(BB)

IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # AP- 313169

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

PIN # 4629741783

APPLICANT/OWNER: 4 G Design Build APPLICANT ADDRESS: 488 Pineville Rd Statesville NC 28677

SITE ADDRESS: 582 Morrison Farm, Troutman 28166 PHONE: 704-664-3647 ALT. PHONE N/A

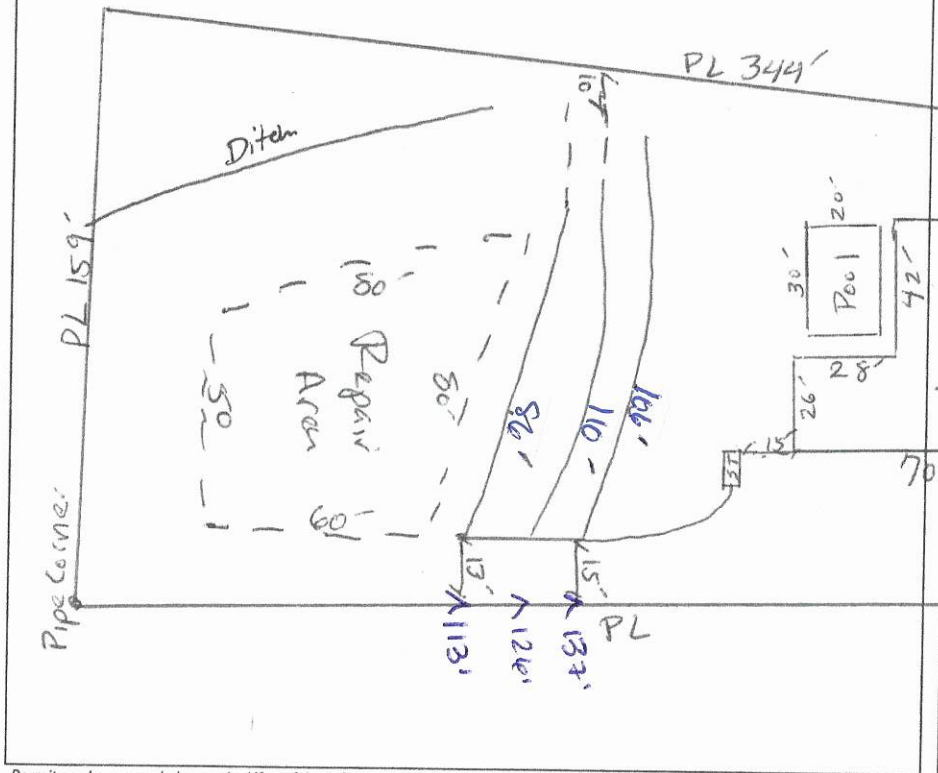
SITE DIRECTIONS: Perth Rd T/R State Park Rd T/L Morrison Farm Rd Lot on Right 634 SAP CONTROLLED: ■ YES ☐ NO

SUBDIVISION: Sunset Bay SECTION: — LOT # 21 LOT AREA: 1.1 ac DESIGN FLOW: 360 L.T.A.R.: 0.3

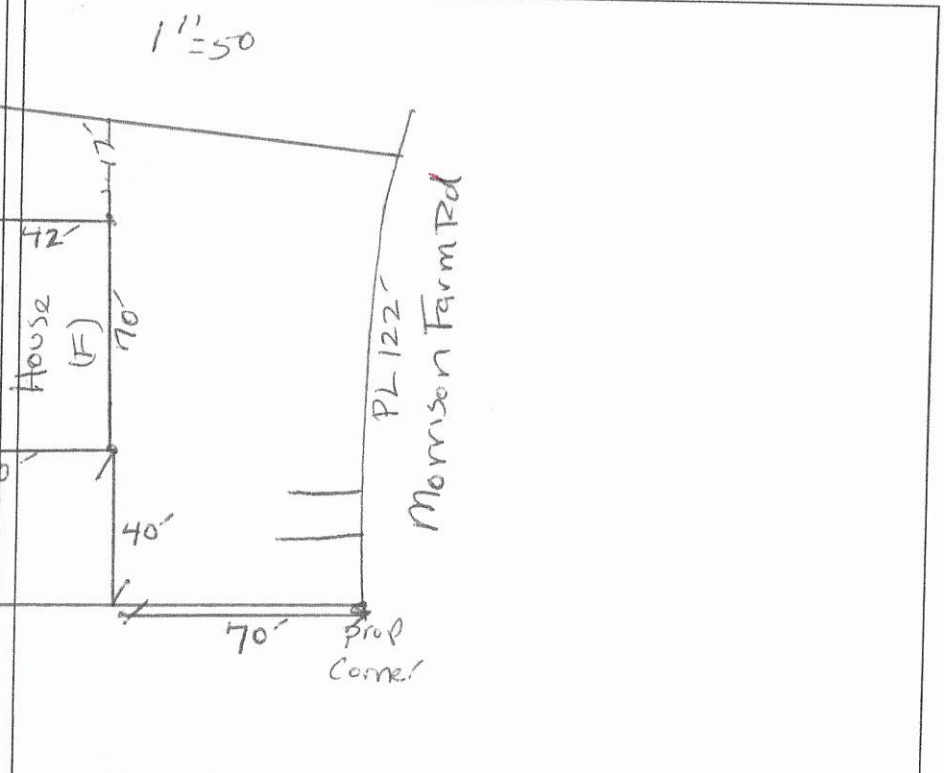
Septic Tank	1000	(gal)	STB SHOAF 760	Date	7/2/21	■ New System ☐ Repair ☐ Expansion System Type: I II III IV V VI		■ Residence	No. Bedrooms	3	Water Supply
Pump Tank	-	(gal)	PT	Date		System Description:	25% Reduction	☐ Business	No. Persons	6	☐ Private
Pump Make		Model		Serial #		Repair	50% Reduction	☐ Other	No. Employees		☐ Public
# Nitrification Fields	1	# Lines	3	Linear Ft	300'	Maintenance Agreement Required:	☐ YES ■ NO	■ Slab	☐ Crawl Space		■ Community
Trench Width	36"	Max Trench Bottom Depth	36"	Gravel Depth	N/A	■ GRAVITY	☐ PRESSURE	☐ Basement w/plumbing		☐ Basement w/o plumbing	

Comments / Conditions: Install on contour & utilize serial distribution
Do not exceed max trench depth

INITIAL SITE SKETCH



AS BUILT SKETCH



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 EXCEPTION**

☐ **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: 1-22-21 Installed by: (Andrew Daywalt) Shady Knoll Septic Service

IMPROVEMENT PERMIT by: [signature] Date: 1/12/21 OPERATION PERMIT by: [signature] D. Mabry Date: 8/26/21

AUTHORIZATION TO CONSTRUCT by: [signature] Date: 1/12/21 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.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

Sheet 1 of 1
PROPERTY ID #: 4629741773
COUNTY: Iredell

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

OWNER: Wayne Marshall
ADDRESS: 118 Canford Way
PROPOSED FACILITY: 3BR
LOCATION OF SITE: 582 Morrison Farm
APPLICATION DATE 5-22-19
DATE EVALUATED: 6-3-19
PROPOSED DESIGN FLOW (.1949): 360gpd
PROPERTY SIZE: 1.1ac
PROPERTY RECORDED: Y

