DENR/DEH

ON-SITE WASTEWATER SECTION

Sheet 1 of 3
PROPERTY ID #: 4822-95-8755
COUNTY: IREDELL

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: J. Patrick Umsbaugh
APPLICATION DATE 4/18/16
ADDRESS: 244 Paddock Rd Union Grove NC
DATE EVALUATED: 6/2/16
PROPOSED FACILITY: SFR
PROPOSED DESIGN FLOW (.1949): 360 GPD
PROPERTY SIZE: 7.8 Acre
LOCATION OF SITE: 143 Alcock
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
A 1	LL 8%	0-6	BCL, WSBK	FR, SS, SP	/	48"	C-M SAP INCL. 18"-48"	/	.3
		6-32	RC, SBK						
		32-48	RCL, SBK						
A 2	LL 12%	0-27	RC, SBK	FR, SS, SP	/	48"	F-C-M SAP INCL. 16-48"	/	.3 .325 35-48"
		27-48	RCL, SBK/WSBK						
A 3	TS/HS 8%	0-12	BRCL, WSBK	FR, SS, SP	/	48"	F-C-M SAP INCL 10"-48"	/	.275-.3
		12-36	RC, SBK						
		36-48	RCL, SBK						
A 4	LS 12%	0-3	GRAVEL	—	/	37"	C-M SAP INCL	39"	.3 6"-37"
		3-6	COMPACTED	—					
		6-32	RL, SBK/WSBK	FR, S, S					
		32-37	RCL, WSBK						
		37-39	MASS SAP	FI, NS, NP					

90 AR

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	III	Approved
Site LTAR	.275	.3

OTHER FACTORS (.1946): —
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: SC
OTHER(S) PRESENT: —

COMMENTS: 1 .275 FOR LANDSCAPE & TOPO

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

PROPERTY ID #: 8738
DATE OF EVALUATION: 6/2/16
COUNTY: Iredell

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
A5	LS 10%	0-8	BRGL, WSBK	FR, SS, SP	1	48"	F SAP Inc	1	.3
		8-48	RL, SBK	" " "					
A6	LS 10%	0-10	BRGL, WSBK	FR, SS, SP	1	48"	F SAP Inc	1	.3
		10-48	RL, SBK	" " "					

COMMENTS:

2/3

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)	0.4 - 0.1	0.2 - 0.05		
		O (Organic)	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.

