Revised - Received 9-19-14



MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
1999 CANDLEWICK DRIVE
FORT MILL, S.C. 29715
803-802-4403 (office)
803-802-4402 (fax)

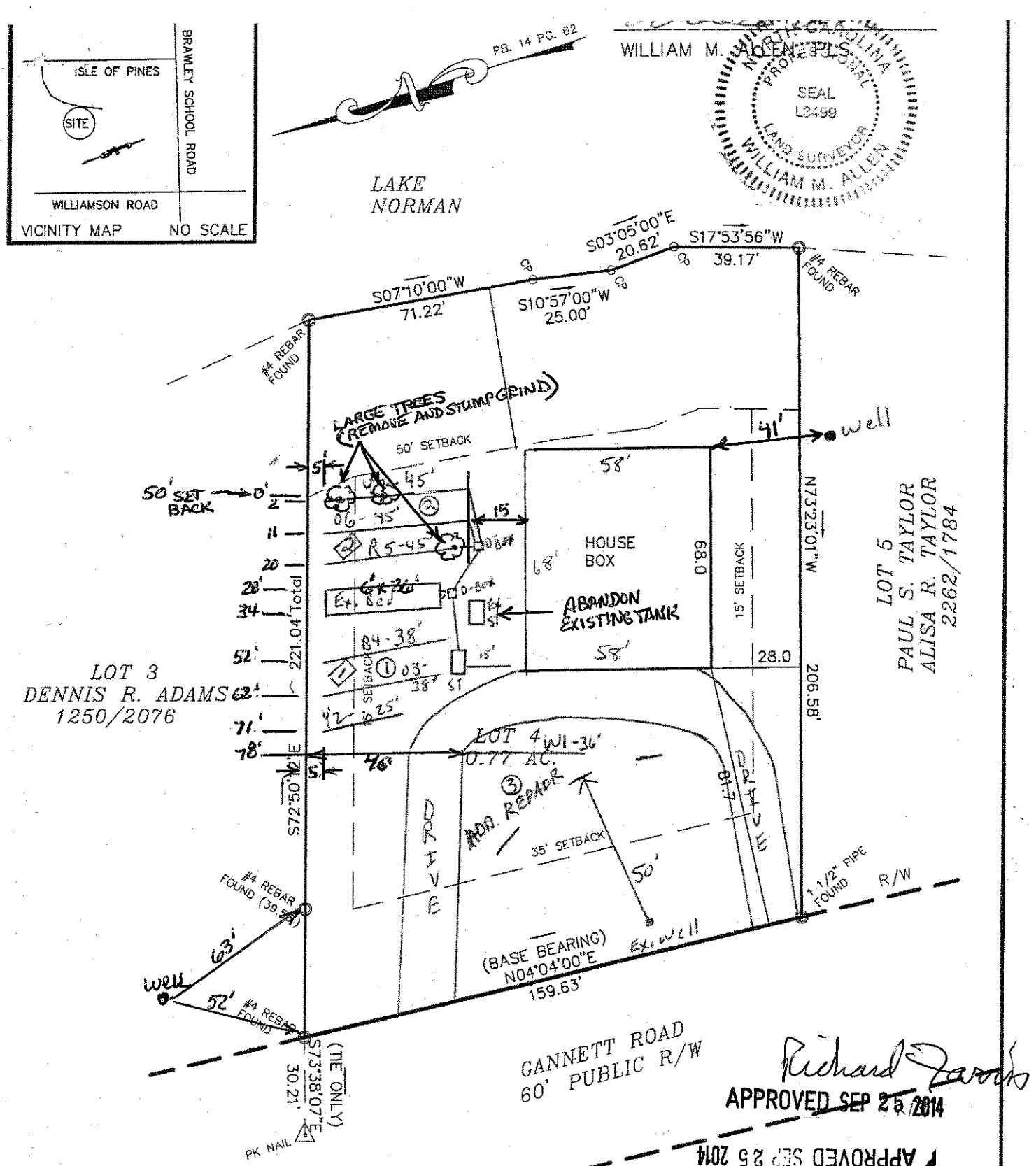
Reference: 210 Gannett Rd., CL&T Sec. 5, Lot 4
House Footprint: See attached plan
Building Setbacks: 35' front, 15' side, 50' lake
Water Source: Private well
Number of Bedrooms: 4/480 GPD
Proposed LTAR: 0.3 GPD/FT2
Proposed System Type: Existing bed/PPBPS
Proposed Repair System Type: Shallow PPBPS
Distribution: Gravity-distribution box
Septic Tank Size: 1000 gallons
Proposed Trench Bottom: 36"

Line	Design Length	Actual Length
White 1		36'
Yellow 2		25'
Orange 3		38'
Blue 4		38'
Red 5	**45'**	**45'**
Orange 6	**45'**	**45'**
Yellow 7	**45'**	**47'**

Initial System: Ex. Bed/135' PPBPS **Repair System:** 137'

Comments:
The purpose of this evaluation is to expand the current system from two bedrooms to four. The existing bed is credited with two bedrooms and M A & Associates propose to add two bedrooms of PPBPS. A new septic tank will be installed and the existing tank pumped, crushed, and filled. Because of the location of the proposed house, we are proposing to pump the basement plumbing to the main level plumbing and have the septic tank gravity to the septic system. Because the property was deeded in 1976, the proposed lines are 5ft from the property line and only two bedrooms of repair is needed. The initial PPBPS is laid out on 8ft centers.