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
1	L 12%	0-9	SBK SCL	Fr SS SP SMP	—	44"	PS	—	PS .3
		9-32	SBK C	Fr SS SP SMP					
		32-44	SBK CL	Fr SS SP SMP					
		44-50	M SAP	VFr					
2	L 13%	0-3	GR SL	Fr SS SP SMP	—	38"	PS	—	PS .3
		3-24	SBK C	Fr SS SP SMP					
		24-38	SBK CL	Fr SS SP SMP					
		38-52	M SAP	VFr					
3 R	L 12%	0-3	GR SCL	Fr SS SP SMP	same Mg in SAP	36"	PS	—	PS .3
		3-24	SBK C	Fr SS SP SMP					
		24-36	SBK CL	Fr SS SP SMP					
		36-54	M SAP	VFr					
4 R	L 13%	0-6	SBK SCL	Fr SS SP SMP	—	41"	PS	—	PS .3
		6-30	SBK C	Fr SS SP SMP					
		30-41	SBK CL	Fr SS SP SMP					
		41-48	M SAP	VFr					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	300'	200'
System Type(s)	25%	50%
Site LTAR	.3	.3

OTHER FACTORS (.1946): N/A
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: C. Cave
OTHER(S) PRESENT: N/A

COMMENTS:

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL .1955 LTAR*	LPP .1957 LTAR*	MINERALOGY/ CONSISTENCE	STRUCTURE
CC (Concave Slope) CV (Convex Slope) D (Drainage Way) DS (Debris Slump) FP (Flood Plain) FS (Foot Slope) H (Head Slope) L (Linear Slope) N (Nose Slope) R (Ridge) S (Shoulder Slope) T (Terrace)	I	S (Sand) LS (Loamy Sand)	1.2 - 0.8	0.6 - 0.4	SEXP (Slightly Expansive) EXP (Expansive)	G (Single Grain) M (Massive) CR (Crumb) GR (Granular) SBK (Subangular Blocky) ABK (Angular Blocky) PL (Platy) PR (Prismatic)
	II	SL (Sandy Loam) L (Loam)	0.8 - 0.6	0.4 - 0.3		
	III	Si (Silt) SiCL (Silty Clay Loam) CL (Clay Loam) SCL (Sandy Clay Loam) SiL (Silt Loam)	0.6 - 0.3	0.3 - 0.15		
	IV	SC (Sandy Clay) SiC (Silty Clay) C (Clay) O (Organic)	0.4 - 0.1 None	0.2 - 0.05 None		

MOIST	WET
VFR (Very Friable)	NS (Non-sticky)
FR (Friable)	SS (Slightly Sticky)
FI (Firm)	S (Sticky)
VFI (Very Firm v. Very Sticky)	VS (Very Sticky)
EFI (Extremely Firm)	NP (Non-plastic)
	SP (Slightly Plastic)
	P (Plastic)
	VP (Very Plastic)

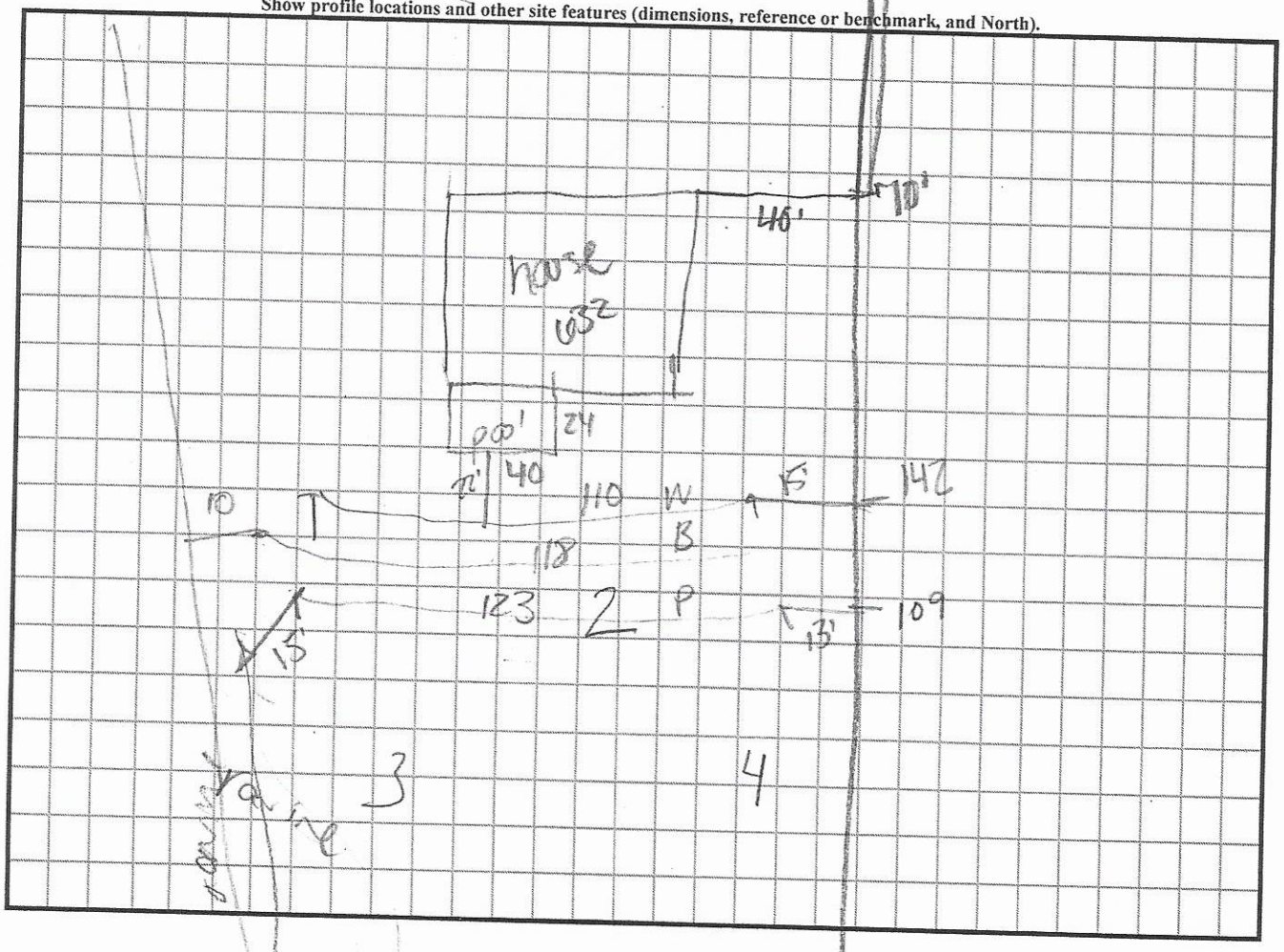
*Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

NOTES

HORIZON DEPTH — In inches below natural soil surface
DEPTH OF FILL — In 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).



CAROLINA SOIL & SEPTIC CONSULTING, PLLC

P.O. BOX 1703, Mooresville, NC 28115
(704) 202-5791 adrianpruett@yahoo.com
NC Licensed Soil Scientist, SC Professional Soil Classifier,
Certified Septic System Operator, Licensed Septic Installer,
Certified Septic Inspector

March 8, 2019
Project Name: 19028

Wayne Marshall
163 Ashmore Cir.
Troutman, NC 28166

Preliminary soil evaluation for an onsite wastewater system located on ~1.104 acres (Parcel # 4629741783) as described and located in Iredell County, North Carolina.

Dear Mr. Marshall:

Carolina Soil & Septic Consulting, PLLC, performed a soil investigation on the parcel referenced above (*See Soil Map*). The evaluation was performed at your request as part of the preliminary planning process to evaluate the soil suitability for an onsite subsurface wastewater disposal system. Fieldwork performed on February 21, 2019 and March 8, 2019.

The property was traversed to observe elements of the landscape (slope, drainage patterns, complex topography, etc.) as well as soil conditions (depth, texture, structure, seasonal wetness, restrictive horizons, back fill, etc.) through the use of 6 hand auger borings. The site was evaluated during moist to wet soil conditions. The observations of the site were used to identify areas relative to subsurface disposal of wastewater. The soil/site evaluation criteria used is that contained in 15 A NCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems".