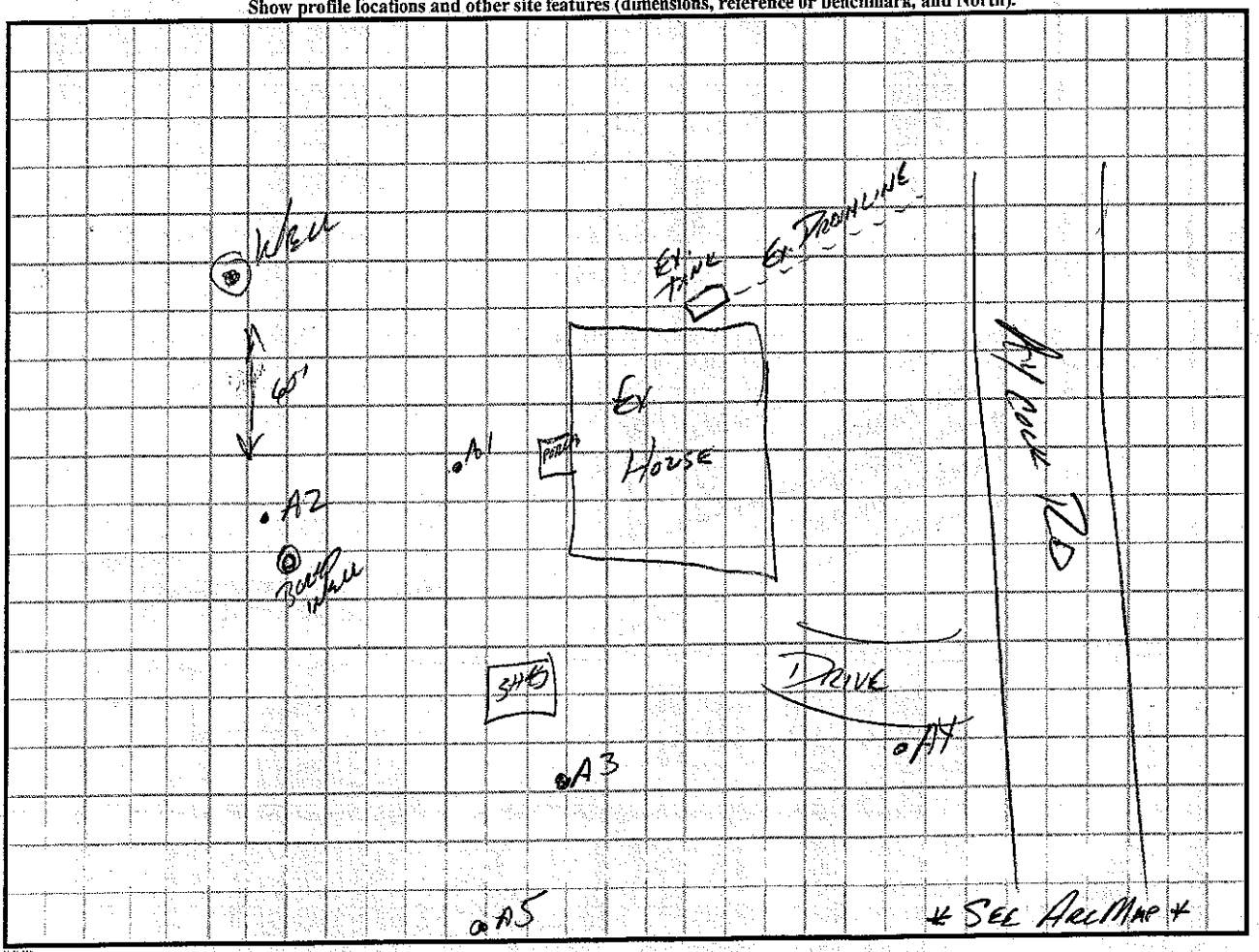
NOTES

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).



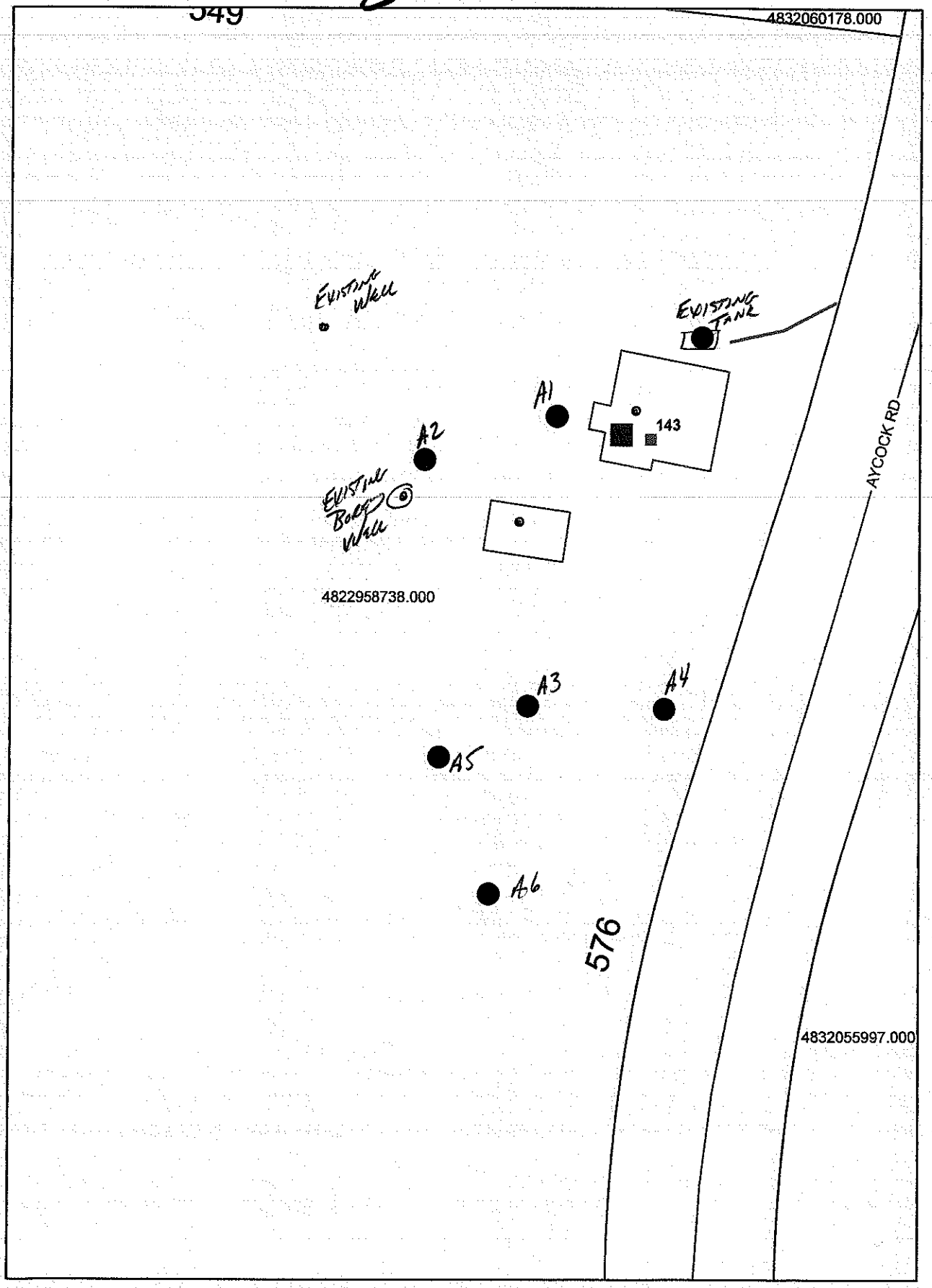
DENR (######)
Review (#####)