APPROVED SEP 25 2014
Richard Farris



APPROVED SEP 25 2014

NOTES
1) THIS PROPERTY MAY BE SUBJECT TO ANY EASEMENTS AND/OR RIGHTS OF WAY OF RECORD.
2) ACREAGE COMPUTED BY THE COORDINATE METHOD.
3) NO GRID MONUMENT FOUND WITHIN 2000 FEET.

LEGEND
P.P. = POWER POLE
□ = DUKE POWER TRANS.
E.I.P. = EXISTING IRON FOUND
I.P.S. = #4 REBAR SET
R/W = RIGHT-OF-WAY

BOUNDARY SURVEY

OF

210 GANNETT ROAD

LOT 4 CRESCENT LAND & TIMBER CORP., SECT. 5

SCALE 1" = 40'

DAVIDSON TWSP., IREDELL CO., N.C.

FIELD BOOK:
FILE: CLT LOT 4 SECT 5

DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

SITE/SOIL EVALUATION for ON-SITE WASTEWATER SYSTEMS

Sheet ____ of ____
PROPERTY ID # 4636402981

OWNER: John Van Voorhees APPLICANT: ____
ADDRESS: 112 Pine Cliff Lane Mooresville NC APPLICATION DATE: 9/11/14 DATE EVALUATED: 9/18/14
PROPOSED FACILITY: 4 BR PROPOSED DESIGN FLOW (.1949): 480 PROPERTY SIZE: ____
LOCATION OF SITE: 210 Dannett Road PROPERTY RECORDED: 12/2/76
WATER SUPPLY: ☑ Private ☐ Public ☑ Well ☐ Spring ☐ Other ____
EVALUATION METHOD: existing ☑ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed

PROFILE	1940 LANDSCP POS. / SLOPE %	HORIZON DEPTH (IN)	SOIL MORPHOLOGY .1941 (a)(1) TEXTURE	(a)(2) STRUCTURE	(a)(3) MINERALOGY CONSISTENCE	SOIL MATRIX COLOR	SOIL MOTTLE COLOR	OTHER PROFILE FACTORS	
1	ridge 15%	0-3	CL	SB	fr SE	brown		.1942 WETNESS CONDITION	
		3-48+	C	SB	fr SE	red		.1941 SOIL STRUCTURE	
								.1945 SOIL DEPTH/ .1956 SAP ROUTE	
								.1944 RESTRICTIVE HORIZON	
								.1947 PROFILE CLASSIF.	
								PROFILE LTAR	.3
2	ridge 15%	0-12	CL	SB	fr SE	brown		1942 WETNESS CONDITION	
		12-18	C	SB	fr SE	red		.1941 SOIL STRUCTURE	
		18-48+	C+SAP	w SB	fr SE	red		1945 SOIL DEPTH/ 1956 SAP ROUTE	
								1944 RESTRICTIVE HORIZON	
								PROFILE CLASSIF.	
								PROFILE LTAR	.3
3	ridge 13%	0-3	CL	SB	fr SE	brown		1942 WETNESS CONDITION	
		3-24	C	SB	fr SE	red		.1941 SOIL STRUCTURE	
		24-40	C+SAP	SB	fr SE	red		1945 SOIL DEPTH/ 1956 SAP ROUTE	
		40+	SAP (CL)	m	fr wet	wet		1944 RESTRICTIVE HORIZON	
								PROFILE CLASSIF.	
								PROFILE LTAR	.3
4	ridge	0-6	SL	gr SB	fr SE	brown		1942 WETNESS CONDITION	
		6-24	C	SB	fr SE	red		.1941 SOIL STRUCTURE	
		24-44	C SAP	SB	fr SE	YR		1945 SOIL DEPTH/ 1956 SAP ROUTE	
		44+ SAP						1944 RESTRICTIVE HORIZON	
								PROFILE CLASSIF.	
								PROFILE LTAR	.3

COMMENTS ____

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	50% repair
System Type(s)	panel block/ conv bed	LPP dist panel block
Site LTAR	.3	.3

OTHER FACTORS (.1946): ____
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Ferris
OTHER(S) PRESENT: Ms Voorhees