Requirements for sizing of the subsurface disposal field are as follows: 1) the design flow from the proposed facility (120 gallons/bedroom/day in residences), and 2) the Long Term Acceptance Rate (LTAR) of the soil (based on the hydraulic conductivity of the soil, a function of the soil's texture, clay mineralogy, structure, porosity, etc.) The proposed design flow on this site along with the size, shape and topography of the usable soil area will dictate the utility of that area. Other considerations are the required horizontal setbacks from various features such as wells (100'), surface waters (50') or more depending on watershed regulations, property lines (10'), top of embankment (15'), watershed buffers, etc. (*see Attachment 1*).

FINDINGS

This site is located in the southwestern area of Iredell County approximately 5.07 miles southwest of the Town of Troutman, located in the Fallstown Township.

Carolina Soil & Septic Consulting, PLLC evaluated the rear of the subject property and determined that there are usable soils located within that area. These soils are most similar to Pacolet soil series. Pacolet soils generally have a brown sandy loam surface over red clay subsoil with a saprolite layer beginning at 37 inches and greater. Lithic contact is usually greater than 60 inches. The usable soils are suitable for conventional, accepted (25% Reduction) and innovative (Drip Irrigation) septic systems.

All evaluated soils were suitable for subsurface septic system install with no restrictions due to water movement within borings 1, 2, 4, 5 or 6. Soil boring 3 showed common yellow brown mottles indicating slowed water movement from 4-28 inches with no signs below 28 inches. Landscape position is believed

to be the main cause of the yellowing as boring 3 was located within the trough area of an old field terrace and below the exit of a graded out field terrace. This area was saturated within the surface horizon and was the only hole that filled with water. Removal of the field terraces will prevent water from ponding over the area and reduce saturation.

The attached *Soil Map* indicates the location of the soil borings performed on the site.

WASTEWATER CONSIDERATIONS

Carolina Soil & Septic Consulting, PLLC evaluated the subject property and determined there to be enough usable soil and available space to support a 4 bedroom septic system and repair pending an infield layout and the house/pool placed in an area that does not or minimally impacts the usable soil areas. Mr. Marshall expressed interest in placement of his house on the property roughly in line with the neighbor to the right. It is CS&SC's recommendation to place the house within that desired area and place the pool to the right of the new house above the or at the head of the gully that forms. This will allow the most available space for septic system and repair.

All soils were evaluated based on 15 A NCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems". Iredell County retains final approval and permitting of all septic systems within their boundaries and require soil to be evaluated via backhoe pits unless other approved NC laws and regulations are used.

Carolina Soil & Septic Consulting, PLLC, was pleased to be of service in this matter and look forward to assisting in any site analysis needs you may have in the future. Please feel free to call with any questions or comments.

Sincerely,

Encl: *Attachment 1*
Soil Map
Soil Series Descriptions
Soil Profile Descriptions

Adrian L. Pruett



Attachment 1

.1950 Location of Sanitary Sewage Systems

(c) Every sanitary sewage treatment and disposal system shall be located at least the minimum horizontal distance from the following:

(1)	any private water supply source including a well or spring	100 feet
(2)	any public water supply source	100 feet
(3)	streams classified as WS-I	100 feet
(4)	water classified as S.A.	100 feet from mean high water mark
(5)	Other coastal waters	50 feet from mean high water mark
(6)	any other stream, canal, marsh, or other surface waters	50 feet
(7)	any Class I or Class II reservoir	100 feet from normal pool elevation
(8)	any permanent storm water retention pond	50 feet from flood pool elevation
(9)	any other lake or pond	50 feet from normal pool elevation
(10)	any building foundation	5 feet
(11)	any basement	15 feet
(12)	any property line	10 feet
(13)	top of slope of embankments or cuts of 2 feet or more vertical height	15 feet
(14)	any water line	10 feet
(15)	drainage systems:	
	(A) Interceptor drains, foundation drains and storm water diversions	
	(i) upslope	10 feet
	(ii) sideslope	15 feet
	(iii) downslope	25 feet
	(B) Groundwater lowering ditched and devices	25 feet
(16)	any swimming pool	15 feet
(17)	any other nitrification field (except repair area)	20 feet

(b) Ground absorption, sewage treatment and disposal systems may be located closer than 100 feet from a private well supply, except springs and uncased wells located downslope and used as a source of drinking water, repairs, space limitations and other site-planning considerations but shall be located the maximum feasible distance and, in no case, less than 50 feet.

(c) Nitrification fields and repair areas shall not be located under paved areas or areas subject to vehicular traffic. If effluent is to be conveyed under areas subject to vehicular traffic, ductile iron or its equivalent pipe shall be used. However, pipe specified in Rule .1955 (e) may be used if a minimum of 30 inches of compacted cover is provided over the pipe.

Note: Systems over 3000 GPD or an individual nitrification fields with a capacity of 1500 GPD or more have more restrictive setback requirements, see .1950 (a) (17) (d) for specifics.

LOCATION PACOLET SC+AL GA NC VA
Established Series
Rev. ECH-DJD;DTA
08/2008

PACOLET SERIES

The Pacolet series consists of very deep, well drained, moderately permeable soils that formed in residuum weathered mostly from felsic igneous and metamorphic rocks of the Piedmont uplands. Slopes commonly are 15 to 25 percent but range from 2 to 60 percent.

TAXONOMIC CLASS: Fine, kaolinitic, thermic Typic Kanhapludults

TYPICAL PEDON: Pacolet sandy loam - forested. (Colors are for moist soil.)

A--0 to 3 inches; brown (7.5YR 5/4) sandy loam; few fine distinct yellowish red (5YR 5/8) mottles; moderate medium granular structure; friable; many fine and medium roots; strongly acid; clear wavy boundary. (1 to 12 inches thick)

Bt1--3 to 23 inches; red (2.5YR 4/6) clay; moderate medium subangular blocky structure; firm, slightly sticky; common distinct clay films on faces of peds; common fine and medium roots; common very fine pores; moderately acid; gradual wavy boundary.

Bt2--23 to 29 inches; red (2.5YR 4/6) clay; common fine prominent reddish yellow (7.5YR 7/8) mottles; moderate medium subangular blocky structure; firm, slightly sticky; common distinct clay films on faces of peds; common very fine pores; few fine flakes of mica; moderately acid; gradual wavy boundary. (Combined thickness of the Bt horizon is 12 to 26 inches)

BC--29 to 37 inches; red (2.5YR 4/6) clay loam; many medium prominent reddish yellow (7.5YR 7/8) mottles; weak medium subangular blocky structure; friable; few fine flakes of mica; strongly acid; gradual wavy boundary. (3 to 15 inches thick)

C1--37 to 52 inches; mottled red (2.5YR 4/6) and reddish yellow (7.5YR 7/8) clay loam saprolite; massive; friable; thin discontinuous distinct clay seams in cracks; few fine flakes of mica; strongly acid; gradual wavy boundary. (10 to 20 inches thick)

C2--52 to 80 inches; light yellowish brown (10YR 6/4) loam saprolite; common medium prominent red (2.5YR 4/6) and strong brown (7.5YR 5/8) mottles; massive; friable; strongly acid.

TYPE LOCATION: Chester County, South Carolina; 3.4 miles south of Chester in Chester County; 1.3 miles south of junction of State Highways 16 and 350; 3,700 feet northeast of junction of State Highways 16 and 171; 0.9 mile northeast of junction of unpaved State Highway 394 and unmarked county road and unpaved private road leading north; 35 feet northeast of unpaved private road.