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1 inch = 50 feet

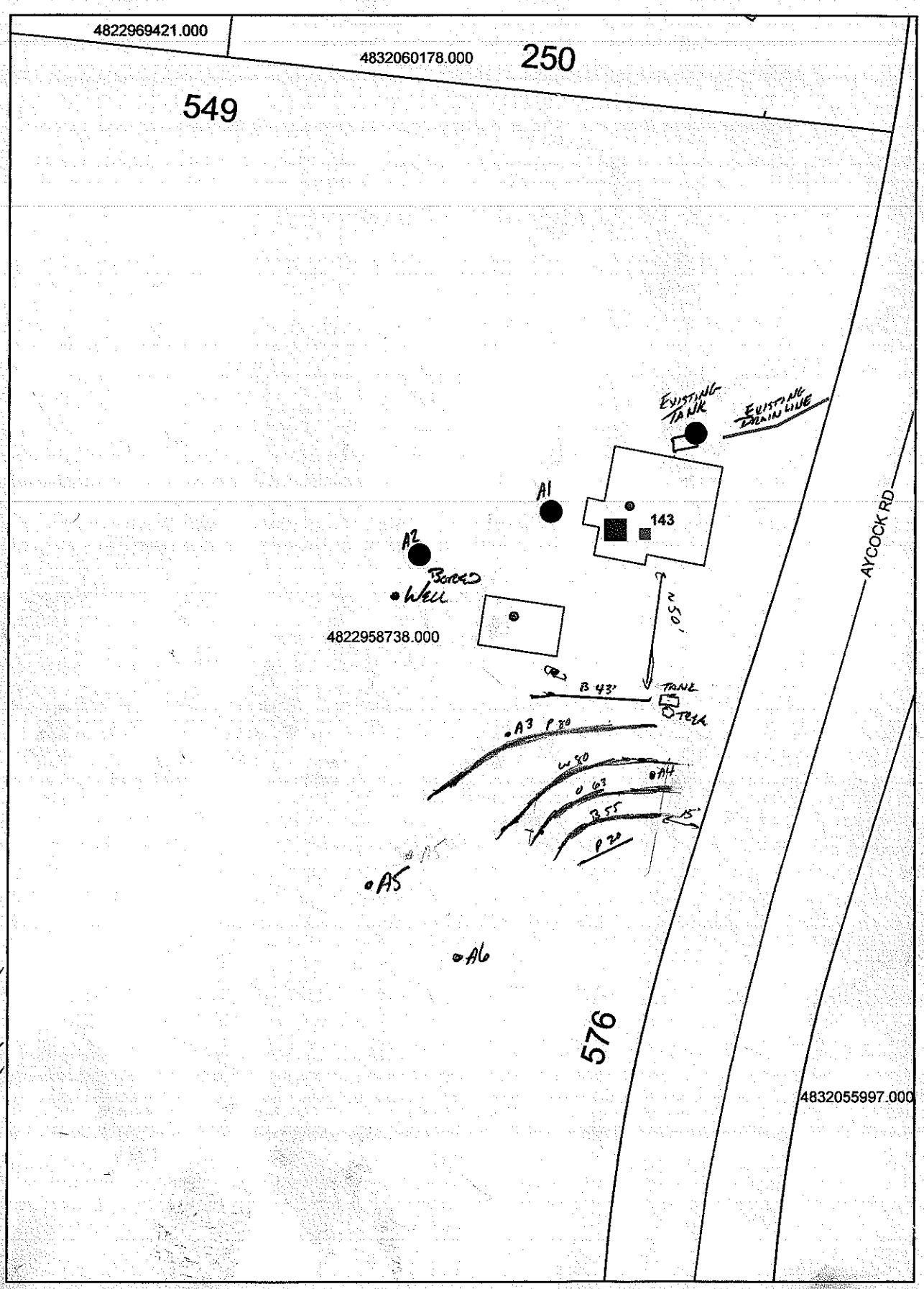
* Soil Notes *

1:600



1 inch = 50 feet

1:600



B 43
P 80
W 80
O 63
B 55
P 20
318

DESIGN
42' ✓
82 78' ✓
82 78' ✓
64' 60' ✓
52 52' ✓
18 ✓ (P)
328