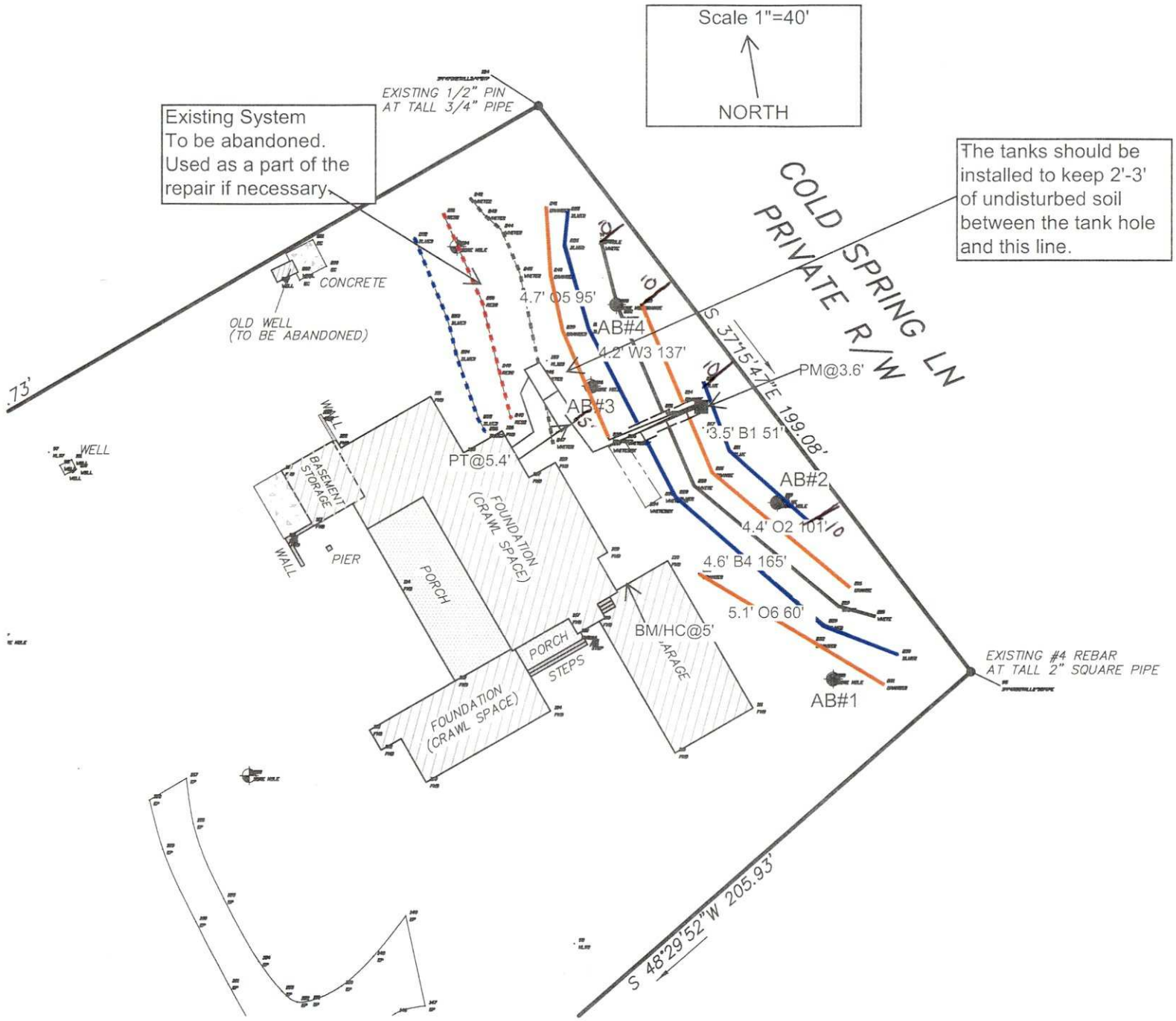
Authorized Agent: Heather Ray

Signature: _____

Date Issued: 5/1/2024

Owner/Legal Agent: _____
Print Name

Signature: _____


Scale 1"=40'
NORTH
Existing System
To be abandoned.
Used as a part of the
repair if necessary
The tanks should be
installed to keep 2'-3'
of undisturbed soil
between the tank hole
and this line.
EXISTING 1/2" PIN
AT TALL 3/4" PIPE
COLD SPRING LN
PRIVATE R/W
CONCRETE
OLD WELL
(TO BE ABANDONED)
.73'
WELL
4.7' O5 95'
AB#4
4.2' W3 137'
S 37°15'47"E 199.08'
PM@3.6'
AB#3
3.5' B1 51'
PT@5.4'
AB#2
4.4' O2 101'
4.6' B4 165'
5.1' O6 60'
BM/HC@5'
AB#1
EXISTING #4 REBAR
AT TALL 2" SQUARE PIPE
S 48°29'52"W 205.93'
WALL
BASEMENT
STORAGE
WALL
PIER
PORCH
FOUNDATION
(CRAWL SPACE)
PORCH
STEPS
FOUNDATION
(CRAWL SPACE)
GARAGE

MA&A
SOIL & ENVIRONMENTAL CONSULTANTS

MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
556 Walden Trail
Weddington, NC 28173
(704) 576-3887

Reference: Data Sheet for 20101 Knox Road;
PID# 00117754;
Mecklenburg County, NC

House Footprints: 122' x 117'
Building Setback: 5 unless foundation drain
Water Source: Private well
Proposed # of Bedrooms/Gallons Per Day: 4/480 gpd
Initial System LTAR: 0.3 gpd/ft2
Suggested Initial System Type: PPBPS; 6' Centers; Vertical Configuration
Repair System LTAR: 0.3 gpd/ft2
Repair System Type: PPBPS; 6' Centers; Vertical Configuration
Distribution: Pressure Manifold
Number of Panels: 60
Flow per Tap: 4@ ½" SCH 40 at 7.11 gpm
Tap Size and Material: ½" SCH 40
System Flow: 28.44 gpm
Dosing Volume: 216 gallons per dose
Pump Run Time: 7.59 minutes
Elevation Head: 6.8'
Friction Head: 0.83'
Pressure Head: 2'
Total Dynamic Head: 9.63'
Supply Line Length: 45'
Proposed Trench Bottom Depth: 36"
Septic/ Pump tank size: 1000 gallon Septic Tank; 1000 gallon Pump Tank

Line	Design Length	Repair Length	Actual Length	Number of Panels	Elevation
Blue 1		51'	51'		3.5'
Orange 2	**67'**	29'	**101'**	**15**	**4.4'**
White 3	**67'**	65'	**137'**	**15**	**4.2'**
Blue 4	**67'**	93'	**165'**	**15**	**4.6'**
Orange 5	**67'**	23'	**95'**	**15**	**4.7'**
Orange 6		60'	60'		5.1'

Initial System: 268' PPBPS; 6' Centers; Vertical Configuration
Repair System: 321' PPBPS; 6' Centers; Vertical Configuration
