

MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
361 Ennis Rd.
Weddington, NC 28173
(704) 576-3887

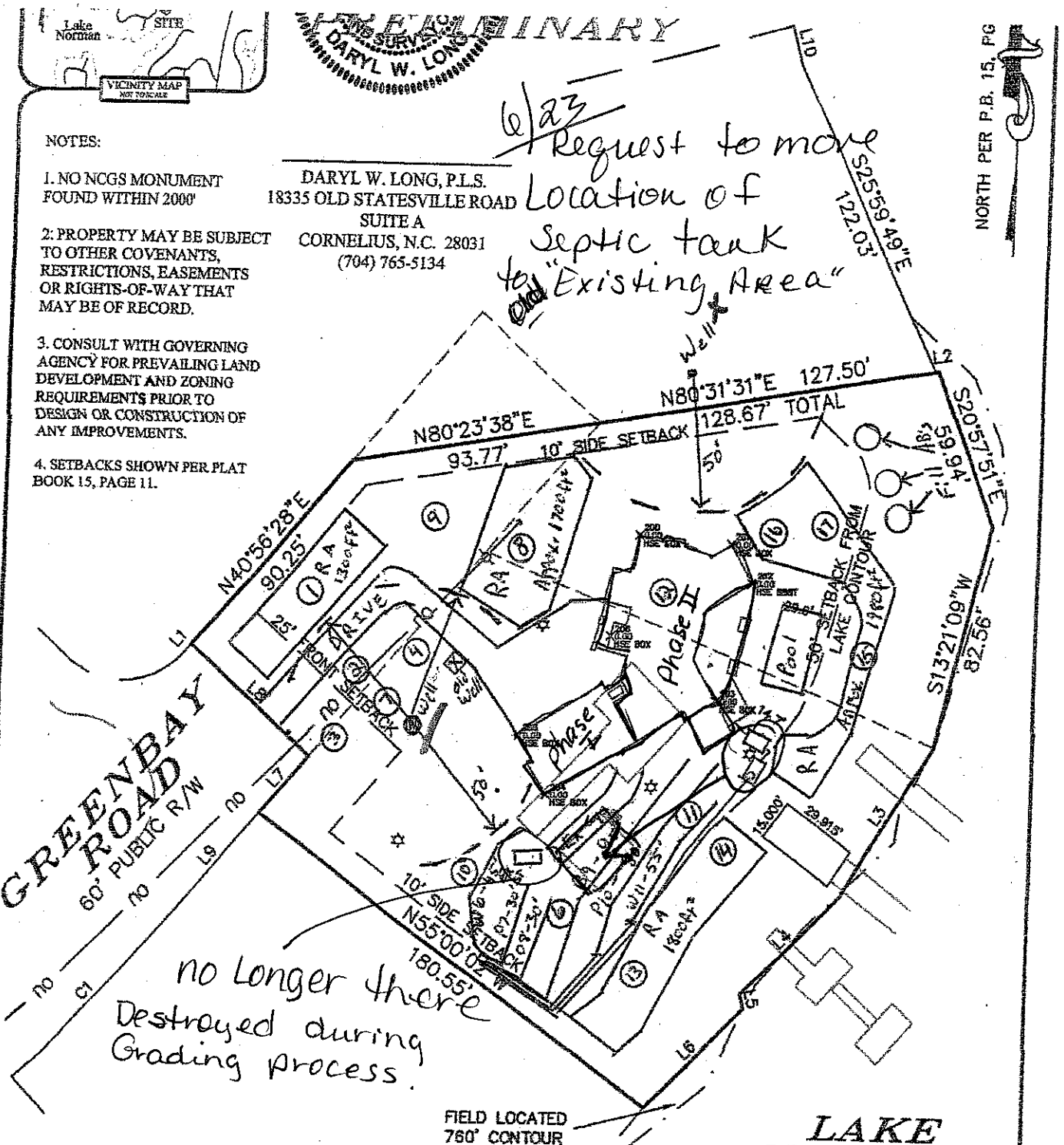
Reference: Data Sheet for 496 Greenbay Rd
House Footprint: See attached plan
Building Setbacks: 35' front, 50' lake, 15' side
Water Source: Private well
Number of Bedrooms: 5/600 GPD
Proposed LTAR: 0.3 GPD/FT2
Proposed System Type: PPBPS
Proposed Repair System Type: Pretreatment Drip Irrigation
Distribution: Low pressure
Flow per Orifice: 0.41 GPM
Orifice Size: 5/32"
System Flow: 31.6'
Dosing Volume: 277.2 gallons
Pump Run Time: 8.8 minutes
Elevation Head: 11.1'
Friction Head: 3.6'
Pressure Head: 2'
Total Dynamic Head: 16.7'
Supply Line Length: 145'
Septic/Pump Tank Size: 1500/1500 gallons
Proposed Trench Bottom: 36"

Line	Design Length	Actual Length	Elevation
White 6	**45' (10 panels)**	**45'**	**11.5'**
Pink 7	**30' (7 panels)**	**30'**	**13.2'**
Orange 8	**30' (7 panels)**	**31'**	**14.0'**
Blue 9	**95' (22 panels)**	**100'**	**15.2'**
Pink 10	**80' (18 panels)**	**85'**	**16.6'**
White 11	**55' (13 panels)**	**55'**	**17.5'**

Initial System: 335' **Repair System:** Approximately 6780 ft2
Pump Tank: 17.6' **House Corner:** 12.5' **Benchmark:** 0.3'

Comments:

The septic system is laid out on 8' centers. The pipe in the panels of B9 and P10 needs to be 1 ½" pipe. The other lines should be 1 ¼" pipe. The deck and light poles in the septic area must be removed. The power pole in the repair area must be removed and the utilities should be brought to the house from the road along the old driveway. The old 2" well will be abandoned and the 6" well will be used. The existing septic tanks should be pumped, crushed and filled. The pool is marked in white flags. The house corners that are staked are represented on the site plan.