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

PROPERTY ID #: 4636402981
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: John Van Voorhies
APPLICATION DATE:
ADDRESS: 112 Pine Cliff Ln. Mooreseville, NC
DATE EVALUATED:
PROPOSED FACILITY: 4 bdrm
PROPOSED DESIGN FLOW (.1949): 480 GPD
PROPERTY SIZE: 0.77 AC
LOCATION OF SITE: 210 Gannett CL&T Sec 5 lot 4
PROPERTY RECORDED: 12/2/1976
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
AB 1	LS 10%	0-6	Br SCL WSBK	FR SS SP	N/A	45"	F-C SAP PS	N/A	PS 0.3
		6-22	R C SBK	FR SS SP					
		22-45	R CL WSBK	FR SS SP					
		45-48	SL SAP M	FR SS SP					
AB 2	LS 10%	0-30	R C SBK	FR SS SP	N/A	48"	Few SAP	N/A	PS 0.3
		30-48	R CL WSBK	FR SS SP					
AB 3	LS 8%	0-6	BR SCL WSBK	FR SS SP	N/A	48"	Few SAP	N/A	PS 0.3
		6-25	R C SBK	FR SS SP					
		25-48	R CL WSBK	FR SS SP					
PIT 1	LS 10%	0-5	Br SCL WSBK	FR SS SP	N/A	60"	F-C SAP	N/A	PS 0.3
		5-31	R C SBK	FR SS SP					
		31-60	R CL WSBK	FR SS SP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	BED + 270 FT2	417 FT2
System Type(s)	BED + PPBPS	PPBPS
Site LTAR	0.3	0.3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: M A & Associates
OTHER(S) PRESENT:

APPROVED SEP 25 2014
Richard Farris

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

PROPERTY ID #: 4636402981
DATE OF EVALUATION:
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	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
P 2	LS 10%	0-7	FILL		N/A	52"	N/A	N/A	PS 0.3
		7-12	Br SCL WSBK	FR SS SP					
		12-45	R C SBK	FR SS SP					
		45-52	R CL WSBK	FR SS SP					

COMMENTS:

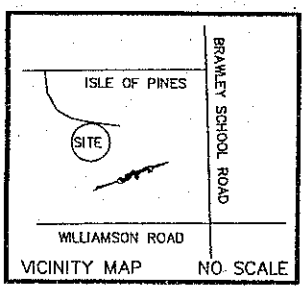
APPROVED SEP 25 2014
Richard Farris

DAS DON ALLEN & ASSOCIATES, P. A.
"Since 1971"
Commercial * Residential * Mortgage Surveys * Multi-Family
Construction Staking * Subdivision Design * Topographical
111-B Raceway Drive * Mooresville * NC * 28117
(704) 664-7029 (704) 664-8041 Fax

I, certify that this map was drawn under my supervision from an actual survey made under my supervision recorded in deed book 2251, page 57, and/or plat book 14, page 62, that the ratio of precision is 1':10,000, that this map was prepared in accordance with the General Statutes of North Carolina Chapter 89C. my hand and seal on the 26, day of AUG., A.D. 20 14

WILLIAM M. ALLEN, PLS

NORTH CAROLINA PROFESSIONAL SEAL L3499 LAND SURVEYOR WILLIAM M. ALLEN



PB. 14 PG. 62

LAKE NORMAN

S03°05'00"E 20.62'
S17°53'56"W 39.17'
S07°10'00"W 71.22'
S10°57'00"W 25.00'
#4 REBAR FOUND
#4 REBAR FOUND
50' SETBACK
61.0
well
HOUSE BOX
68.0'
15' SETBACK
N73°23'01"W
LOT 5
PAUL S. TAYLOR
ALISA R. TAYLOR
2262/1784
LOT 3
DENNIS R. ADAMS
1250/2076
221.04' Total
S72°50'12"E
61.0
28.0
206.58'
LOT 4 W1 - 0.77 AC.
DRIVE
35' SETBACK
50'
#4 REBAR FOUND (39.5'S)
well
#4 REBAR FOUND 5'
1 1/2" PIPE FOUND
R/W
(BASE BEARING) N04°04'00"E 159.63'
Ex. well
S73°38'07"E (TIE ONLY) 30.21'
PK NAIL
GANNETT ROAD
60' PUBLIC R/W
R/W

Keep this in office files w/ soil notes

0' 20' 40' 100'
SCALE IN FEET

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BOUNDARY SURVEY

OF
210 GANNETT ROAD
LOT 4 CRESCENT LAND & TIMBER CORP., SECT. 5
DAVIDSON TWSP., IREDELL CO., N.C.

SCALE 1" = 40'
ACQUIRED BY: JOHN R. & BRENDA VAN VOORHIES

FIELD BOOK:
FILE: CLT LOT 4 SECT 5
DC FILE:
TAX MAP NO: 4636402981