LOW PRESSURE PPBPS SYSTEM
INSTALL SPECIFICATIONS

Location: 115 BROADBILL DR, LOT 44 OF WOODLAND HILLS SUBDIVISION
Source of Wastewater Flow: 3 Bedroom Single Family Residence
Estimated Gallons Per Day Flow: 360
System Flow: 22.55

Design Specifications

Drainfield Size: 239
Required Drainfield Size: 200
Loading Rate (gpd/ft.^{2}): 0.3
Depth of Gravel in Trench: NA (PPBPS)
Gravel Size: NA (PPBPS)
Trench Depth: 30 in.
Trench Width: **24 in.**

Existing Septic Tank Size: 1000
Pump Tank Addition Size: 1000

Estimated Supply Line Length: 115
Supply Line Diameter: 2 in. SCH 40 PVC
Supply Line Volume: 20.01
Dosing Volume: 132.66

Recommended Pump: County Approved.

Recommended Float Controls: Float Control Switches as Required for Control Panel or County Approved Equivalents

Recommended Control Panel: SJE Rhombus, Aquaworx or County Approved Control Panel.

Pressure Head: 2 ft.
Friction Head: 1.46
Elevation Head: 10.16
Total Dynamic Head: 16.34

Threaded Union: In Tank
Gate Valves: 1 in Tank
1 per lateral
Check Valves: In Tank
Anti-Siphon Hole: N/A
Additional Comments: Soil suitability performed by Carolina Soil & Septic Consulting, PLLC

Owner/Applicant Information
Owner/Applicant Name: Jerrell & Carol Stockwell
Address: 115 Broadbill Dr.
Mooresville, NC 28117
Phone Number:

**Pump tank draw down based on a volume basis of 21 gallons per inch. Draw down may vary among pump tank manufacturers.*

115 BROADBILL DR, LOT 44 OF WOODLAND HILLS SUBDIVISION
FIELD LAYOUT SPECIFICATIONS

May 5, 2013

REPAIR LAYOUT FOR 3 BEDROOM HOME

LINE #	FLAG COLOR	IH	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM				106.92		
INSTR. 1						
HOUSE CNR						
P. TANK				102.65		
1	*ORANGE*			99.68		
2	*YELLOW*			*104.84*	*21*	*18*
3	*BLUE*			*104.30*	*53*	*45*
4	*PINK*			*103.74*	*46*	*40*
5	*ORANGE*			*103.27*	*62*	*59*
6	*YELLOW*			*102.76*	*27*	*27*
7	EXISTING			*101.86*	*52*	*50*
8	EXISTING				40	40
9	EXISTING				40	40
10	EXISTING				40	40
11	EXISTING				40	40
12	EXISTING				40	40
13	EXISTING				60	60
			Total		**561**	**539**

	LINE LENGTH	SYSTEM TYPE	SOIL LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION
** REPAIR*	*239*	*MOD.*	*0.300*	*PPBPS*	*LOW PRESSURE*
SYSTEM	300	ACCEPT.	0.300 FROM PERMIT	25% RED.	GRAVITY DISTRIBUTION

Notes:

