IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 233677

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

PIN # 4614827236

APPLICANT/OWNER: Greg Allen APPLICANT ADDRESS: 132 Chasestone Ln.

SITE ADDRESS: 132 Chasestone Ln. Mooresville, NC PHONE: 704-929-0814 ALT. PHONE —

SITE DIRECTIONS: Brawley School Rd → R on Tuskarora → L on Syllabub → R on Ballycastle → R on Chasestone → lot at end SAP CONTROLLED: ☐ YES ☑ NO

SUBDIVISION: CL+T SECTION: G LOT # 341 LOT AREA: .81 ac DESIGN FLOW: 480 gpd L.T.A.R.: .3 (.3 repair)

Septic Tank existing 1500 (gal)	STB	Date	☐ New System ☐ Repair ☑ Expansion System Type: I II III (IV) V VI	☑ Residence	No. Bedrooms 4	Water Supply
Pump Tank existing 1500 (gal)	PT	Date	System Description: LP PPBPS	☐ Business	No. Persons 8	☑ Private
Pump Make	Model	Serial #	Repair System Description: TS1 LP PPBPS	☐ Other	No. Employees	☐ Public
# Nitrification Fields 1	# Lines 2	Linear Ft 67'	Maintenance Agreement Required: ☑ YES ☐ NO	☑ Slab	☑ Crawl Space	☐ Community
Trench Width 24"	Trench Bottom Depth(Low side) 33"/33" high side	Gravel Depth —	☐ GRAVITY ☑ PRESSURE	☐ Basement w/plumbing	☐ Basement w/o plumbing	

Comments / Conditions: * Install no deeper than 33" *
* Maintain 50' from existing well when installing new lines.

INITIAL SITE SKETCH

See attached site plan by Carolina Soil + Septic Consulting

AS BUILT SKETCH

7/20/16
L1 34' } Installed approximately
L2 33' } where permitted
2' of pressure head set on all lines OK

