APPROVED APR 14 2016
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MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
561 Ennis Rd.
Weddington, NC 28173
(704) 576-3887

Reference: Data Sheet for 115 Buckingham Place Rd. Davidson Downes Lot 1/2
House Footprint: 80' x 80'
Building Setbacks: 35' front/rear, 15' side
Water Source: Community water
Number of Bedrooms: 4/480 GPD
Proposed LTAR: 0.3 GPD/FT2 (initial), 0.1 GPD/FT2 (repair)
Proposed System Type: 25% Reduction
Proposed Repair System Type: Drip irrigation
Distribution: Pressure manifold
Flow per Tap: 12.5 GPM
Tap Size and Material: ¾" SCH 40
System Flow: 25 GPM
Dosing Volume: 175 gallons 67%
Pump Run Time: 7 minutes
Elevation Head: 17.7'
Friction Head: 1.4'
Pressure Head: 2'
Total Dynamic Head: 21.1'
Supply Line Length: 105'-2" PVC
Septic/Pump Tank Size: 1000/1000 gallons
Proposed Trench Bottom: 24"-36"

Line	Design Length	Actual Length	Elevation
Pink 1	50'	50'	3.8'
Blue 2	75'	90'	4.6'
Orange 3	75'	100'	5.5'
White 4	100'	115'	5.7'
Yellow 5	100'	109'	6.4'

Initial System: 400' **Repair System:** 4800 ft2
Pump Tank: 16.5' **House Corner:** 15.7' **Benchmark:** 3.9'

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Comments:

Lots 1 and 2 have been combined into one lot. Neither lot could support system and repair area on its own. An area have been left available for the possible addition of a pool and/or a detached garage.

The pressure manifold will have two taps. One tap will feed P1, B2, and O3. The other tap will feed W4 and Y5. Each group of lines will use serial distribution going from end cap or drop boxes.

MENT OF ENVIRONMENT AND NATURAL RESOURCES
ION OF ENVIRONMENTAL HEALTH
SITE WASTEWATER SECTION

PROPERTY ID #: 4654880119
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

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OWNER: Davidson Downes Inc
ADDRESS: Denver NC
APPLICATION DATE
DATE EVALUATED:
PROPOSED FACILITY: 4 bdrm PROPOSED DESIGN FLOW (.1949): 480 GPD
PROPERTY SIZE: 1.33 AC
LOCATION OF SITE: 115 Buckingham Place Rd. Davidson downes Lot 1/2
PROPERTY RECORDED: 2016
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	.1944 RESTRICTIVE HORIZON	.1944 RESTRICTIVE HORIZON	PROFILE CLASS & LTAR
1	LS 6%	0-5	Br CL WSBK	FR SS SP SEXP	N/A	48"			PS 0.3
		5-30	R C SBK	FR SS SP SEXP					
		30-48	R CL WSBK	FR SS SP SEXP					
2	LS 6%	0-30	R C SBK	FR SS SP SEXP	N/A	48"	N/A	N/A	PS 0.3
		30-48	R CL SBK	FR SS SP SEXP					
3	LS 6%	0-8	FILL		N/A	48"		N/A	PS 0.3
		8-32	R C SBK	FR SS SP SEXP					
		32-48	R CL WSBK	FR SS SP SEXP			F-C SAP		
4	LS 4%	0-4	Br SCL WSBK	VFR SS SP	N/A	48"		N/A	PS 0.3
		4-30	R C SBK	FR SS SP SEXP					
		30-48	R CL WSBK	FR SS SP SEXP			F-C SAP		

LICENSED SOIL SCIENTIST MICHAEL A. ADKINS 1252 STATE OF NORTH CAROLINA

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	1200 FT2	4800 FT2
System Type(s)	25% Reduction	DRIP
Site LTAR	0.3	0.1

