ICHD - ENVIRONMENTAL HEALTH DIVISION

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

BLDR-2022-10861

PERMIT # OSWIP-2022-5925

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

PIN # 4823 -- 36 -- 9280

APPLICANT/OWNER: BUDDY BUTLER

APPLICANT ADDRESS: 3116 WEST MEMORIAL HIGHWAY, UNION GROVE, N.C, 28689

SITE ADDRESS: 3116 WEST MEMORIAL HIGHWAY, UNION GROVE, N.C, 28689

PHONE: 704-745-7122 ALT. PHONE 704-745-7206

SITE DIRECTIONS: (N) ON 77, (L) ON 901, LOT ON (R)

SAP CONTROLLED: ☐ YES ☑ NO

SUBDIVISION: —

SECTION: — LOT # — LOT AREA: 19,361 AC

DESIGN FLOW: 360GPD L.T.A.R.: 0.3 (0.225 REPAIR)

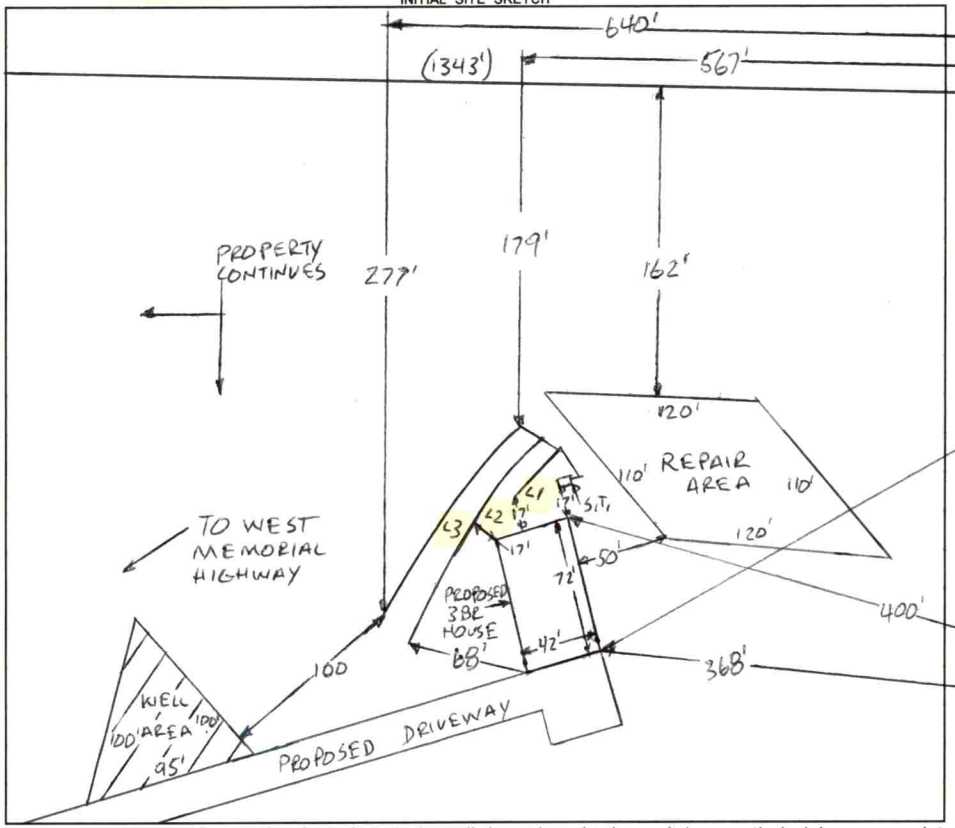
Septic Tank	1000	(gal)	STB	854	Date	3-3-2023	☑ New System	☐ Repair	☐ Expansion	System Type: I II (III) IV V VI	
Pump Tank	—	(gal)	PT	—	Date	—	System Description:			25% REDUCTION	
Pump Make	—	Model	—		Serial #	—	Repair System Description:			25% REDUCTION	
# Nitrification Fields	1	# Lines	3		Linear Ft	302FT	Maintenance Agreement Required:	☐ YES	☑ NO		
Trench Width	36 IN	Trench Bottom Depth(Low side)		30 IN	Gravel Depth	—	☑ GRAVITY	☐ PRESSURE			

☑ Residence	No. Bedrooms	3	**Water Supply**
☐ Business	No. Persons	6	☑ Private
☐ Other	No. Employees	—	☐ Public
☐ Slab	☑ Crawl Space		☐ Community
☐ Basement w/plumbing			☐ Basement w/o plumbing

Comments / Conditions: INSTALL ON CONTOUR, INSTALL ON 9FT CENTERS UTILIZE SERIAL DISTRIBUTION, DO NOT EXCEED A 36 IN MAX TRENCH DEPTH