7-27-18: Received maintenance agreement

Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

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

Owner / Applicant Signature: [signature] Date: 3/6/18 Installed by: Larry Hinkle

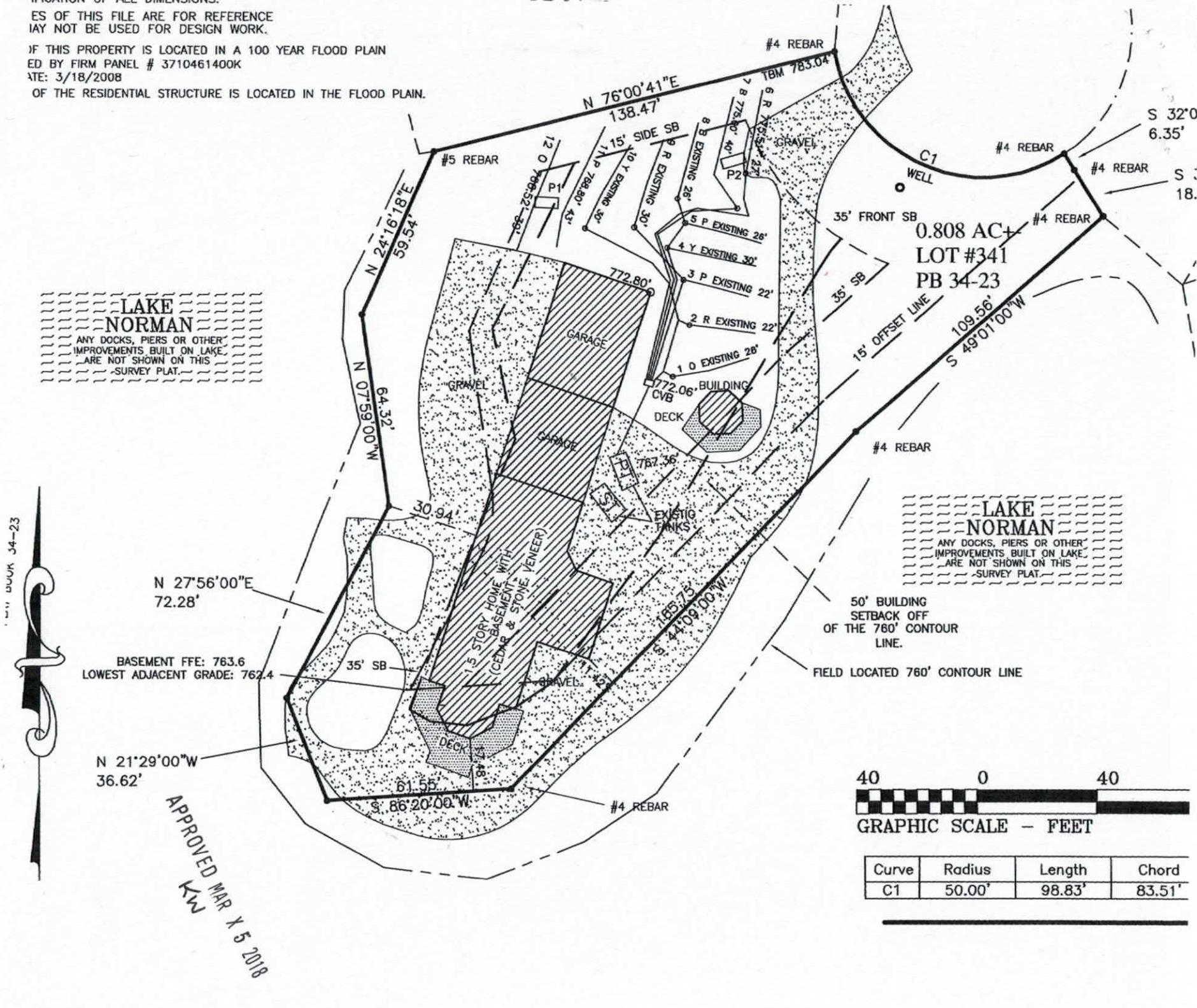
IMPROVEMENT PERMIT by: Kayla Wilson Date: 3-5-18 OPERATION PERMIT by: Tom Shuck Date: 7/27/2018

AUTHORIZATION TO CONSTRUCT by: Kayla Wilson Date: 3-5-18 Existing System Inspected by: Date:

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

ES OF THIS FILE ARE FOR REFERENCE
IAY NOT BE USED FOR DESIGN WORK.

)F THIS PROPERTY IS LOCATED IN A 100 YEAR FLOOD PLAIN
ED BY FIRM PANEL # 3710461400K
ATE: 3/18/2008
OF THE RESIDENTIAL STRUCTURE IS LOCATED IN THE FLOOD PLAIN.



Curve	Radius	Length	Chord
C1	50.00'	98.83'	83.51'

LOW PRESSURE PPBPS SYSTEM
INSTALL SPECIFICATIONS

Owner/Applicant Information

Owner:	Greg Allen
Address:	132 Chasestone Ln. Mooresville, NC 28117
Client:	Greg Allen
Phone Number:	704-929-0814

Location:	132 CHASESTONE LN, CL&T SECTION 6 LOT 341
County:	IREDELL

Source of Wastewater Flow:	4 Bedroom Single Family Residence Total
Estimated Gallons Per Day Flow:	480 Total
System Flow:	6.15

