DENR/DEH

ON-SITE WASTEWATER SECTION

Sheet 1 of 4
PROPERTY ID #: 5307
COUNTY: IREDELL

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Freedom Homes — APPLICATION DATE 7/16/15
ADDRESS: 1124 Charlotte Hwy — DATE EVALUATED: 8/1/15
PROPOSED FACILITY: SFR — PROPOSED DESIGN FLOW (.1949): 480 GPD — PROPERTY SIZE: 1.020 ACRE
LOCATION OF SITE: 177 Fairhaven Ln. Cleveland NC — PROPERTY RECORDED: _____
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	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
A 1	SS 12%	0-4	BSCL, NSBK		F YB DRAINAGE MOTTLES 12"-20"	30"	F-L-M SAP INCL 18-	29"	.25 0"-28"
		4-20	RCL, ABK	FR, SS, SP					
		20-28	RYCL, SBK/ABK	FR, SS, SP	YB + SAP 20-30"				U >28"
		28-30	CL SAP						
A 2	SS 8%	0-22	RCL, ABK	FI, SS, SP	YB DRAIN MOTTLES 6"-24"	48"	F-L SAP INCL 10"-24"	/	.25-.275 24"-48"
		22-48	RCL, ABK/SBK	FR, SS, SP	FEW MOTTLES 24"-32"		F SAP INCL 24"-48"		.225 0-24"
A 3	TS 5%	0-10	BL		YEL/B DRAIN MOTTLES 16"-28"	29"	C-M SAP INCL 12"-29"	29"	.225-.25 0-28"
		10-20	RCL, ABK	FI, SS, SP					
		20-28	RCL, ABK	FR, SS, SP					
		29	AR						
A 4	CV 9%	0-20	RCL, SBK	FR, SS, SP	/	44"	C-M SAP INCL 18"-98"	/	.3
		20-44	RCL, SBK	FR, SS, SP					
		44-48	SL SAP	VFR, SS, SP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

OTHER FACTORS (.1946): —
SITE CLASSIFICATION (.1948): TS
EVALUATED BY: Shane Joshua
OTHER(S) PRESENT: —

COMMENTS: Called for Pits

ON-SITE WASTEWATER SECTION

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Freedom Homes (Eric Ward) APPLICATION DATE 7-15-15
ADDRESS: 1124 Charlotte Highway DATE EVALUATED: 8-19-15
PROPOSED FACILITY: 4 Bedroom House PROPOSED DESIGN FLOW (.1949): 480 gpd PROPERTY SIZE:
LOCATION OF SITE: 177 Fairhaven Lane PROPERTY RECORDED:
WATER SUPPLY: ☐ Private ☐ Public ☒ Well ☐ Spring ☐ Other TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed
EVALUATION METHOD: ☐ Auger Boring ☒ Pit ☐ Cut

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
TH 3 / PIT 3	7%	0-9	Clay Loam SBK	SS, Sexp, Loose, Sp		30"	UN.	30"	0.3
		9-20	Sandy Clay Loam SBK	Sticky, Sexp, Fr, Sp	Abundant SAPP @ 37"-38" on low side +				
		20-30	Clay Loam SBK	SS, Sexp, Fr, Sp			30" on high side		
		30-42"	Qtz + Feldspar Dominated Saprolite	a SAP	DRIP REPAIR				
TH 2 / PIT 2		0-6	Clay Loam SBK	Loose, SS, Sexp, Sp		47"	PS	/	~~0.25~~ 0.3
		6-20	Fine Clay Loam to SCL SBK	Fr, SS, Sexp, Sp	Heavy Sapp @ 47"				
		20-47	Some Sapp SCL SBK	Fr, SS, Sexp, Sp	Some Sapp from 17" to 47"				
		47-52	Saprolite.	—					
TH 4 / PIT 4	Water 6" on 8/19 11" on 8/21	0-11	CL/SCL SBK	Friable, SS, Sp, Sexp	VB < 40"-48" Low Chroma Closer To 48"	48"	N/Ao	N/A	0.3 .3 @ 39"-48" .25 39"-48"
		11-31	Clay Loam SBK	Slightly Firm, SS, Sp, Sexp					
		31-48" Water Line	Heavy SCL/CL SBK	Slightly Firm, SS, Sp, Sexp					
TH Test Pit 1 / PIT 1		0-6	Clay Loam SBK	Friable wet, SS, Sexp, Sp	some mica + sapp inclusions more pronounced SAPP inclusions numerous w/ depth. up to 40% @ 45". Plentiful mica	VB 36"-48" 49"	C-M SAP INCL 24"-49"	N/A	0.3
		6-24	Clay Loam + clay SBK	Friable, Slight Sexp, Sp					
		24-49	Clay Loam SBK	Friable, SS, Sexp, Sp					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	Approved	Approved
Site LTAR	.3	.3

OTHER FACTORS (.1946): N/A
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Shawn Goodman
OTHER(S) PRESENT: Tom Shuler

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	NEXP (Non-expansive) 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	0.2 - 0.05		
			None	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.