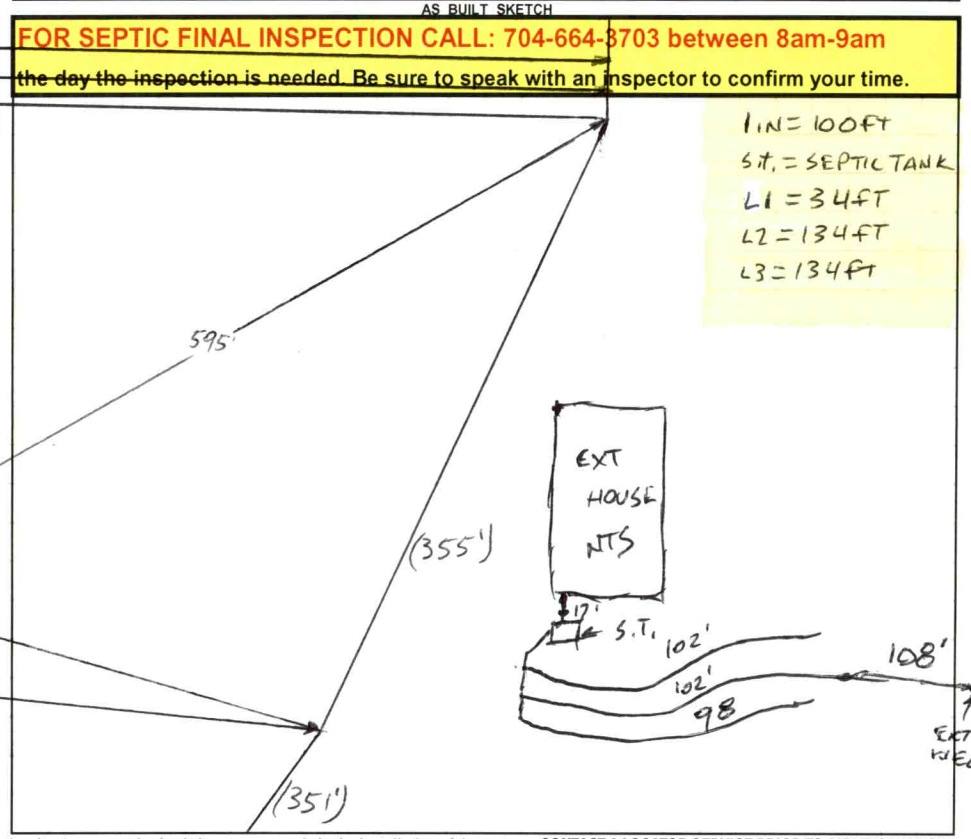
PRE-CONSTRUCTION MEETING REQUIRED

INITIAL SITE SKETCH



AS BUILT SKETCH

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 time.



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: ONLINE SIGNATURE Date: — Installed by: A-1 BACKHOE

IMPROVEMENT PERMIT by: Bryant C. White Date: 12-11-2022 OPERATION PERMIT by: Bryant C. White Date: 5-31-2023

AUTHORIZATION TO CONSTRUCT by: Bryant C. White Date: 12-12-2022 Existing System Inspected by: Date:

FOR SEPTIC FINAL INSPECTION: CALL 704-664-3703 between 8am-9am the day the inspection is needed.

Item	Date	Initials
Drain Lines Checked		
Tanks Checked		
Pressure Manifold or Valve Box Checked		
Pressure Head Set		
Electrical Checked		
Floats Set		
Alarm Checked		
Maintenance Contract Needed? Y / N		
Comments:		

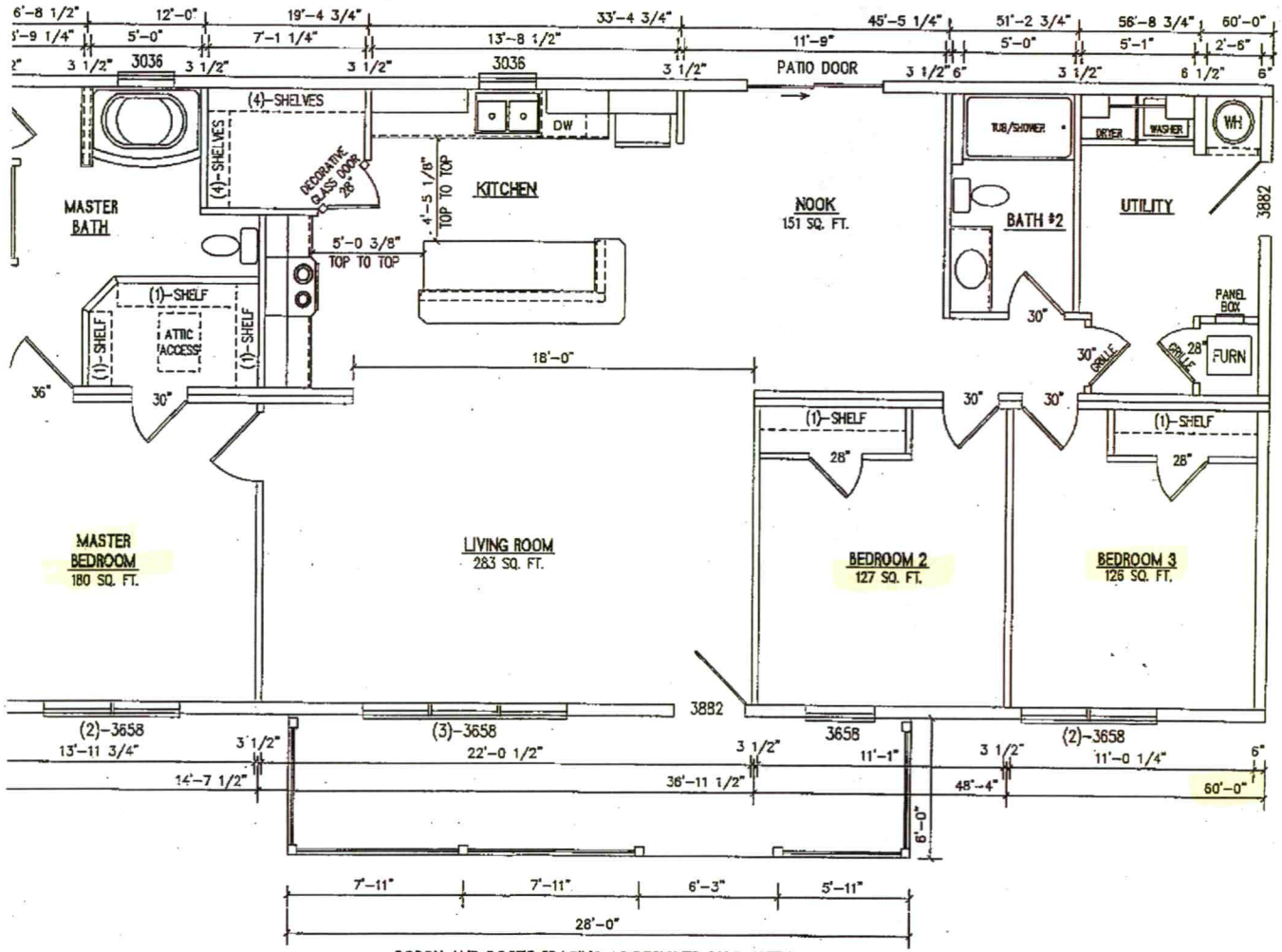
Repairs Only	
	State Code
Failing System Code	
Type of Distribution	G or P
Type of Failure/Malfunction	
Primary Cause of Failure/Malfunction	
Age of System? _____	
Initial or Repair? _____	