Design Specifications

Expansion Drainfield Size:	67
Required Expansion Drainfield Size:	66.66666667
Loading Rate (gpd/ft.^{2}):	0.3
Depth of Gravel in Trench:	NA (PPBPS)
Gravel Size:	NA (PPBPS)
Trench Depth:	33 in.
Trench Width:	24 in.
Existing Traffic Rated Septic Tank Size:	1500 gal.
Existing Traffic Rated Pump Tank Size:	1500 gal.
Repair Trench Width:	24 in.
Repair Trench Depth:	32 in.
Estimated Supply Line Length:	26
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	9.98
Dosing Volume:	54.00
Recommended Pump:	Use existing pump or replace with County Approved
Recommended Float Controls:	Use existing floats or replace with County Approved
Recommended Control Panel:	Use existing Control Panel or Replace with County Approved
Pressure Head:	2 ft.
Friction Head:	0.46
Elevation Head:	10.70
Total Dynamic Head:	15.80
Threaded Union:	In Tank
Gate Valves:	1 in Tank 1 per lateral
Check Valves:	In Tank
Anti-Siphon Hole:	**N/A**
Additional Comments:	Soil suitability performed by Carolina Soil & Septic Consulting, PLLC

APPROVED MAR X 5 2018
KW

**Pump tank draw down based on a volume basis of 31 gallons per inch. Draw down may vary among pump tank manufacturers.*

132 CHASESTONE LN, CL&T SECTION 6 LOT 341
FIELD LAYOUT SPECIFICATIONS

LAYOUT FOR THE EXPANSION FROM 3 BEDROOMS TO A 4 BEDROOM HOME

March 2, 2018

LINE #	FLAG COLOR	IH	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM				783.04		
INSTR. 1						
HOUSE CNR				772.80		
P. TANK				767.36		
1	***EX. O***			***772.06***	***26***	***26***
2	***EX. R***			***772.64***	***22***	***22***
3	***EX. P***			***773.29***	***22***	***22***
4	***EX. Y***			***773.87***	***30***	***30***
5	***EX. P***			***774.34***	***26***	***26***
6	***RED***			***775.51***	***28***	***27***
7	***BLUE***			***775.00***	***45***	***40***
7	***EX. B***			***773.94***	***26***	***26***
8	***EX. R***			***773.01***	***30***	***30***
9	***EX. Y***			***770.41***	***30***	***30***
10	PINK			768.80	43	43
11	ORANGE			766.52	39	39
				Total	**367**	**361**

	LINE LENGTH	SYSTEM TYPE	SOIL LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION		
****System***	***67***	***MOD.***	***0.300***	***PPBPS***	***LOW PRESSURE***		
Ex. System	***212***	***MOD.***			***LOW PRESSURE***		
Repair	43	MOD.	0.300	PPBPS	LOW PRESSURE	50% REDUCTION	77.4 GPD
	39	MOD.	0.300	TS-I PPBPS	LOW PRESSURE	25% REDUCTION	46.3 GPD
							TOTAL 124.2 GPD

Notes: ** TBM located at front right EIP(see site plan)
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**IH, and FS indicate rod readings

Comments: **Lot platted 9-21-1976. Amount of repair laid out for the expansion of 1 bedroom only**
Two new lines to be ran off of individual valves, do not combine.
Existing lines distribution and valves as shown on Mecklenburg County permit/Site Plan.
Holes size in existing panel lines unknown and to be determined by installer if needed.
Existing pump to be reused or replaced as needed
Existing supply lines to be reused or replaced as needed.
Iredell County has permission from CS&SC to change tank and distribution device locations.

APPROVED MAR X 5 2018
KW

LOW PRESSURE PPBPS TAPSHEET
THE POINT ON NORMAN PHASE 5 MAP 3 LOT 539
SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench Area	Number of Panels
6	***RED***	***775.51***	***27***	0.156	**0.41**	81	6
7	***BLUE***	***775.00***	***40***	0.156	**0.41**	120	9
							15
	total	**feet =**	**67**	**gal/min =**	**6.15**		
			Des. Flow	**480**			
			Pump Run=	**8.78**			
			soil LTAR	**0.3**			

.156 equals 5/32 inch hole

*NOTES: HOLES SIZE OF EXISTING SYSTEM IS UNKNOWN AND TO BE DETERMINED BY INSTALLER.