RANGE IN CHARACTERISTICS: The Bt horizon is at least 10 to 24 inches thick and extends to a depth of 18 to 30 inches. Depth to a lithic contact is more than 60 inches. The soil is very strongly acid to slightly acid in the A horizon, and very strongly acid to moderately acid throughout the rest of the profile. Content of rock fragments, dominantly gravel, ranges from 0 to 35 percent in the A and E horizons, and 0 to 15 percent in the Bt horizon. Most pedons have few to common flakes of mica in the solum, and few to many in the C horizon.

The A horizon has hue of 5YR to 10YR, value of 3 to 5, and chroma of 1 to 6. In eroded areas, hue ranges to 2.5YR and chroma ranges to 8. The A horizon commonly is sandy loam, but ranges to loamy coarse sand, loamy sand, fine sandy loam or loam in the fine-earth fraction. In eroded areas, it is clay loam or sandy clay loam in the fine-earth fraction.

The E horizon, where present, has hue of 5YR to 10YR, value of 4 to 6, and chroma of 3 to 8. It commonly is sandy loam, but ranges to loamy coarse sand, loamy sand, fine sandy loam, loam in the fine-earth fraction.

The BA or BE horizon, where present, and the upper part of the Bt in most pedons, has hue of 2.5YR to 10YR, value of 4 to 6, and chroma of 3 to 8. It is clay loam, sandy clay loam, or loam.

The Bt horizon has hue of 10R or 2.5YR, value of 4 or 5, and chroma of 6 or 8. Mottles in shades of red, yellow, or brown are in the upper part of the Bt horizon in some pedons and in the lower part of the Bt horizon in most pedons. Texture is clay, sandy clay, or clay loam.

The BC horizon has hue of 10R to 5YR, value of 4 or 5, and chroma of 6 or 8 commonly with mottles in shades of red, yellow, or brown. The BC horizon of some pedons is mottled in shades of red, yellow, or brown. It is clay loam, sandy clay loam, loam, or sandy loam.

The C horizon has hue of 10R to 10YR, value of 4 or 5, and chroma of 3 to 8 commonly with mottles in shades of red, yellow, or brown or is multicolored. Texture is loamy saprolite weathered from felsic crystalline rock.

COMPETING SERIES: These are the Appling, Bethlehem, Cecil, Georgeville, Herndon, Lloyd, Madison, Nanford, Nankin, Saw, Tarrus, and Wedowee series. Appling and Cecil soils have a thicker clayey Bt horizon. Bethlehem soils have a paralithic contact within 20 to 40 inches of the surface. Georgeville, Herndon, Nanford, and Tarrus soils formed from Carolina slate and have more than 30 percent silt. Lloyd soils have value of 3 in at least part of the Bt horizon. Madison soils contain more mica. Nankin soils formed from marine sediments. Saw soils have a lithic contact within 20 to 40 inches of the surface. Wedowee soils have Bt horizons with hue of 5YR or yellower.

GEOGRAPHIC SETTING: Pacolet soils are on gently sloping to very steep Piedmont uplands. Slopes commonly are 15 to 25 percent but range from 2 to 60 percent. The soils formed in material weathered mostly from felsic igneous and metamorphic rocks. The mean annual temperature ranges from 59 to 66 degrees F, the frost-free season ranges from 190 to 240 days, and the mean annual precipitation ranges from 37 to 60 inches.

GEOGRAPHICALLY ASSOCIATED SOILS: In addition to the competing Appling, Bethlehem, Cecil, Lloyd, Madison, Saw, and Wedowee series, these are the Cataula, Lockhart, Louisburg, Rion, and Wateree series. Cataula soils have a perched water table at 2 to 4 feet. Lockhart soils have more than 35 percent rock fragments in the particle-size control section. Louisburg, Rion, and Wateree soils have less than 35 percent clay in the particle-size control section.

DRAINAGE AND PERMEABILITY: Well drained; runoff is medium to rapid; permeability is moderate.

USE AND VEGETATION: Most areas are in forests of pine and mixed hardwoods. Cleared areas are used for small grain, hay, and pasture.

DISTRIBUTION AND EXTENT: The Piedmont of Alabama, Georgia, North Carolina, South Carolina, and Virginia. The series is of large extent

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Raleigh, North Carolina

SERIES ESTABLISHED: Catawba County, North Carolina, 1969.

REMARKS: The December 1987 revision recognized the low activity clay property of this soil and reclassification to Kanhapludults. Pacolet soils were formerly mapped as a thin solum phase of the Cecil series.

Diagnostic horizons and features recognized in this pedon are:
Ochric epipedon - the zone from the surface of the soil to a depth of 3 inches (A horizon).
Argillic and Kandic horizon - the zone from 3 to 29 inches below the surface (Bt1 and Bt2 horizons).

MLRA=136

ADDITIONAL DATA:

TABULAR SERIES DATA:
SOI-5 Soil Name Slope Airtemp FrFr/Seas Precip Elevation

SC0015 PACOLET 2-60 59-66 190-240 37-60 200-900
SC0107 PACOLET 2-60 59-66 190-240 37-60 200-900

SOI-5	FloodL	FloodH	Watertable	Kind	Months	Bedrock	Hardness
SC0015	NONE		>6.0		-	>60	
SC0107	NONE		>6.0		-	>60	

SOI-5	Depth	Texture	3-Inch	No-10	Clay%	-CEC-
SC0015	0-3	SL FSL L	0-2	80-100	8-20	4-7
SC0015	0-3	CL SCL	0-1	90-100	20-35	4-10
SC0015	0-3	LS LCOS	0-3	70-100	4-15	2-5
SC0015	3-29	SC CL C	0-1	80-100	35-65	6-18
SC0015	29-52	CL SCL SL	0-2	70-100	15-30	5-12
SC0015	52-80	SL FSL L	0-2	70-100	10-25	4-10
SC0107	0-3	GR-LS GR-LCOS	0-3	65-85	4-15	2-5
SC0107	0-3	GR-SL GR-FSL	0-3	70-85	8-20	4-7
SC0107	0-3	GR-CL GR-SCL	0-3	70-90	27-35	4-10
SC0107	3-29	SC CL C	0-1	80-100	35-65	6-18
SC0107	29-52	CL SCL SL	0-2	70-100	15-30	5-12
SC0107	52-80	SL FSL L	0-2	70-100	10-25	4-10

SOI-5	Depth	-pH-	O.M.	Salin	Permeab	Shnk-Swll
SC0015	0-3	4.5-6.5	.5-2.	0-0	2.0-6.0	LOW
SC0015	0-3	4.5-6.5	.5-1.	0-0	0.6-2.0	LOW
SC0015	0-3	4.5-6.5	.5-2.	0-0	2.0-6.0	LOW
SC0015	3-29	4.5-6.0	0.-.5	0-0	0.6-2.0	LOW
SC0015	29-52	4.5-6.0	0.-.5	0-0	0.6-2.0	LOW
SC0015	52-80	4.5-6.0	0.-.5	0-0	0.6-2.0	LOW
SC0107	0-3	4.5-6.5	.5-2.	-	2.0-6.0	LOW
SC0107	0-3	4.5-6.5	.5-2.	0-0	2.0-6.0	LOW
SC0107	0-3	4.5-6.0	.5-2.	0-0	0.6-2.0	LOW
SC0107	3-29	4.5-6.0	0.-.5	0-0	0.6-2.0	LOW