House Corner: 5' **Pump Tank:** 5.4' **PM:** 3.6' **Bench Mark:** 5.0'; See site plan

Comments: The purpose of the evaluation is to permit this site for a 4-bedroom house

- The entire system including the existing system has been located by the surveyor.
- **The septic area should be fenced off and all vehicular traffic should be kept off of the initial system area as well as the repair area. Failure to do so will result in the permit being revoked.**
- The tanks should be installed to keep 2'-3' of undisturbed soil between the tank hole and the O5 line.
- The house is currently under construction.
- The existing system maybe also be used for repair if necessary.
- No cuts of 2' or greater within 25' down slope of the system and 15' on the side slope.
- There are currently two wells on the property. The one that is closest to the septic area, should be abandoned through Mecklenburg County's process.
- The tanks should be installed no greater than 36" from the surface or traffic rated tanks will be necessary.
- The existing fence may need to be removed to allow the system to be installed as shown.
- All aspects of this design should meet all 18E Rules.

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 # 6547a App# 14592 Tax Parcel# 0011754

Property Owner: Allen & Joanne Darby

Job Location Address: 2401 Knox Rd

City: Cornelius State: NC Zip Code: 28031

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

   ☐YES ☐ NO

   Comments: NA

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: _____

*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.**

Heather Ray — Authorized Agent

7-16-24 — Date

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 #: 6547A Permit #: 30014592 Tax Parcel #: 00117754

Property Owner: Allen & JoAnne Darby

Job Location Address: 20101 Knox Rd

City: Cornelius State: NC Zip Code: 28031

Operation Permit Issuance Date: 8/12/24 Contractor Name: Raise Building

Permitted Design Flow: 480 GPD Liquid Capacity of Dosing Tank: 1000 gallons

Liquid Capacity of Septic Tank: 1000 gallons Tank Manufacture Shoaf Effluent Pump Model: Liberty 1/2 hp

Drainfield Installation ☐ N/A

Trench Depth: 36 inches

Trench Width: 2 feet

Line Spacing: 6 feet (O.C.)