APPROVED MAR X 5 2018
KW

DOSING CALCULATIONS

Address:	132 Chasestone		
Subdivision:	CL&T		
Section:	6		
Lot No:	341		
No. of Bedrooms	4	Total	
No. of Bedrooms	1	Expansion	
Design Flow	480	$^{gal}/_{day}$	Total
LTAR	0.300	$^{gal}/_{ft^2\ day}$	
PPBPS? (YES OR NO)	YES		
Supply Line Length	26	ft.	Existing
Supply Line Volume	9.984	gal.	
Required Feet of Line	66.66667	ft.	
Amount of Line from Layout	67	ft.	
Gallons per Minute	6.15	$^{gal}/_{min}$	
Existing Septic Tank Capacity	1500	gal.	Traffic Rated
Existing Pump Tank Capacity	1500	gal.	Traffic Rated
Panel Volume	3.6	gal.	
# of Panels	15		
Dosing Volume	54.00	gal.	

Note: Dosing Volume based on 100% of # of panels times 3.6 gal/panel

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

Tank Draw Down	1.7	*Generic Draw Down of 31 gal.per in.*	
Pump Run Time	8.78	minutes	
Elevation Head	10.7	ft.	
Pressure Head	2	ft.	
Friction Factor	1.78	ft./100 ft.	*(From the interpolater.)*
Friction Head	0.46	ft.	
Total Dynamic Head (+20%)	15.80	ft.	

APPROVED MAR X 5 2018
KW

*Notes: Supply line Volume based off of 3 inch PVC pipe per old Mecklenburg County permit/Site Plan
Elevation Head based off of top of ground at existing pump tank and top of existing CVB.

APPROVED MAR X 5 2018
KW

Sheet 1 of 1
PROPERTY ID #: 4614822236
COUNTY: Iredell

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

OWNER: Greg Allen
APPLICATION DATE: 2-26-18
ADDRESS: 132 Chesestone Ln Mooresville NC 28117
DATE EVALUATED: 2-22-18
PROPOSED FACILITY: Res
PROPOSED DESIGN FLOW (.1949): 480 total
PROPERTY SIZE: 0.81 ac
LOCATION OF SITE: 132 Chesestone Ln, Mooresville
PROPERTY RECORDED: yes
WATER SUPPLY: ☑ Private ☐ Public ☐ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☐ Auger Boring ☑ Pit ☐ Cut
TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
P 1	LSS/ FS 20%/2%	0-5	BR CL WFSBK	FR SS SP SE XP	N/A	49"	PS	N/A	PS
		5-30	RC MFSBK	FR SS SP SE XP					
		30-49	RYCL WFSBK	FR SS SP SE XP	-com sap				
		49-57	Var LSap M	FR SS SP SE XP	-Com R Cmins, com cc				0.3
P 2	LSS 4% Shot	0-3	B CL WFSBK	FR SS SP SE XP	N/A	47"	PS	N/A	PS
		3-26	RC MFSBK	FR SS SP SE XP					
		26-35	YR CL WFSBK	FR SS SP SE XP	-com sap				
		35-47	YR L WFSBK	FR SS SP SE XP	-com/many sap				0.325
		47-49	Var FSL Sap M	FR SS SP SE XP					
3									
4									

