

MICHAEL ATHANAS & ASSOCIATES

LICENSED SOIL SCIENTIST

561 Ennis Rd.

Weddington, NC 28173

(704) 576-3887

Reference: Data Sheet for 2596 Brawley School Road, Iredell County NC

Addition Footprint: 23'x39'
Building Setback: 35' Front/Rear, 15' Side,
Water Source: Private Well
Number of Additional Bedrooms: 2/240 gpd
Current number of Bedroom: 4/480 gpd
Proposed LTAR: 0.3 gpd/ft2
Suggested System Type: PPBPS/ 9' center
Distribution: LP-CVB
Flow per Orifice: .59
Hole Size & Material: 3/16"
Number of Panels: 95 Total (63* in existing and 32 in expansion)
System Flow: 56.05 gal/min
Dosing Volume: 342 gal/dose
Pump Run Time: 6.10 min
Total Linear Footage: 270' in existing; 140' in expansion
Trench Bottom Square Footage: 1230 sq.ft
Elevation Head: 12.8'
Friction Head: 2.58'
Pressure Head: 2'
Total Dynamic Head: 17.38'
Supply Line Length: 265'
Proposed Trench Bottom Depth: 36"
Septic/ Pump tank size: 1500gal ST 1500 gal PT or add a 1000gal ST to the existing tanks

* This number is being assumed by MA&A due to the line lengths indicated on the original permit.

TO ANY PLANNING OR

IMPROVEMENTS SHOWN ON
NOT BE SCALED OR RELIED
OR CONSTRUCTION WITHOUT
I OF ALL DIMENSIONS.

THIS FILE ARE FOR REFERENCE.
BE USED FOR DESIGN WORK.

EASEMENT MAY EXIST ALONG EACH LOT LINE.
FOUND WITHIN 2000' OF SUBJECT PROPERTY.

BLDG. IS 1.12' OFF PROPERTY LINE

Bearing	Distance
N 46°47'16" W	16.90'
S 88°10'52" E	5.15'

- BOUNDARY LINE
- SANITARY SEWER LINE
- NATURAL GAS LINE
- UNDERGROUND POWER
- OVERHEAD UTILITIES
- UNDERGROUND TELEPHONE
- WATER LINE
- FENCE (TYPE NOTED)
  POINT (UNMARKED)
  -WAY
  PAVEMENT
  E
  ILE

34-55

#5 REBAR

3.49'

S 88°02'38"E
182.94'

#4 REBAR

Well

BLOCK BLDG

50' Radius

0.983 AC

Existing CVB (Replace w/ Larger)

Existing Pavilion

Existing Deck

Existing Deck

S 12°12'31"E
109.17'

N 13°27'37"W
111.97'

Scale 1"=40'

North

Abandoned System

#4 REBAR

Approved
5/21/15
MD

#4 PIN

N 88°56'31"W
64.64'

#4 REBAR

TIE ONLY

S 15°47'19"E
24.33'

#4

430

M. CONNOR
2279-1554
34-16

20.05'

28' Addition

FRAME GARAGE

CONCRETE DRIVE

14.02'

P.T.

24.99'

N 22°26'22"E
230.18'

21.01'

Existing Pump and Septic Tanks

New 1000 gal Septic

WELL

Not a well, it is a Propane Tank

195.28'
S 27°35'13"W

18.09'

2

G. THOMPSON
1701-957
48-33

CONCRETE PATIO

1.5 STORY FRAME/ROCK

#4 PIN

APPROX. FLOOD LINE

APPROX.

15.26'

* A PORTION OF THIS PROPERTY IS LOCAT

Existing System

Line	Actual Length	Design Length	# of Panels	Elevation
Orange 1	65'	n/a	15	n/a
Blue 2	65'	n/a	15	n/a
Pink 3	55'	n/a	13	n/a
Yellow 4	47'	n/a	11	n/a
Orange 5	38'	n/a	9	n/a

Expansion and Repair

Line	Actual Length	Design Length	# of Panels	Elevation
White 1	40'			3.3'
Blue 2	**60'**	**60'**	**14**	**3.8'**
Orange 3	**80'**	**80'**	**18**	**4.2'**
White 4	115'			4.7'
Orange 5	101'			5.6'
Blue 6	65'			5.9'
White 7	95'			6.2'
Blue 8	35'			6.5'
Orange 9	45'			6.7'

Septic/Pump Tanks: 11.4' **CVB:** 3.6'
Initial System: 410' of PPBPS (270' in existing; 140' in expansion) **Repair System:** 502'
Septic Tank/Pump tank: 1500 or additional 1000gal/1000gal existing pump tank.
Benchmark: 7.3' Front left corner iron of lot. (Facing the lot from the road.)