Acknowledgement Of
Plans Submittal ONLY!
ONLINE Signature Date
Buyer Initials Date 12-12-2022

27'4"

"MITCHELL MAX"

Silverpoint

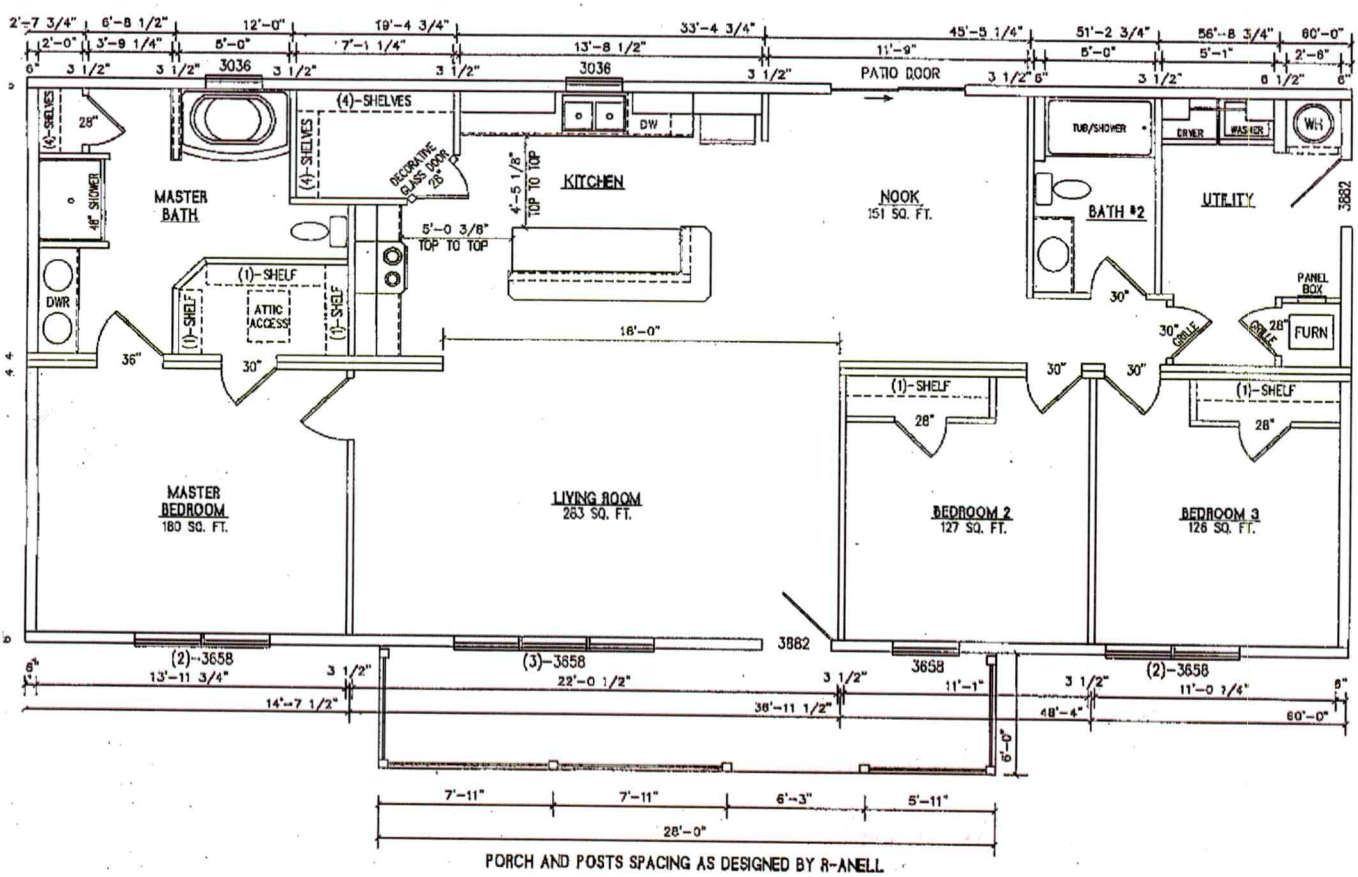


PORCH AND POSTS SPACING AS DESIGNED BY R-ANELL

[redacted]