SC0107 29-52	4.5-6.0	0.-.5	0-0	0.6-2.0	LOW
SC0107 52-80	4.5-6.0	0.-.5	0-0	0.6-2.0	LOW

PROPERTY ID #: 4629741783
COUNTY: IREDELL

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

OWNER: CLAY COGAR AND DAVID WHITE
ADDRESS: 131 LYNN COVE LN., MOORESVILLE, NC 28117 APPLICATION DATE
PROPOSED FACILITY: RESIDENTIAL PROPOSED DESIGN FLOW (.1949): 360 GPD DATE EVALUATED: 2/21/19
LOCATION OF SITE: 582 MORRISON FARM RD., TROUTMAN PROPERTY SIZE: 1.104 AC
WATER SUPPLY: ☐ Private ☐ Public X Well ☐ Spring ☐ Other COMMUNITY WELL PROPERTY RECORDED: YES
EVALUATION METHOD: X Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: X Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
B 1	LSS 7%	0-18	B SCL GR	FR SS SP SEXP	N/A	48"	N/A	N/A	PS
		8-26	R C MFSBK	FI S P SEXP					
		26-48	YR CL WFSBK	FR SS SP SEXP	-COM SAP				0.3 GPD/SQFT
B 2	LSS 5% IN OLD ROAD BED	0-4	B SCL GR	FR SS SP SEXP	-4" COMPACTION	46"	PS	N/A	PS
		4-20	R C MFSBK	FI S P SEXP					
		20-46	YR CL WFSBK	FR SS SP SEXP	-COM SAP				
		46-48	VAR SL SAP	FR SS SP SEXP					0.3 GPD/SQFT
					N/A				
B 3	LSS 5% IN TERRACE TROUGH	0-4	LB SCL GR	FR SS SP SEXP	N/A	48"	N/A	N/A	PS
		4-28	B SCL GR	FI S P SEXP	-FEW SAP, COM YB				
		28-36	LB SCL GR	FR S P SEXP	-FEW/COM SAP				
		36-48	LB C WFABK	FI S P SEXP	-FEW R C VEINS				0.25 GPD/SQFT
B 4	LSS 12% ABOVE OLD ROAD BED	0-3	B SCL GR	FR SS SP SEXP	N/A	40"	PS	N/A	PS
		3-20	R C WFSBK	FI S P SEXP					
		20-28	VAR L SAP M	FR SS SP SEXP	-FEW R C VEINS				
		28-40	R CL/L WFSBK	FR SS SP SEXP	-COM SAP				0.3 GPD/SQFT
		40-48	VAR L SAP M	FR SS SP SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	CONV OR 25%	CONV, 25%, PPBPS
Site LTAR	0.3	0.3

OTHER FACTORS (.1946): NONE
SITE CLASSIFICATION (.1948): PS

EVALUATED BY: ADRIAN L. PRUETT
OTHER(S) PRESENT: WAYNE MARSHALL

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

PROPERTY ID #: 4629741783
DATE OF EVALUATION: 2/21/19
COUNTY: IREDELL

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
B 5	LSS 8% BELOW TERRACE	0-4	B SCL GR	FR SS SP SEXP	N/A -COM SAP, COM R C VEINS -FEW/COM R C VEINS -COM SAP	48"	N/A	N/A	PS 0.3 GPD/SQFT
		4-23	R C WFSBK	FI S P SEXP					
		23-32	RY CL WFSBK	FR SS SP SEXP					
		32-38	VAR SL SAP M	FR SS SP SEXP					
		38-48	R L WFSBK	FR SS SP SEXP					
B 6	LSS 6%	0-6	B CL WFSBK	FR SS SP SEXP	N/A -COM SAP -FEW/COM R C VEINS	38"	PS	N/A	PS 0.3 GPD/SQFT
		6-26	R C MFSBK	FR SS SP SEXP					
		26-38	YR CL WFSBK	FR SS SP SEXP					
		38-48	VAR L SAP M	FR SS SP SEXP					

COMMENTS:

RECEIVED DEC 0 8 2020

APPLICATION MUST BE FILLED OUT COMPLETELY & BE LEGIBLE OR IT WILL NOT BE PROCESSED

Iredell County Health Department – Environmental Health Division

AP-313169
$500.00

PAGE 1: *APPLICATION FORM*

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

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

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

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

Applicant Information: (PRINT CLEARLY)

Applicant Name: 4G Design Build Address: 488 Pineville Rd. Statesville Zip: 28677
Applicant Email: Quinton@Build4G.com Phone: 704-634-3647 Alt. Phone:
Owner Name: Waterview Investments Address: same above Zip:
Owner Email: N/A Phone: Same above Alt. Phone:

Property Information:

Street Address: 582 Morrison Farm Rd. Troutman, NC Lot 21
Subdivision Name: Sunset Bay Section/Phase: 2 Lot Number: 21
Driving Directions: State Park Rd. turn on Morrison Farm Rd. on Right

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

(X) 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: 3
Maximum Number of Occupants: 4
( ) Swimming Pool
( ) Other Addition/Structure:

CHECK FOUNDATION TYPE
( ) Crawl Space Foundation
(X) 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 (X) Community Well ( ) City Water ( ) Other Public Water

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

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

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

Signature: _____ 11-24-2020
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

(Check and sign only ONE of the options below)

☐ 1. *** APPLICANT AND OWNER ARE THE SAME. *** (*Sign here*) _____

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.

☑ 2. I, Quinton Grandy with Waterview Investments am the legal owner(s) of the property located at 582 Morrison Farm Rd. Troutman, NC, identified as PIN (Parcel Identification Number) 4629741783, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) 4G Design Build, LLC Quinton Grandy, 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.

_____ 11-24-2020
Signature of Owner(s) Date

Mooresville - Environmental Health
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

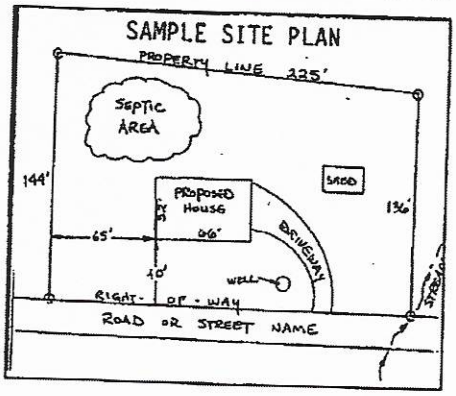
Statesville - Environmental Health
ronda.hart@co.iredell.nc.us
Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677

IREDELL COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

PAGE 2: *SITE PLAN WORKSHEET*

SEE THE "SAMPLE SITE PLAN" BELOW. INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!



Place an (X) beside each item as you complete the site plan:

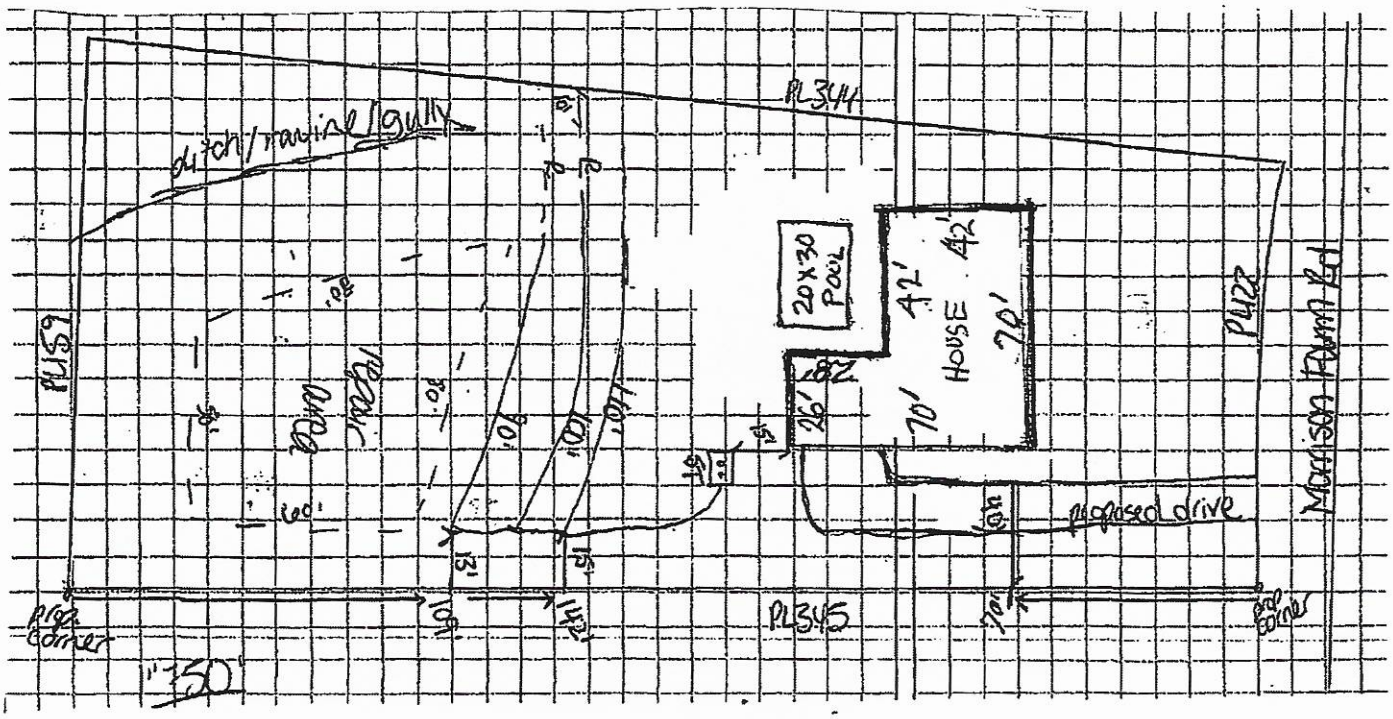
( ) Property Line measurements are clearly identified
( ) All proposed structures are indicated
( ) Front and side setbacks from property line
( ) Preferred driveway location and well location
( ) Area you prefer your septic system to be placed
( ) North arrow, or other sufficient indicator of direction

Circle N/A on the following if appropriate:

Location of septic systems and wells within 100' of your property	N/A
Location of easements and rights of ways on your property	N/A
Location of any designated wetlands on the property	N/A

USE THIS SPACE TO DRAW YOUR SITE PLAN

Show: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site



Signature: _____
Property owner/ or owner's legal representative signature (SIGNATURE REQUIRED)

11-24-2020
DATE

* For reference, this IP was with drawn *

IREDELL COUNTY HEALTH DEPARTMENT

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

BW

With drawn

PERMIT # 244922

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

PIN # 4629741783

APPLICANT/OWNER: Wayne Marshall

APPLICANT ADDRESS: 118 Longford Way Apt 104, Mooresville

SITE ADDRESS: 582 Morrison Farm

PHONE: 704-838-6827 ALT. PHONE —

SITE DIRECTIONS: Perth Rd → R on State Park → L on Morrison Farm → on R

SAP CONTROLLED: [X] YES [ ] NO

SUBDIVISION: Sunset Bay

SECTION: 2 LOT # 21 LOT AREA: 1.1 ac

DESIGN FLOW: 360 gpd L.T.A.R.: .3

Septic Tank	1000 (gal)	STB	Date	[X] New System	[ ] Repair	[ ] Expansion	System Type: I II (III) IV V VI	[X] Residence	No. Bedrooms 3
Pump Tank	(gal)	PT	Date	System Description:			25% reduction	[ ] Business	No. Persons 6
Pump Make		Model	Serial #	Repair System Description:			30% - gravity	[ ] Other	No. Employees
# Nitrification Fields	1	# Lines	3	Linear Ft: 300'				[ ] Slab	[X] Crawl Space
Trench Width	36"	Trench Bottom Depth	36" max	Gravel Depth				[ ] Basement w/plumbing	[ ] Basement w/o plumbing

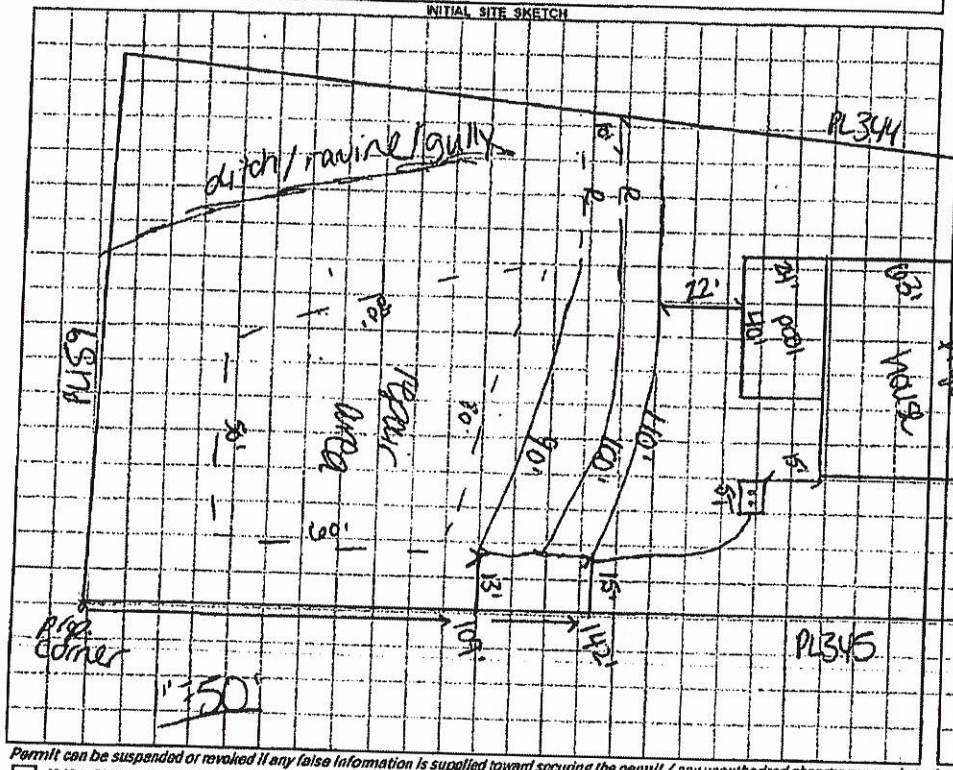
Maintenance Agreement Required: [ ] YES [X] NO

[X] GRAVITY [ ] PRESSURE

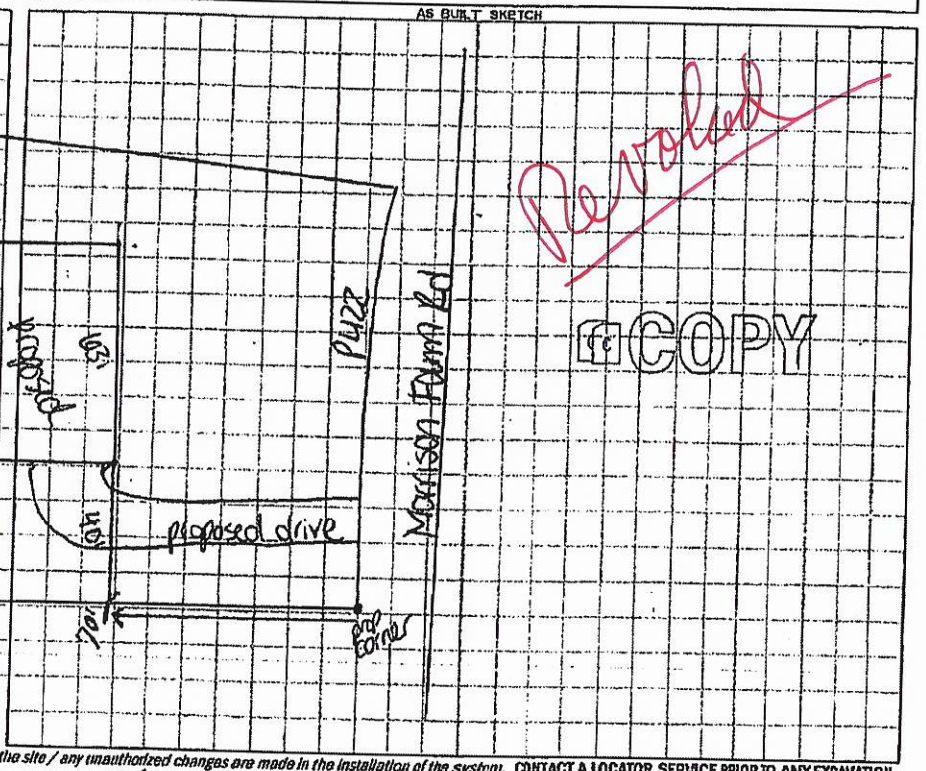
Water Supply: [ ] Private [ ] Public [X] Community

Comments / Conditions: Install on contour utilize serial distribution. Do not exceed max trench depth of 36".