LINE TABLE		
LINE	LENGTH	BEARING
L1	4.35	N40°56'28"E
L2	1.17	N80°31'31"E
L3	64.61	S31°22'09"W
L4	51.33	S45°04'09"W
L5	5.52	S13°50'51"E
L6	51.52	S46°04'09"W
L7	27.80	N40°47'50"E
L8	60.00	N49°11'22"W
L9	48.68	N40°47'50"E
L10	15.01	S16°04'19"E

CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD	CHORD BRG
C1	82.47	917.91	82.44	N43°07'12"E

Physical Survey of Lot 96, Section 10 of Recreation Lots plus two additional tracts

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

PROPERTY ID #: 4637064691
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Keith and Lisa Wine APPROVED FEB 0 6 2015 RA APPLICATION DATE
ADDRESS: DATE EVALUATED:
PROPOSED FACILITY: 5 bdrm PROPOSED DESIGN FLOW (.1949): 600 GPD PROPERTY SIZE: 1.096 AC
LOCATION OF SITE: 496 Greenbay Rd PROPERTY RECORDED: 4/29/2014
WATER SUPPLY: Ξ Private ☐ Public Ξ Well ☐ Spring ☐ Other
EVALUATION METHOD: Ξ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: Ξ 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	
1	LS 5%	0-12	Br CL WSBK	FR SS SP	N/A	60"		N/A	PS 0.3
		12-36	R C SBK	FR SS SP					
		36-60	R CL WSBK	FR SS SP			F-C SAP		
2	LS 5%	0-20	FILL						US
3	LS 5%	0-23	FILL						US
4	LS 5%	0–6	Br CL WSBK	FR SS SP	N/A	48"	N/A	N/A	PS 0.3
		6-48	R C SBK	FR SS SP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	670 FT2	674 FT2
System Type(s)	PPBPS	PPBPS
Site LTAR	0.3	0.3

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

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

APPROVED FEB 06 2015

PROPERTY ID #: 4637064691
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	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
5	LS 7%	0-10	Br CL WSBK	FR SS SP	N/A	48"	F-C SAP	N/A	PS 0.3
		10-36	R C SBK	FR SS SP					
		36-48	R CL WSBK	FR SS SP					
6	LS 7%	0-6	Br CL WSBK	FR SS SP	N/A	48"	Few SAP	N/A	PS 0.3
		6-26	R C SBK	FR SS SP					
		26-48	R CL WSBK	FR SS SP					
7	LS 5%	0-4	Br CL WSBK	FR SS SP	N/A	48"	N/A	N/A	PS 0.3
		4-25	R C SBK	FR SS SP					
		25-48	R CLWSBK	FR SS SP					
8	LS 7%	0-30	R C SBK	FR SS SP	N/A	48"	N/A	N/A	PS 0.3
		30-48	R CL WSBK	FR SS SP					
9	LS 7%	0-30	FILL						US

OMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

APPROVED FEB 06 2015
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PROPERTY ID #: 4637064691
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	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
10	LS 5%	0-6	Br CL WSBK	FR SS SP	N/A	52"	N/A	N/A	PS 0.3
		6-36	R C SBK	FR SS SP					
		36-52	R CL WSBK	FR SS SP					
11	LS 7%	0-8	Br CL WSBK	FR SS SP	N/A	48"	N/A	N/A	PS 0.3
		8-36	R C SBK	FR SS SP					
		36-48	R CL WSBK	FR SS SP					
12	LS 5%	0-10	FILL		N/A	48"	N/A	N/A	PS 0.35 IN HOUSE AREA
		10-42	R CL WSBK	FR SS SP					
		42-48	R L WSBK	FR SS SP					

COMMENTS:

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

PROPERTY ID #: 4637064691
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

ADDITION SOILS FOR 496 GREENBAY RD.

OWNER: _____ APPLICATION DATE _____
ADDRESS: _____ DATE EVALUATED: _____
PROPOSED FACILITY: _____ PROPOSED DESIGN FLOW (.1949): _____ PROPERTY SIZE: _____
LOCATION OF SITE: 496 Greenbay Rd. _____ 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)		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	
13	LS 5%	0-4	Br CL WSBK	FR SS SP	N/A	36"	N/A	N/A	PS 0.3
		4-36	R C SBK	FR SS SP					
14	LS 5%	0-4	Br CL WSBK	FR SS SP	N/A	48"	N/A	N/A	PS 0.3
		4-48	R C SBK	FR SS SP					
15	LS 5%	0-5	Br CL WSBK	FR SS SP	N/A	36"	N/A	N/A	PS 0.3
		5-24	R C SBK	FR SS SP					
		24-36	R CL WSBK	FR SS SP					
16	LS 5%	0-8	RBr CL WSBK	FR SS SP	N/A	36"	N/A	N/A	PS 0.3
		8-36	R C SBK	FR SS SP					

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

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): _____

EVALUATED BY: _____
OTHER(S) PRESENT: _____

COMMENTS: _____

SOIL/SITE EVALUATION

(Continuation Sheet)

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17	LS 5%	0-14	FILL		N/A	44"	N/A	N/A	PS 0.3
		14-18	Br CL WSBK	FR SS SP					
		18-44	R C SBK	FR SS SP					

COMMENTS: ___