"MITCHELL MAX"

Silverpoi



PORCH AND POSTS SPACING AS DESIGNED BY R-ANELL

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

Sheet 1 of 1
PROPERTY ID #: 4823-36-9080
COUNTY: IREDELL

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

OWNER: BUDDY BUTLER
APPLICATION DATE: 10-3-2022
ADDRESS: 3116 WEST MEMORIAL HIGHWAY, UNION GROVE, N.C. 28689
DATE EVALUATED: 11-18-2022
PROPOSED FACILITY: 3BR
PROPOSED DESIGN FLOW (.1949): 360 GPD
PROPERTY SIZE: 19.361 AC
LOCATION OF SITE: 3116 WEST MEMORIAL HIGHWAY, UNION GROVE, N.C 28689
PROPERTY RECORDED: YES
WATER SUPPLY: Private ✓ Public Well ✓ Spring Other
EVALUATION METHOD: Auger Boring Pit ✓ Cut
TYPE OF WASTEWATER: ✓ Sewage Industrial Process Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	LINEAR SIDE 5%	0-12	SCL, SBK PLOW	FR, SS, SP, SEXP	FEW SAP INC THRU OUT	54"+	NA	NA	PS .3
		12-35	C, SBK	FR, SP, SEXP					
		35-54	CL, WSBK	FR, SS, SP, SEXP					
2	LINEAR SIDE 8%	0-12	PLOW	LAYER	FEW Y/B MOTS @ 18" & SAP, INC THRU OUT	48"+	NA	NA	PS .275
		12-36	C, ABK	FR, S, P, SEXP					
		36-48	CL, WSBK	FR, S, SP, SEXP					
3	LINEAR SIDE 8%	0-13	PLOW	LAYER	Y/B MOTS 0"-36" 10YR 6/2 @ 20" SAP INC THRU OUT	51"+	NA	NA	PS .25 BELOW 30"
		13-38	C, ABK	FR, VS, P, SEXP					
		38-51	CL, WABK	FR, S, SP, SEXP					
4	LINEAR SIDE 7%	0-12	PLOW	LAYER	Y/B MOTS 0"-38" 10YR 6/2 @ 24" SAP, INC THRU OUT	57"+	NA	NA	PS .225 BELOW 24"
		12-40	C, ABK	FR VS, P, SEXP					
		40-57	CL, WABK	FR, S, SP, SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	25%	25%
Site LTAR	0.3	0.225

OTHER FACTORS (.1946): PS
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Bryant C. White
OTHER(S) PRESENT:

COMMENTS:

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL .1955 LTAR*	LPP .1957 LTAR*	MINERALOGY/ CONSISTENCE	STRUCTURE
CC (Concave Slope)	I	S (Sand)	1.2 - 0.8	0.6 - 0.4	SEXP (Slightly Expansive)	G (Single Grain)
CV (Convex Slope)		LS (Loamy Sand)			EXP (Expansive)	M (Massive)
D (Drainage Way)						CR (Crumb)
DS (Debris Slump)	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 - 0.3	0.3 - 0.15		PL (Platy)
L (Linear Slope)		SiCL (Silty Clay Loam)				PR (Prismatic)
N (Nose Slope)		CL (Clay Loam)				
R (Ridge)		SCL (Sandy Clay Loam)			**MOIST**	**WET**
S (Shoulder Slope)		SiL (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)	S (Sticky)
		C (Clay)			VFI (Very Firm v. Very Sticky)	VS (Very Sticky)
		O (Organic)	None	None	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.