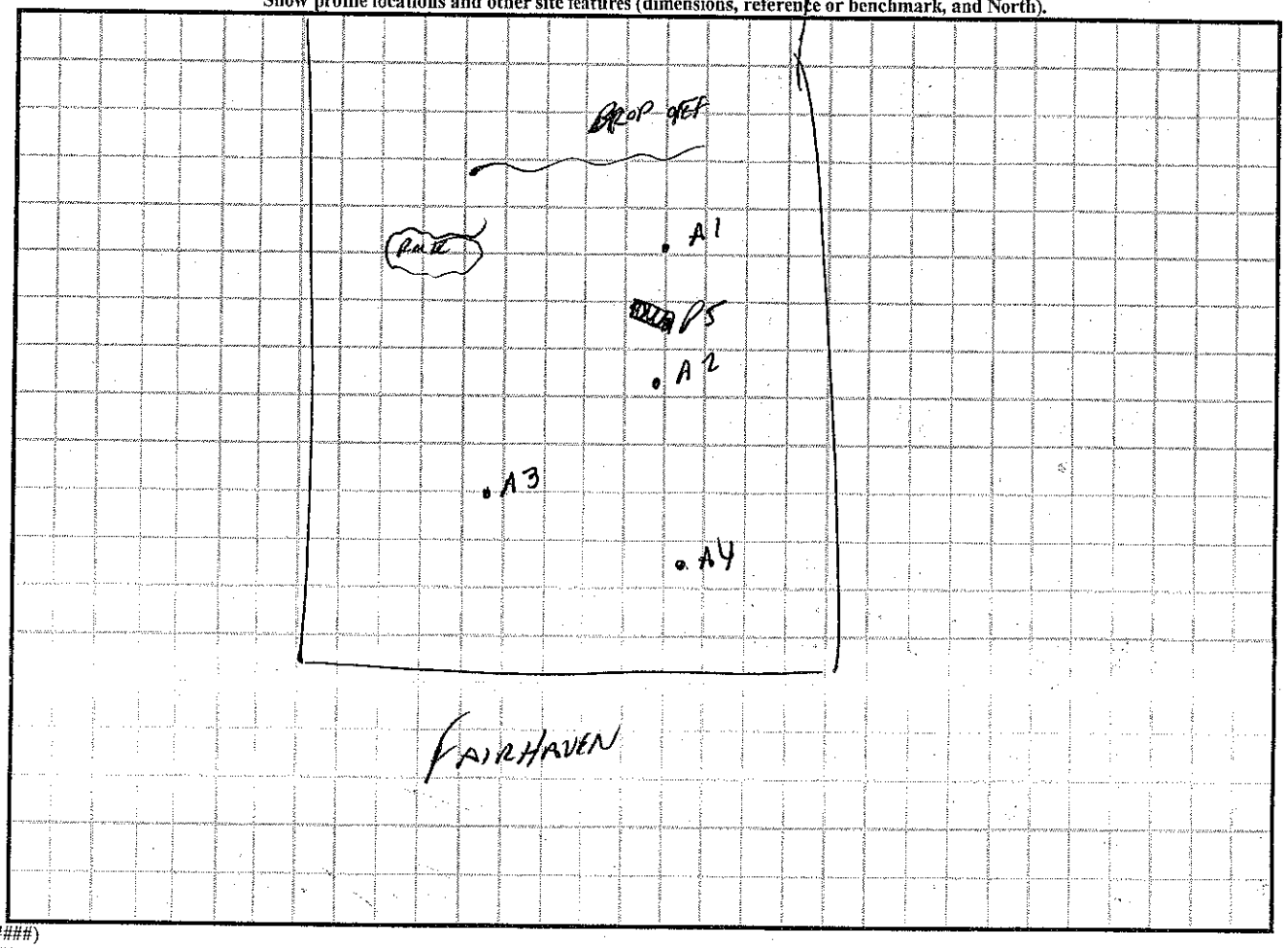
NOTES

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.