INITIAL SITE SKETCH



AS BUILT SKETCH



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

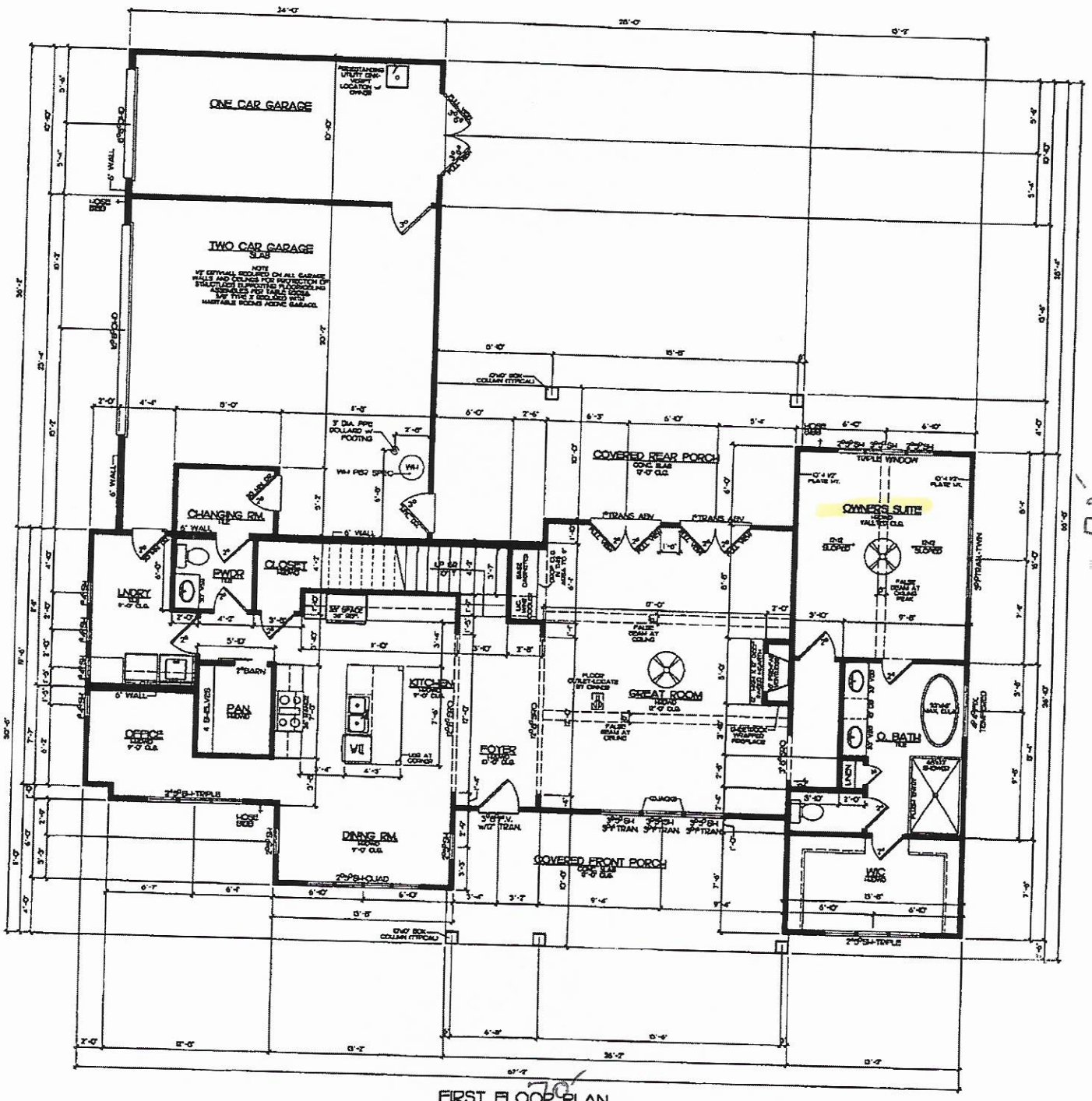
[ ] IMPROVEMENT PERMIT *with plat valid without expiration.* [X] IMPROVEMENT PERMIT *with site plan valid for 60 mos.* [X] AUTHORIZATION TO CONSTRUCT *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: _____ Date: _____ Installed by: _____

IMPROVEMENT PERMIT by: Carla C. Cave Date: 6-5-19 OPERATION PERMIT by: _____ Date: _____

AUTHORIZATION TO CONSTRUCT by: Carla C. Cave Date: 6-5-19 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 inspector to confirm your inspection time.



FIRST FLOOR PLAN

NOTE: ALL WINDOWS TO BE LOW 'E' GLASS

NOTE: DESIGNED AND ENGINEERED FOR THE 2018 N.C.R.C.

Acknowledgement of Plans Submittal ONLY!