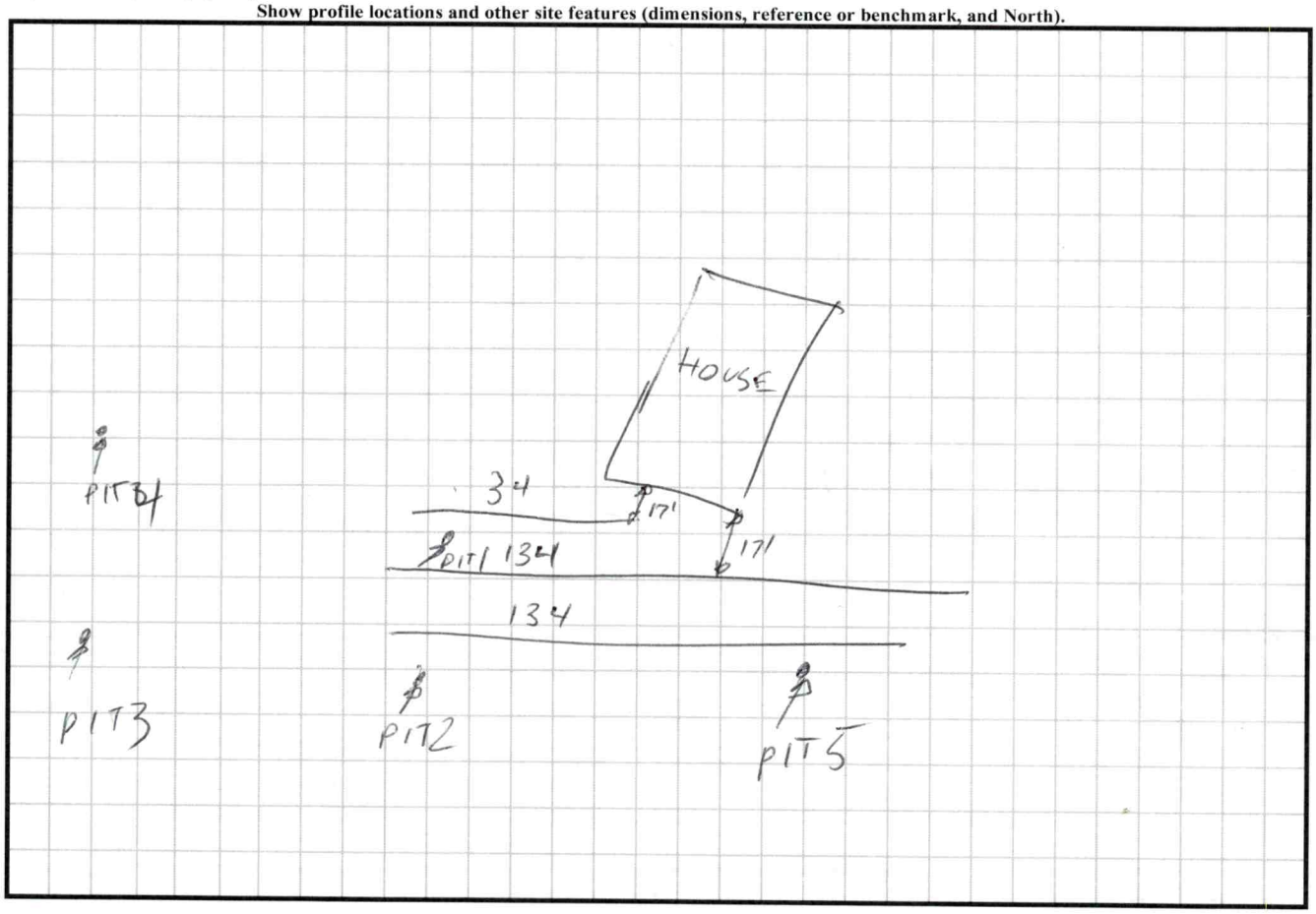
NOTES

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)

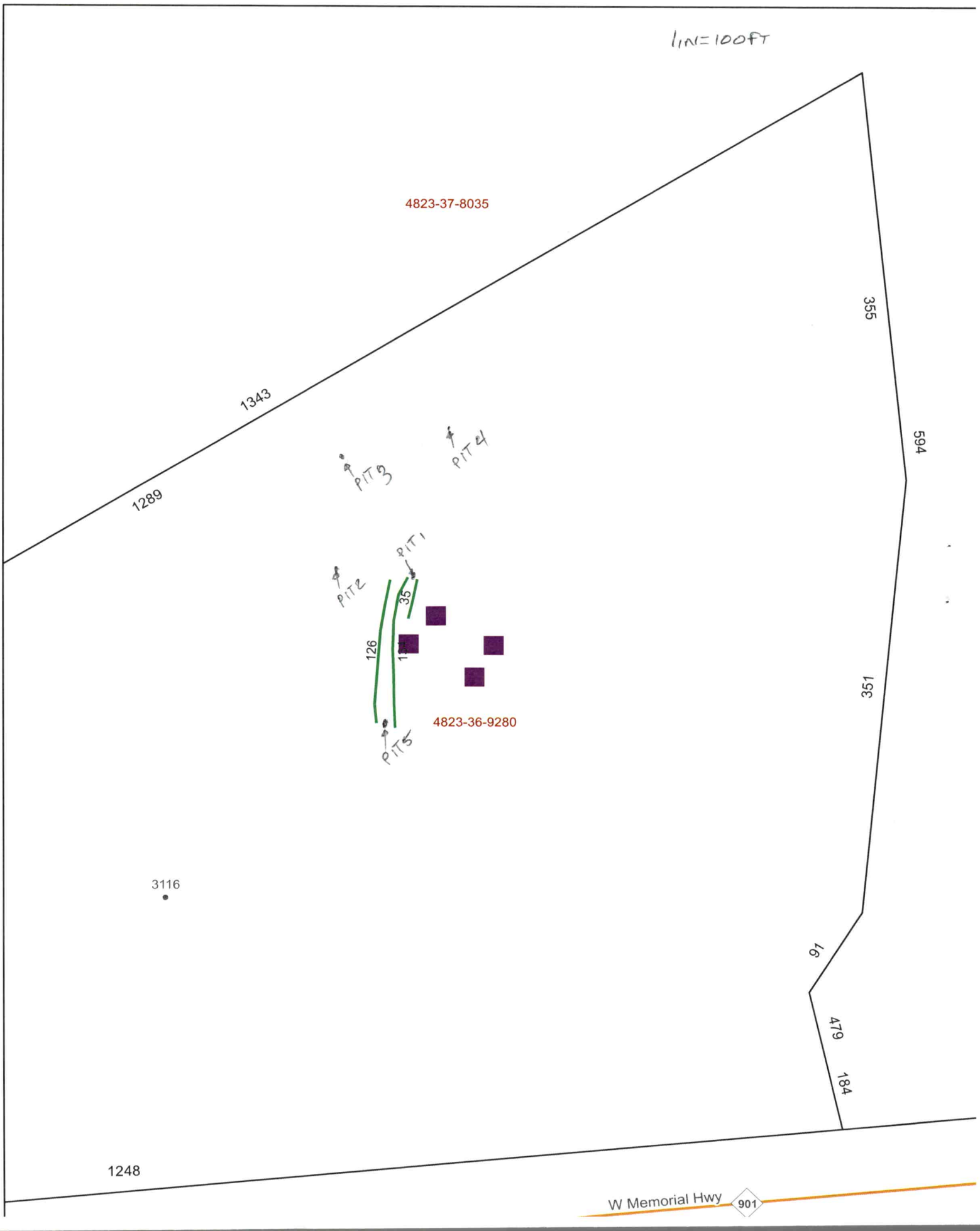
Evaluation of saprolite shall be by pits.