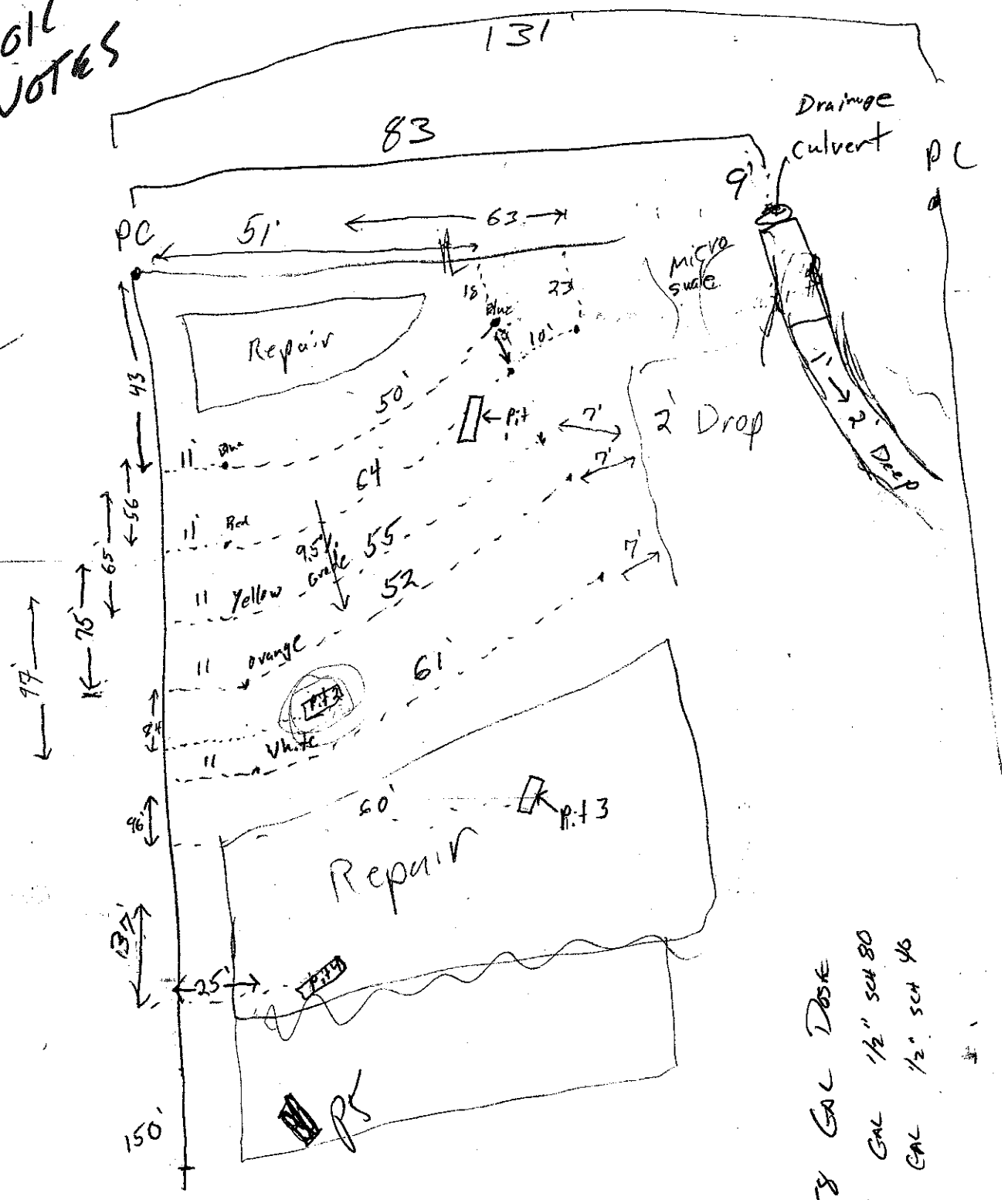
Long-term Acceptance Rate (LTAR): gal/day/ft^2

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



DENR (######)
Review (#####)

* Soil Notes *



50
64
55
52
61
± 282

Need 266.5

PS
0-16 Fill
16-37 RC Asbestos

Flow Drain Mastics 18"-37"
.25
.1 Drip

158 Gal Dose
22 Gal 1/2" sch 80
28 Gal 1/2" sch 40