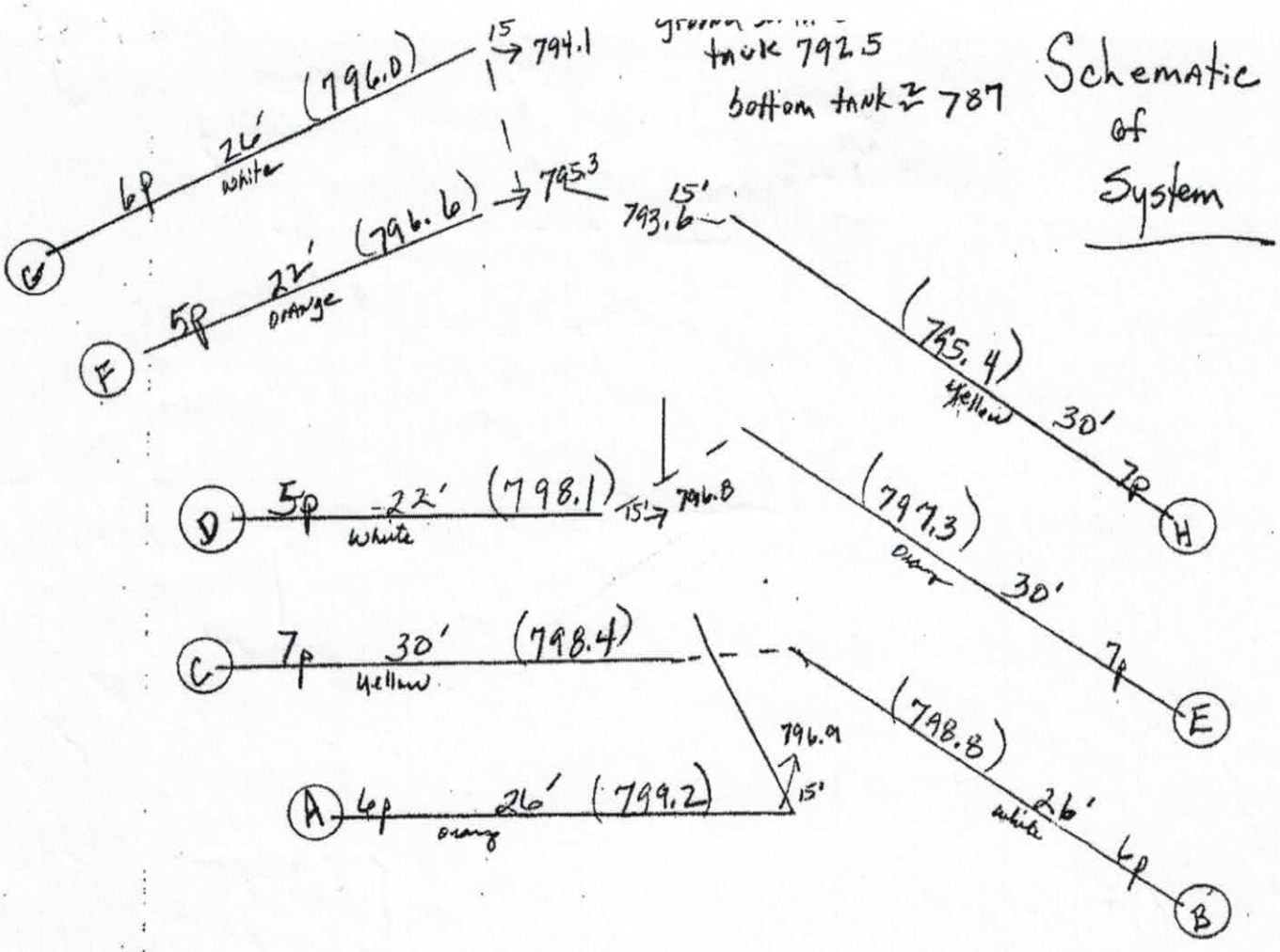
DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	LP PPBPS	LP PPBPS/TS-1 PPBPS
Site LTAR	0.325	0.3

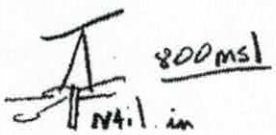
OTHER FACTORS (.1946): None
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Adrian Pruett
OTHER(S) PRESENT: Benjamin Aldridge, Jacob Conrad, David Deane, Greg Allen

COMMENTS:

KW *initial system will have LTAR of .3

Schematic of System



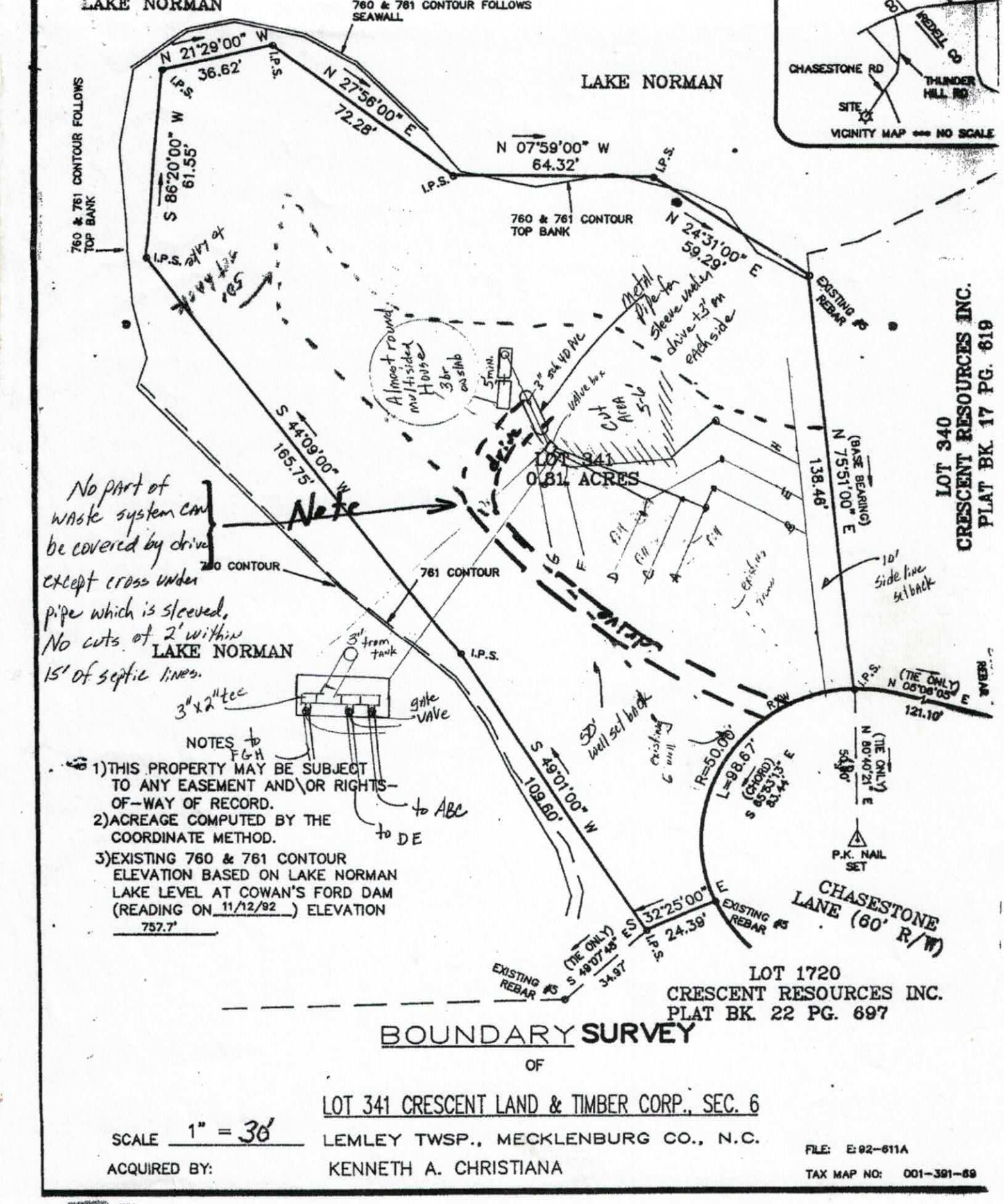


800 msl

N4.1 in road (flagged) control point

$\Sigma = 22'$

Well cover
Assumed 800' msl
○
R.P.