Long-term Acceptance Rate (LTAR): gal/day/ft^2

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



PIT									
5	LINEAR SIDE 6%	0-9	PLOW	LAYER	SAP INC THRU OUT	48"+	NA	NA	PS 13
		9-30	C, SBK	FR, S, P, SEXP					
		30-48	CL, GNSBK	FR, SS, SP, SEXP					


1 IN = 100 FT
4823-37-8035
1343
1289
355
594
351
16
479
184
1248
PIT 1
PIT 2
PIT 3
PIT 4
PIT 5
35
126
4823-36-9280
3116
W Memorial Hwy
901

PERMIT SNAPSHOT REPORT OSWP-2022-5925 FOR IREDELL COUNTY

Permit Type: Environmental Health OSWP
Work Class: EH Septic Improvement Permit
Status: In Progress
Valuation: $0.00
Description: new septic installation

Project:
District: Iredell County
Square Feet: 0.00
Assigned To: White, Bryant

App Date: 10/03/2022
Exp Date: NOT AVAILABLE
Completed: NOT COMPLETED
Approval Expire Date:

Parcel: 4823369280.000 Main	**Address:** 3116 W Memorial Hwy Union Grove, NC 28689 Main	**Zone:** RA(Residential Agricultural District)

Applicant/Authorized Agent
Buddy Butler
3116 W Memorial Hwy
Union Grove, NC 28689
Mobile: (704) 745-7206

Property Owner
BILLY J+AMANDA L BUTLER
704-745-7122

Permit Custom Fields

How is your site plan being submitted	Custom Site Plan	Does the site contain any jurisdictional wetlands	No	Non-domestic Sewage Generated	No
Other Public Agency	No	All proposed structure dimensions	approx 40 x50 on site plan; current permit on file for Accessory Structure - Farm Exempt but in system	What are the proposed structures	New Single Family Residence
If other Addition/Structure, please explain		Maximum Number of Bedrooms	3	Number of Occupants	2
Foundation Type	Crawl Space Foundation	Water Supply	New Well	Desired Septic System Type	Conventional (most common)
If other septic system type, please explain		Has this project been approved by TRC	No	Lot Acreage	19.361
Front Setback	35	Back Setback	35	Left Setback	15
Right Setback	15	Is the structure or development in the floodplain	No	Is the property in a local historic district?	No
Is the property located downtown?	No	Additional Unique Setbacks Apply	No	Watershed	NOT IN A WATERSHED

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Buddy_Butler_10/3/2022.jpg	10/03/2022 12:02	Butler, Buddy		Uploaded via CSS
3116 W Memorial Hwy AA form_v1.pdf	10/18/2022 12:23	Nebel, Barbara	Available Online	Authorize to Act as Agent
3116 W Memorial Hwy Site Plan_v1.pdf	10/18/2022 12:23	Nebel, Barbara	Available Online	Site Plan
3116 W Memorial Hwy P Penniger preliminary soil notes.pdf	10/18/2022 12:43	Nebel, Barbara	Available Online	P Penniger Preliminary Soil Notes

Inspection Number	Status	Inspection Type	Request Date	Scheduled Start Date	Scheduled End Date	Actual Start Date	Actual End Date
2022-29878	Passed - Permit	OSWP Septic/Well Preliminary Site Visit	10/26/2022			10/26/2022 8:08	10/26/2022 8:08

Inspectors: Kobuck, Teanna (Primary)

Checklist Item	Description	Passed	Comments
General Comments	Checklist item used to track general comments, not specific to any other checklist item	No	

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00003840	New Gravity System	$500.00	$500.00
	Iredell Zoning Tech Fee	$2.25	$2.25
	Iredell Zoning Permit Fee	$75.00	$75.00
	Total for Invoice INV-00003840	$577.25	$577.25
	Grand Total for Permit	**$577.25**	**$577.25**

PERMIT SNAPSHOT REPORT (OSWP-2022-5925)

Workflow Step / Action Name	Action Type	Start Date	End Date
Application Completeness Check v.1		10/18/2022 0:00	10/18/2022 12:29
Confirm application complete v.1	Generic Action		10/18/2022 12:29
Fees v.1		10/18/2022 0:00	10/25/2022 9:12
Issue Invoice v.1	Generic Action		10/18/2022 12:43
Fees Paid v.1	Generic Action		10/25/2022 9:12
Zoning Review v.1		10/05/2022 0:00	10/25/2022 9:13
Iredell County Zoning Approval v.1	Task	10/05/2022 0:00	10/25/2022 9:13
Issue Invoice v.1	Generic Action		10/18/2022 12:43
Fees Paid v.1	Generic Action		10/25/2022 9:13
Lot Readiness Verification v.1		10/27/2022 0:00	
OSWP Septic Preliminary Site Visit v.1	Inspection	10/27/2022 0:00	10/27/2022 8:08
OSWP Site Evaluation v.1	Inspection		
Issue Improvement Permit v.1			
Issue Invoice v.1	Generic Action		
Fees Paid v.1	Generic Action		
Issue Permit v.1	Generic Action		
Permit Completion Process v.1			
Authorization to Construct Permit v.1	Create Sub Permit		
Issue Authorization to Construct v.1	Generic Action		