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

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

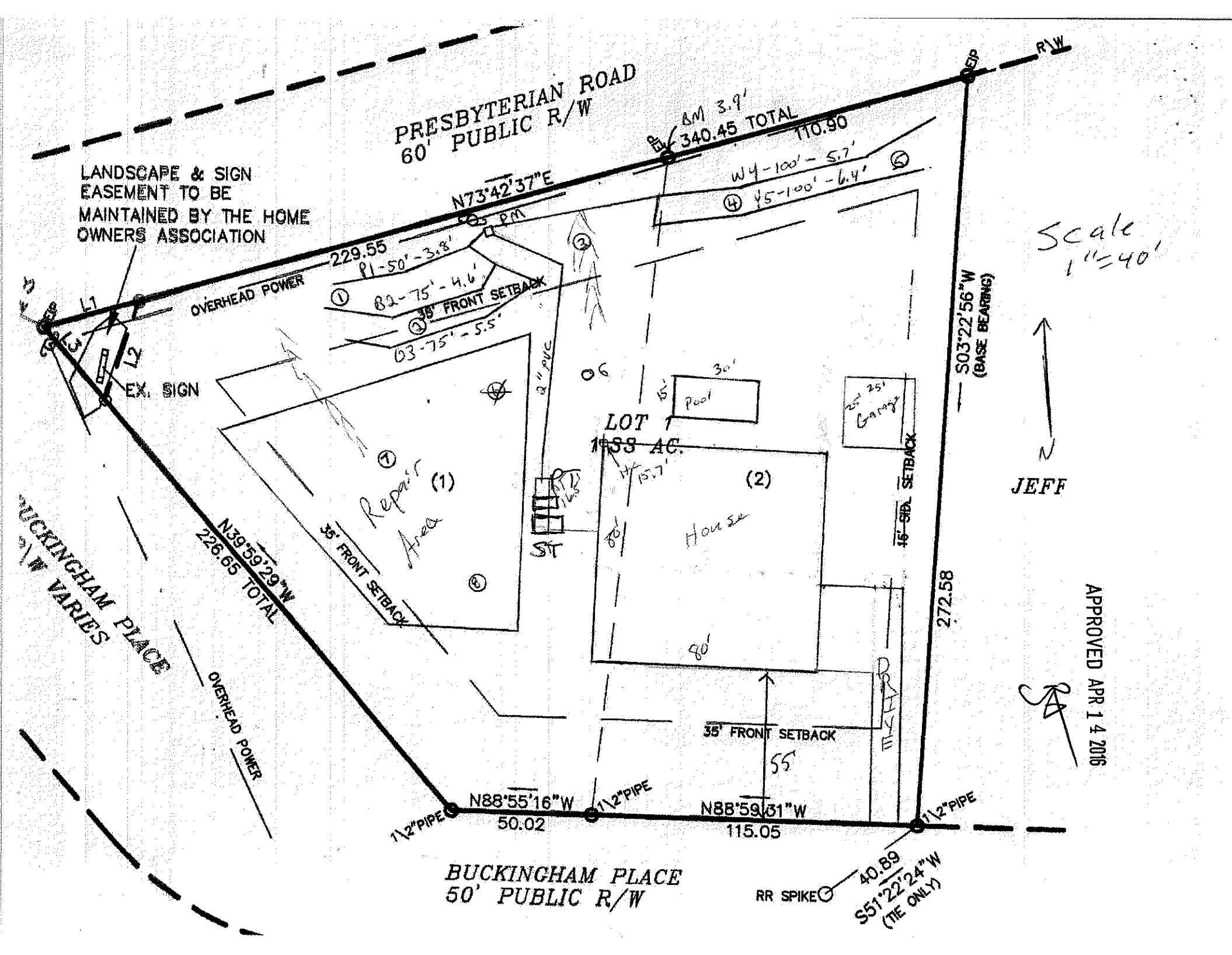
DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

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PROPERTY ID #: MCCALL LOT 30
DATE OF EVALUATION:
COUNTY: [redacted]

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
5	LS 4%	0-4	Br CL WSBK	FR SS SP SEXP	N/A	48"	N/A	N/A	PS 0.3
		4-48	R C SBK	FR SS SP SEXP					
6	LS 8%	0-8	Br CL WSBK	FR SS SP SEXP	F-C YB CHR 2 @ 30"	30"	N/A	N/A	PS 0.25
		8-30	R C SBK	FR SS SP SEXP					
7	LS 5%	0-5	Br CL WSBK	FR SS SP SEXP	F-C YB CHR 2 @ 24"	24"	N/A	N/A	PS 0.1 DRIP
		5-24	YR C SBK	FR SS SP SEXP					
8	LS 6%	0-18	RBr SCL WSBK	FR SS SP SEXP	YB/Mn CHR 2 @ 32"	32"	N/A	N/A	PS 0.25-0.225
		18-32	RY C WSBK	FR SS SP SEXP					

COMMENTS:


PRESBYTERIAN ROAD
60' PUBLIC R/W
LANDSCAPE & SIGN EASEMENT TO BE MAINTAINED BY THE HOME OWNERS ASSOCIATION
N73°42'37"E
229.55
OVERHEAD POWER
EX. SIGN
35' FRONT SETBACK
Repair Area
(1)
(2)
House
Pool
Garage
LOT 1
1.33 AC.
16' SIDE SETBACK
S03°22'56"W
(BASE BEARING)
272.58
N39°59'29"W
226.65 TOTAL
BUCKINGHAM PLACE
50' VARIES
OVERHEAD POWER
N88°55'16"W
50.02
1/2"PIPE
N88°59'31"W
115.05
1/2"PIPE
1/2"PIPE
BUCKINGHAM PLACE
50' PUBLIC R/W
RR SPIKE
40.89
S51°22'24"W
(TIE ONLY)
110.90
340.45 TOTAL
W4-100'-5.7'
N5-100'-6.4'
B2-75'-4.6'
D3-75'-5.5'
P1-50'-3.8'
Scale
1"=40'
JEFF
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