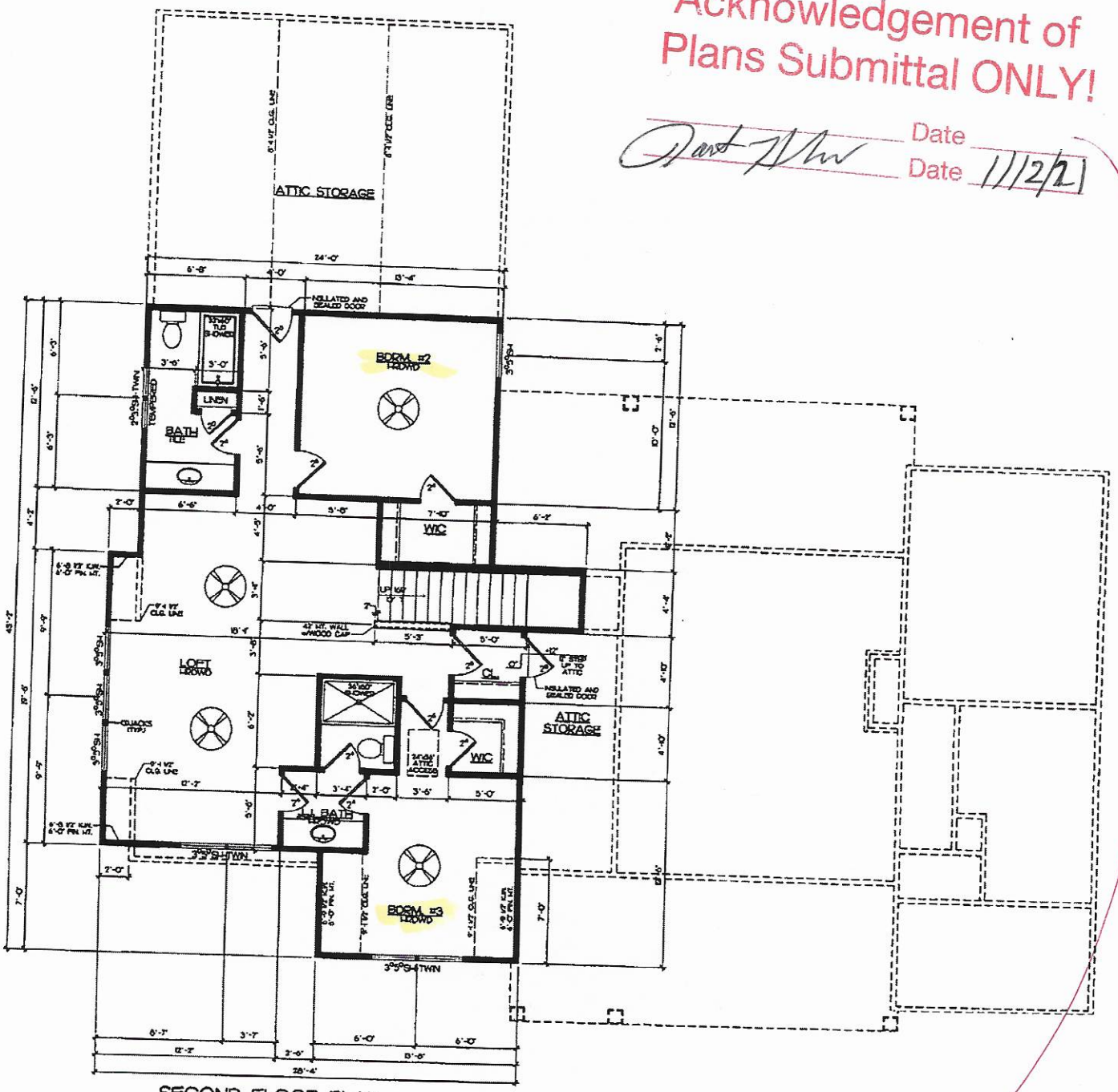
Date 1-15-21

Date 1/12/21

Acknowledgement of
Plans Submittal ONLY!

Date

Date 1/12/21



SECOND FLOOR PLAN

NOTE: ALL WINDOWS TO BE LOW 'E' GLASS 1/4" = 1'-0"
NOTE: DESIGNED AND ENGINEERED FOR 11-E 2015 N.C.R.C.

Tommy Parr 1-15-21

Tommy Parr

IREDELL COUNTY · NC

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

APPLICATION NUMBER
313169 Issue Date:

Permit Type: ZONING

Parcel Number	Street Address	Jurisdiction
4629741783.000	582 MORRISON FARM RD	Iredell County

Owner Information	Applicant Information
Name: WATERVIEW INVESTMENTS LLC	Name: 4G DESIGN BUILD, LLC
Address: 488 PINEVILLE RD	Address: 488 PINEVILLE RD
STATESVILLE, NC 28677	STATESVILLE, NC 28677
Phone:	Phone: (704)634-3647

Use Requested	Zone Code
Single Family Dwelling	R20

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
1.104	35	35	15	15	WSIV-CA Catawba/Lake Norman	NO

Remarks
SFD need disclaimer

The applicant certifies that there are no deed restrictions, contractual agreements or governmental regulations of any kind that interfere with or prohibit the use of the property or the use for which this permit is requested. The applicant further acknowledges that enforcement of deed restrictions, plat conditions and other contractual agreements will not be undertaken by Iredell County and is the sole responsibility of the affected parties.

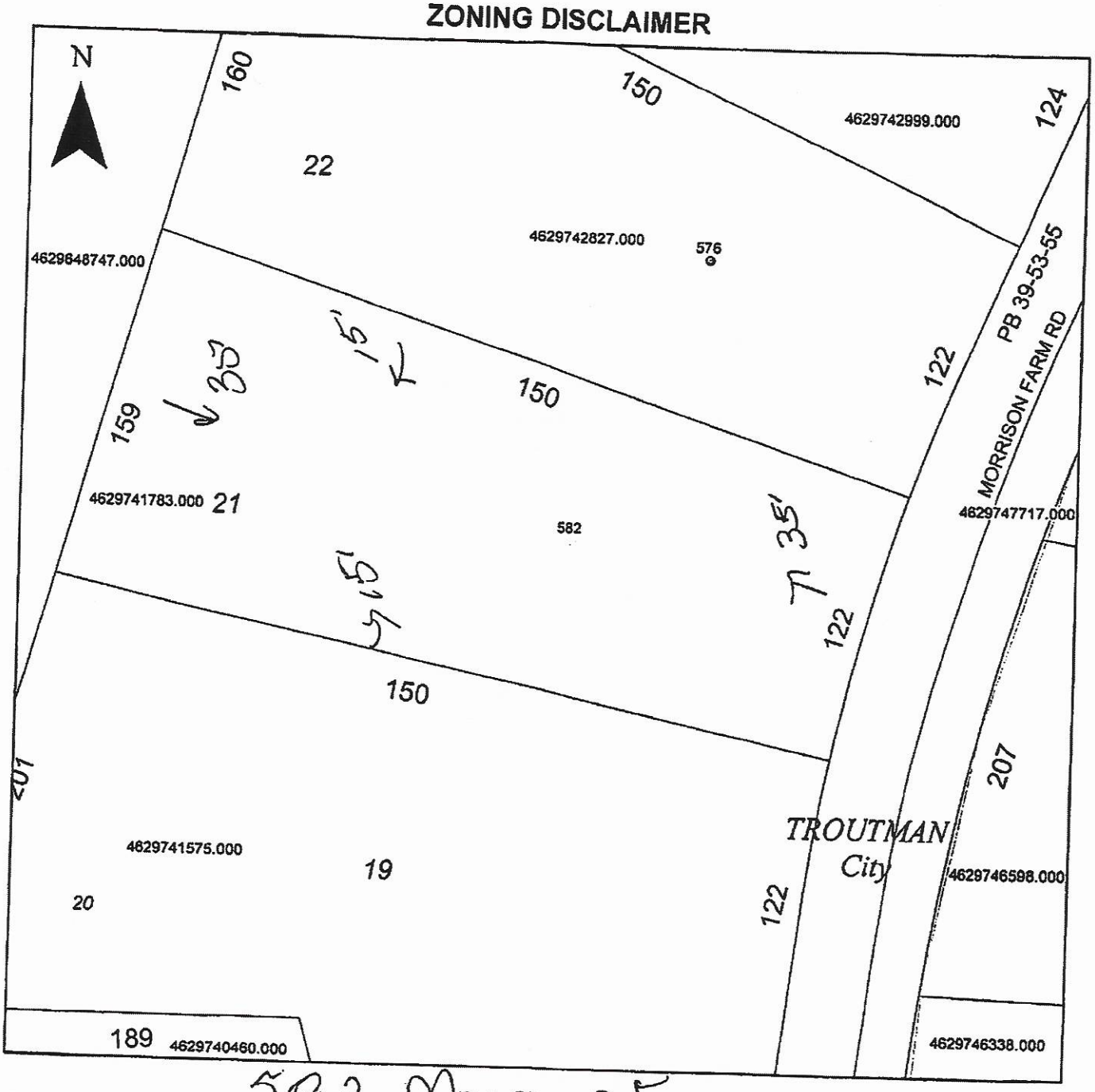
Signature of Owner/Contractor

Date: 12/07/2020

Permit Number	313169

TOTAL FEES:	$77.25

ZONING DISCLAIMER



Property Address 582 Morrison Farm

The applicant certifies that there are no deed restrictions, contractual agreements or governmental regulations of any kind that interfere with or prohibit the use of the property or the use for which this permit is requested. Applicant further acknowledges that the enforcement of deed restrictions, plat conditions, and other contractual agreements will not be undertaken by Iredell County and is the sole responsibility of the affected parties.

Applicant

12-7-2020
Date