Penninger Soil Consulting, PLLC
Ph: 704-996-6330 Email: pgpenninger@gmail.com

February 19, 2021

Billy Butler

Submitted via email to: bbutler4109@outlook.com

Reference: Septic System Preliminary Soil and Site Evaluation
W. Memorial Highway (Hwy 901) – A portion of Parcel No. 4823350988
Approx. 19 Acres - Two Proposed Home Sites
Iredell County, North Carolina
Project No. 21-110

Dear Mr. Butler:

Penninger Soil Consulting, PLLC has provided a preliminary soil and site evaluation for two, possible 3-bedroom Septic Improvement Permits to be issued by the Iredell County Health Department (ICHD) for the referenced site. The soil and site evaluation were performed in general accordance with Penninger Soil Consulting Proposal 21-P106, dated January 29, 2021.

BACKGROUND

The referenced property is located north of West Memorial Highway (901). You indicated that approximately 19 acres were being subdivided from the larger tract, and you indicated that the property would extend from the eastern boundary to the stream in the woods to the west of the corn stubble field. We understand you have the property under contract and intend to construct your personal 3-bedroom home on the lot, and a possible future home for a family member.

You requested Penninger Soil Consulting to provide a preliminary soil and site evaluation during your due diligence period to determine if on-site septic systems permitted by the ICHD are possible. This evaluation is for two, proposed 3-bedroom homes on the approximate 19-acre property at the locations approximately shown on the attached site plan. You staked the proposed house locations in the field with wood stakes.

No surveyed property lines were observed during the soil evaluation and no survey map was provided to Penninger Soil Consulting. We understand your surveyor is in the process of surveying the property. Individual wells permitted by the ICHD will be required to provide water to the home.

METHODS AND PROCEDURES

The preliminary soil scientist evaluation consisted of a review of topographic / aerial maps, reconnaissance and visual inspection of the site, and the evaluation of subsurface soils with hand auger borings at the proposed septic areas. The soils were evaluated for the following site-specific characteristics: texture; color; structure; soil depth; depth and thickness of any restrictive horizon(s) if present; depth (if present) of a seasonal high water table; and topography and landscape position. With this information the hand auger borings evaluated were rated in accordance with the "Laws and Rules for Sewage Treatment and Disposal Systems (15A NCAC 18A .1900)".

RESULTS AND DISCUSSION

Preliminary Soil and Site Evaluation

A preliminary soil scientist evaluation was conducted with hand auger borings by Mr. Paul Penninger on February 8, 2021. A total of nine hand auger borings were made to a depth of approximately 48 inches below the ground surface (bgs) and were described to evaluate the soil on the site. The hand auger borings were approximately located on the attached site plan and marked with survey flagging in the field (see attached). You had staked the proposed house pads with wood stakes in the corn stubble/small grain field.

The soil and saprolite associated with the nine borings was rated as Provisionally Suitable for septic systems with respect to soil depth, soil wetness, and soil morphology. The soil in the area evaluated could be considered for use with conventional septic systems, 25 percent reduction septic systems, and T&J Panel septic systems at an approximate Long-Term Acceptance Rate (LTAR) of 0.25 to 0.3 gpd/sqft. The soils typically had a clay to clay loam Bt horizon and a clay loam to sandy clay loam BC soil horizon with saprolite inclusions. Some sandy loam to loam saprolite zones were observed in some of the borings and a saprolite horizon was observed in Boring #4. Some quartz rock inclusions were observed in some of the borings. Rule 15A NCAC 18A .1956(6) requires a final determination of saprolite suitability to be made with backhoe pits.

Based on the hand auger borings evaluated and the site review, the property should be considered Provisionally Suitable for two State approved, 3-bedroom septic systems. The ICHD will require at least 4 provisionally suitable backhoe pits for each system for permitting. The ICHD will be required to assign the LTAR and useable soil/saprolite depths for system approval and permitting. A system layout with a laser level and pin flags will be required to determine the exact system location and line lengths that can be approved.

The hand auger boring locations are approximate and are only intended for preliminarily determining areas with Provisionally Suitable soil for on-site septic systems. Any proposed septic system will require an Improvement Permit/Construction Authorization from the ICHD to install the septic system and obtain a building permit. An ICHD permit will also be required for the proposed well site.

Septic system suitability is affected by the soil present, the proposed house size and number of bedrooms, lot size and configuration, outbuildings proposed, topography, required

setbacks, etc. This report identifies the general location of potentially useable soils for on-site wastewater treatment and disposal systems, but does not constitute or imply approval for permit, as required by the local health department and/or state agencies. The soil evaluation is only valid for the described hand auger boings. The soil suitability may change between the evaluated borings. Soil evaluations are done based on interpretations of the rules governing wastewater treatment and disposal systems and are not guarantees for site approval or future system performance.