BOUNDARY SURVEY

OF

LOT 341 CRESCENT LAND & TIMBER CORP., SEC. 6

SCALE 1" = 30'

LEMLEY TWSP., MECKLENBURG CO., N.C.

ACQUIRED BY: KENNETH A. CHRISTIANA

FILE: E-92-611A

TAX MAP NO: 001-391-69

RECEIVED FEB 2 6 2018

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM Expansion Paid $350.00

Application For: ( ) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
(✓) Septic Improvement Permit (✓) Authorization to Construct ( ) Existing System Inspection ( ) Septic System Repair

THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED. APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS.

****

Page 2: *Site Plan Worksheet* form MUST accompany this application # 233677

The following optional attachments may also be submitted: (✓) Survey Plat, scaled no more than 1 inch = 60 feet
Place an (X) beside whichever is submitted if applicable (✓) Custom Site Plan, scaled no more than 1 inch = 60 feet

****

Applicant Information: **(PRINT CLEARLY)** Paid $500.00 3-6-18

Applicant Name: GREG ALLEN/CS&SC **Address:** 132 CHASESTONE LN., MOORESVILLE, NC **Zip:** 28117

Applicant Email: gregallenlkn@gmail.com **Phone:** 704-929-0814 **Alt. Phone:** _____

Owner Name: SAME **Address:** _____ **Zip:** _____

Owner Email: _____ **Phone:** _____ **Alt. Phone:** _____

****

Property Information:

Street Address: 132 CHASESTONE LN., MOORESVILLE, NC

Subdivision Name: CL&T **Section/Phase:** 6 **Lot Number:** 341

Driving Directions: BRAWLEY SCHL RD, TR ON TUSKARORA, TL ON SYLLABUB, TR ON BALLYCASTLE, BEAR R ON CHASESTONE, HOUSE IN CUL-DE-SAC ON R

****

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

CHECK FOUNDATION TYPE

( ) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
(✓) Bedroom(s) Addition
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem: _____

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

(✓) Crawl Space Foundation
(✓) Concrete Slab Foundation
( ) Basement with Plumbing
( ) Basement without Plumbing

Non-Residential Site Development: **Type of Business:** _____
Square Footage of Building: _____ **Max. Number of Employees:** _____ **Max. Number of Seats/Beds/Other:** _____

****

Water Supply: ( ) Replacement Well – Reason: _____
( ) Multi-connection Well **Number of Houses:** _____ **Number of Persons:** _____

( ) New Well (✓) Existing Well ( ) Community Well ( ) City Water ( ) Other Public Water

****

Desired Septic System Type: ***(you may rank in order of preference)*** **Year existing system installed:** _____
( ) No Preference ( ) Alternative ( ) Conventional ( ) Innovative (✓) Modified Conventional ( ) Other: _____

****

Please answer the following to the best of your ability:
( ) Yes (✓) No **Does the site contain any jurisdictional wetlands?**
( ) Yes (✓) No **Is any non-domestic sewage (i.e. industrial) to be generated?**
( ) Yes (✓) No **Is the site subject to approval by any other public agency?**

****

I have read this application and certify that the information provided herein is true, complete, and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed.

Signature: _____ 2-26-18
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

Applications for permits require the "signature of the owner or owner's legal representative" (15A NCAC 18A .1937). If the owner does not sign the application himself or herself, they can submit any one of the following documents to designate their legal representative:

Power of Attorney; Real Estate Contract; Estate executor; Bankruptcy trustee; Court ordered guardianship

In the absence of the above documentation, the property owner may provide the local health department with documentation that designates a legal representative. A property owner may:

Complete this form to document his or her legal representative, or provide his or her own form that contains the information in this form.

If there are multiple property owners, then all property owners must sign the form that designates a legal representative.