Total line length: 268 feet

# of Lines: 4 @ 67 feet

Depth of Media: 22 inches (Type) PPBPS

Depth of Cover: 6+ inches

Distribution Device: Pressure Manifold

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

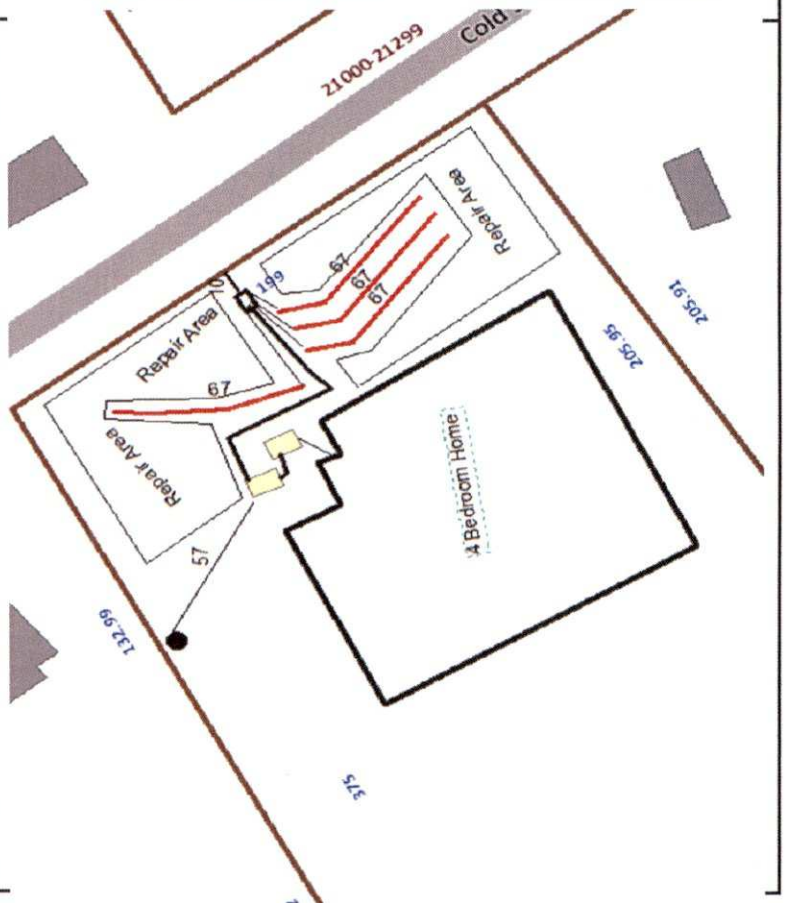
Distance from Water Supply Source: 50 feet

Inspection Dates

Tank(s) Inspected: 7/17/24

Excavation Inspected: 7/19 & 7/24

Pump & Controls Inspected: 8/5/24



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: IIIb/PPBP /P/Na/NA (IIIPPBPS)

DENR Authorized Agent: Heather Ray Signature: Heather Ray

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 #: 6547A Permit #: 30014592 Tax Parcel #: 00117754

Property Owner: Allen & JoAnne Darby

Job Location Address: 20101 Knox Rd

City: Cornelius State: NC Zip Code: 28031

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: IIIb

*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: HEather Ray Date: 8/12/24

Signature: HEather Ray



MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
556 Walden Trail
Weddington, NC 28173
(704) 576-3887

Heather Ray
Mecklenburg County Health Department
3205 Freedom Drive, Suite 8000
Charlotte, NC 28208

RE: 20101 Knox Road Cornelius, NC PID# 00117754

Dear Ms. Ray:

Please see the statement below concerning the system installation at 20101 Knox Road Cornelius, NC PID# 00117754

Michael Athanas and Associates was able to visit the site to look at the system installation. After speaking with the installer, it appears that the system was installed according to our specifications and in the area delineated.

Please let me know if you need any further information. Thank you.

Sincerely,

Michael Athanas
Michael Athanas and Associates