CLOSING

Penninger Soil Consulting, PLLC appreciates the opportunity to provide these soil scientist services to you. A preliminary soil scientist evaluation has been completed on portions of the approximate 19-acre site. We welcome the opportunity to further review the preliminary soil evaluation with you. Once the survey is completed, we can assist you with obtaining the septic Improvement Permits from the ICHD.

Sincerely,

Penninger Soil Consulting, PLLC



Paul G. Penninger, L.S.S.
Soil Scientist

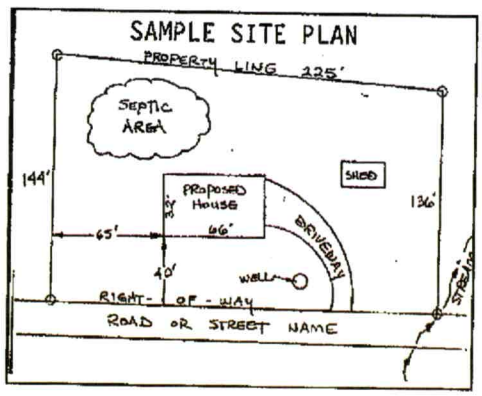
Attachments: Preliminary Soil Evaluation Site Plan

C:\Users\Paul G. Penninger\Documents\2021 Projects\21-110 Billy Butler - Union Grove PSE\Billy Butler - W Memorial Highway Preliminary Septic Soil Evaluation Report.doc

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

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 OR WELL PERMIT!!!*



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

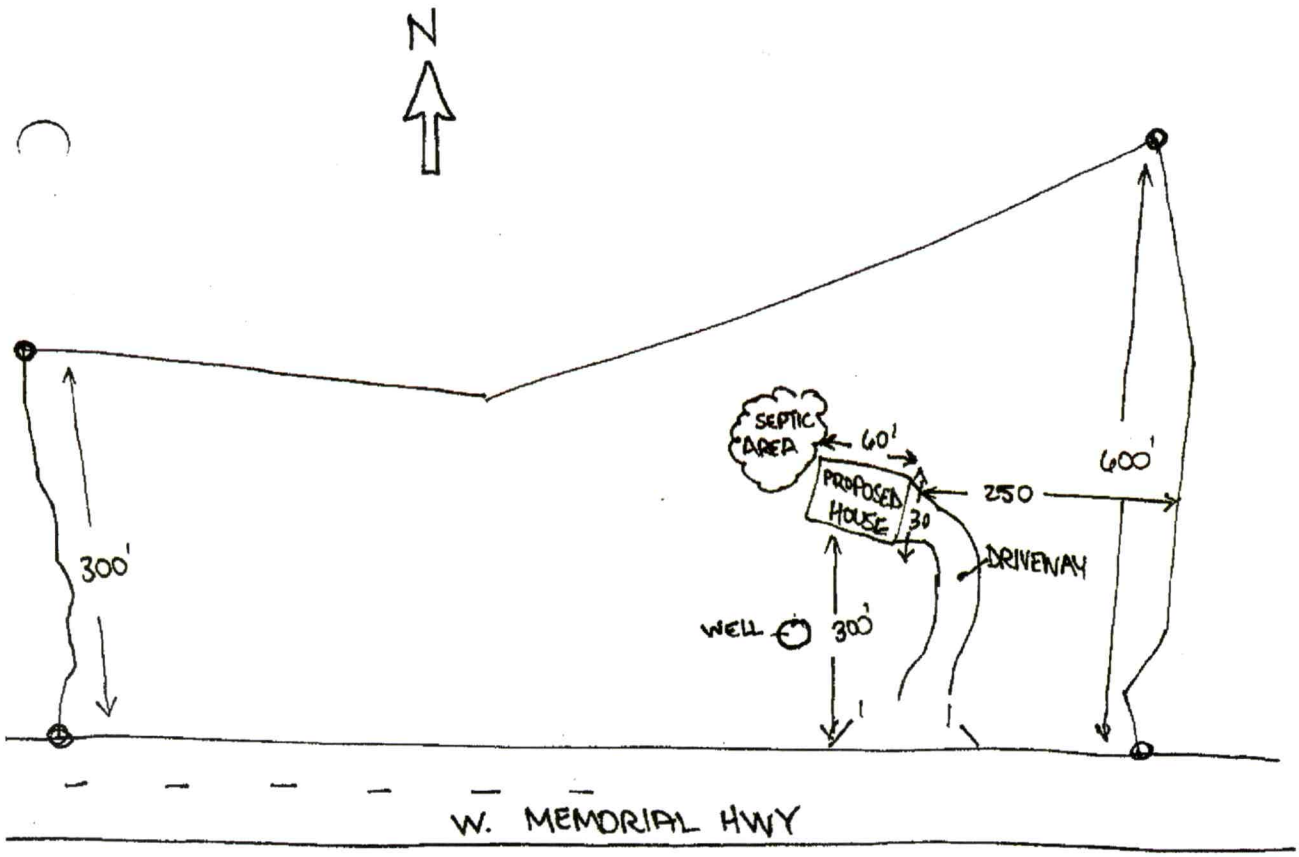
- (X) Property Line measurements are clearly identified
- (X) All proposed structures are indicated
- (X) Front and side setbacks from property line
- (X) Preferred driveway location
- (X) Preferred well location
- (X) Preferred septic system location
- (X) North arrow, or other sufficient indicator 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: Bing J Burke

Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

10/13/22

DATE