By signing a form that designates a legal representative for purposes of 15A NCAC 18A .1937, the property owner authorizes that representative to act on their behalf in matters pertaining to the application and permitting process, including signing or receiving any application, document or permit. The owner retains full responsibility to meet all permit conditions specified by the local health department.

I, William Greg Allen, am the legal owner(s) of the property located at 132 Chasestone Lane, Mooresville, NC 28117, identified as PIN (Parcel Identification Number) 4614-82-7236.000, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) Adrian Pruett, Carolina Soil & Septic, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

- Application for Improvement Permit (IP) / Authorization to Construct (AC)
- Improvement Permit (IP) / Authorization to Construct (AC)
- Application for soil-site evaluation (new/repair)
- Application/permit for private drinking water well/well abandonment
- Application for Compliance Inspection

I agree to abide by all decisions and/or conditions between the legal representative acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division.

[signature]	2/24/2018	[signature]	2/24/18
Signature of Owner(s)	Date	Signature of Witness	Date

Please return this signed form to the appropriate office:

Mooresville - Environmental Health
ronda.hart@co.iredell.nc.us
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

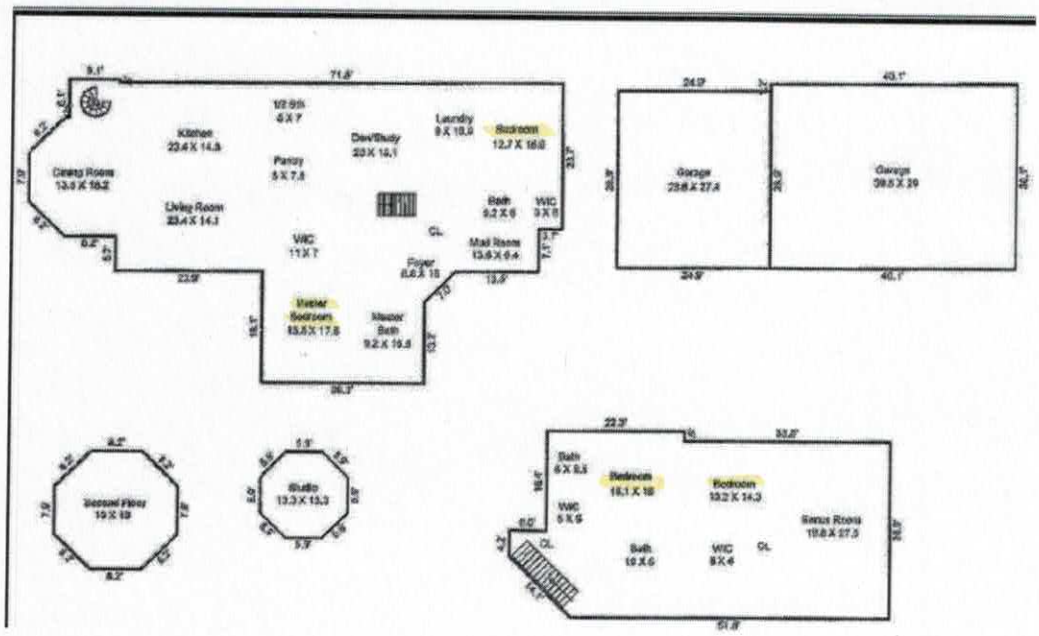
Statesville - Environmental Health
adrienne.shea@co.iredell.nc.us
Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677

Kayla Wilson

From: Greg Allen <gregallenlkn@gmail.com>
Sent: Friday, March 2, 2018 9:58 PM
To: Kayla Wilson; Adrian Pruett
Subject: 132 Chasestone Lane

Kayla it was nice meeting you at the property today. Attached as requested is the home layout showing the 4 bedrooms layout etc. Please let me know if you need anything else and when I can come by and pick up the permit etc. Many thanks.

Thanks,
Greg Allen
704-929-0814



Acknowledgement Of
Plans Submittal ONLY!
Kayla Wilson Date 3-5-18
Date 3/6/18