Comments: The purpose of the evaluation is to have the existing 4-bedroom system expanded to a 6-bedroom system.

- MA&A Inc, evaluated 7 auger borings on the site and are proposing using B2 and O3 for the needed additional footage to increase the system to a 6-bedroom. The additional area will be used for a PPBPS repair for 6-bedrooms.
- An additional 1000 gallon septic tank will need to be set in series with the existing septic tank. An additional option is to crush the existing tank and use new 1500 gallon septic and pump tanks.
- MA&A was unable to locate the pressure line from the pump tank. If the line interferes with any of the proposed septic area, it will need to be rerouted around the proposed septic area.
- As noted above MA&A made the assumption of the total number of panels in the existing system due to the line lengths given in the existing permit.
- A 3" pressure line will need to be used due to the gpm pumped to the septic area.
- A lager Central Valve Box will need to be set to accommodate the additional valves needed.
- The existing well is located inside the block building on the right side of the property.

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

PROPERTY ID #: Lot 10; Highland Ridge
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Joseph Chickene
ADDRESS: 2596 Brawley School Rd, Mooresville, NC 28117
PROPOSED FACILITY: 6-Bedroom Residence PROPOSED DESIGN FLOW (.1949): 600 GPD
LOCATION OF SITE: Lot 1; Brawley School Road

APPLICATION DATE:
DATE EVALUATED: 4/30/2015
PROPERTY SIZE: 0.98 Acres
PROPERTY RECORDED: 06/12/2014

WATER SUPPLY: ☐ Private ☐ Public * Well ☐ Spring ☐ Other
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

Approved MD 5/21/15

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 4-6%	0"-24"	R C SBK	SS SP FR SEXP		48"	Few to common Saporlite Inclusions 24"-48"	None	.3
		24"-48"	R CL WSBK	SS SP FR SEXP					
AB 2	LS 4-6%	0"-6"	Fill			48"	Few to common Saporlite Inclusions 44"-48"	None	.3
		6"-15"	Br CL WSBK	SS SP FR SEXP					
		15"-44"	R C SBK	SS SP FR SEXP					
		44"-48"	R CL WSBK	SS SP FR SEXP					
AB 3	LS 4-6%	0"-4"	Fill			48"	Few to common Saporlite Inclusions 30"-48"	None	.3
		4"-15"	Br CL WSBK	SS SP FR SEXP					
		15"-30"	R C SBK	SS SP FR SEXP					
		30"-48"	R CL WSBK	SS SP FR SEXP					
AB 4	LS 4-6%	0"-15"	Br CL WSBK	SS SP FR SEXP		48"	Few to common Saporlite Inclusions 30"-48"	None	.3
		15"-48"	R C SBK	SS SP FR SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	1230 ft2	1506 ft2
System Type(s)	PPBPS	PPBPS
Site LTAR	.3	.3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948):
EVALUATED BY: Michael Athanas and Associates
OTHER(S) PRESENT:

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

PROPERTY ID #: 2596 Brawley School Road
DATE OF EVALUATION: 4/30/2015
COUNTY: Iredell

Approved MD 5/21/15

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AB 5	LS 4-6% ✓	0"-15"	Br CL WSBK	SS SP FR SEXP		48"	Few to common Saporlite Inclusions 40"-48"	None	.3
		15"-40"	R C SBK	SS SP FR SEXP					
		40"-48"	R CL WSBK	SS SP FR SEXP					
AB 6	LS 4-6% ✓	0"-13"	Fill			48"		None	.3
		13"-23"	Br CL WSBK	SS SP FR SEXP					
		23"-48"	R C WSBK	SS SP FR SEXP					
AB 7	LS 4-6% ✓	0"-12"	Br CL WSBK	SS SP FR SEXP		48"		None	.3
		12"-48"	R C SBK	SS SP FR SEXP					

COMMENTS: _____