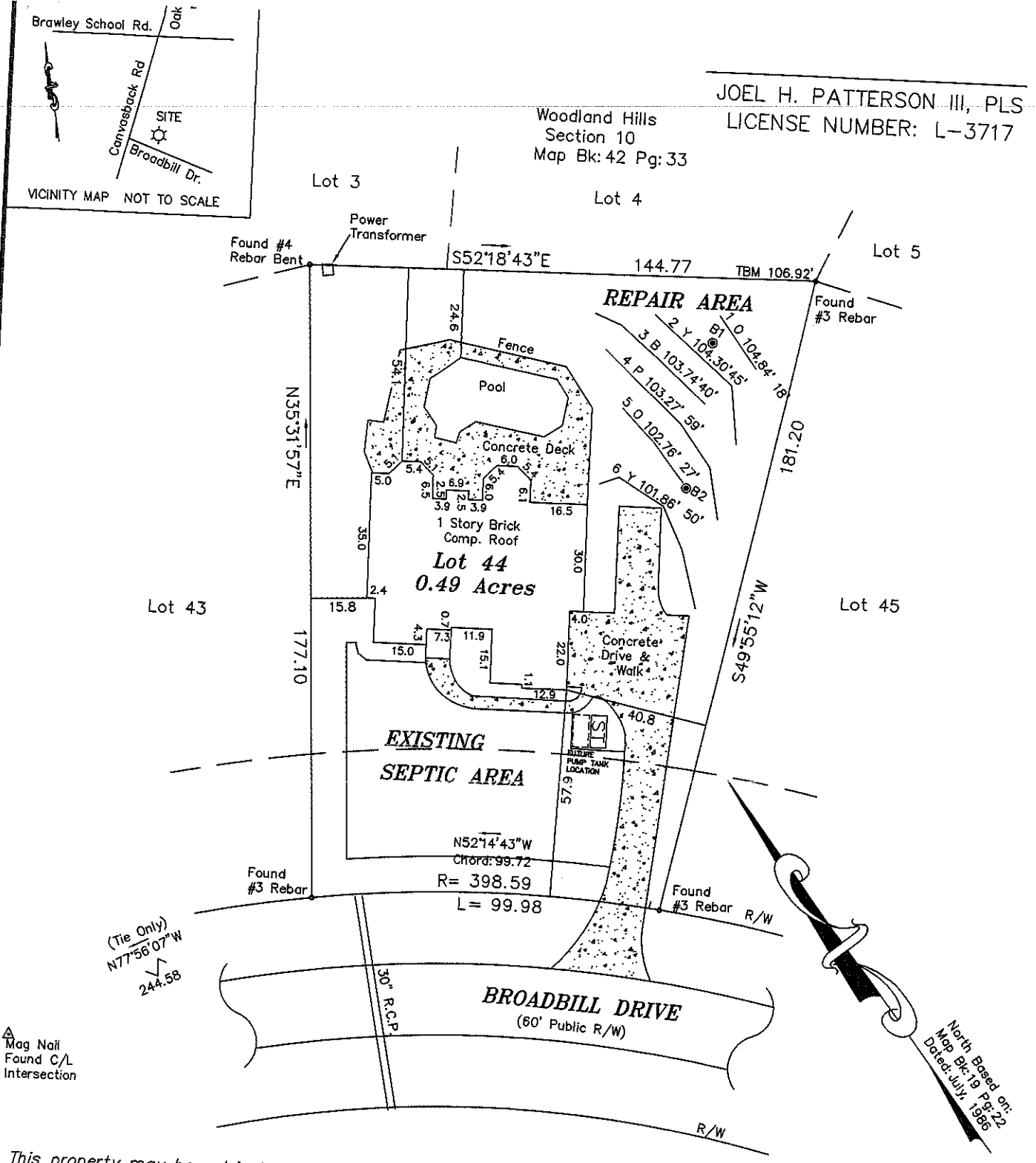
** TBM located top of ground at EIP at corner of lot (see site plan)
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**IH, and FS indicate rod readings

LOW PRESSURE PPBPS TAPSHEET -115 BROADBILL DR, LOT 44

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench Area	Number of Panels
1	*ORANGE*	*104.84*	*18*	0.156	**0.41**	54	4
2	*YELLOW*	*104.30*	*45*	0.156	**0.41**	135	10
3	*BLUE*	*103.74*	*40*	0.156	**0.41**	120	9
4	*PINK*	*103.27*	*59*	0.156	**0.41**	177	14
5	*ORANGE*	*102.76*	*27*	0.156	**0.41**	81	6
6	*YELLOW*	*101.86*	*50*	0.156	**0.41**	150	12
	total	**feet =**	**239**	**gal/min =**	**22.55**		55
			Des. Flow	**360**			
			Pump Run=	**5.88**			
			soil LTAR	**0.3**			

.156 equals 5/32 inch hole



1) This property may be subject to any Easements, Rights-of-way, and/or Restrictive Covenants.

2) Boundary information based on Map Book 19 at Page 22 as recorded in the Iredell County Register of Deeds.

3) This survey is of an existing parcel or parcels of land.

4) No N.C.G.S. or U.S.G.S. Monuments could be located within 2000'.

5) Area by coordinate method.

LEGEND

R/W = Right-of-way

I.P.S. = #4 Rebar Set

= Not to scale

= Telephone Pedestal

= Utility Pole

= Soil Boring

WM = Water Meter

PHYSICAL SURVEY

OF

115 BROADBILL DRIVE

LOT 44 "WOODLAND HILLS-SECTION SIX"

DAVIDSON TWSP., IREDELL CO., NC

SCALE 1" = 40'

FIELD BOOK: 002

FILE: 13035

DOSING CALCULATIONS

Location 115 Broadbill Dr

Lot No: Lot 44, Woodland Hills

No. of Bedrooms	3
Design Flow	360 $^{gal}/_{day}$
LTAR	0.300 $^{gal}/_{ft^2\ day}$
PPBPS? (YES OR NO)	YES
Supply Line Length	115 ft.
Supply Line Volume	20.01 gal.
Required Feet of Line	200 ft.
Amount of Line from Layout	239 ft.
Gallons per Minute	22.55 $^{gal}/_{min}$
Required Pump Tank Capacity	1000 gal.
Existing Septic Tank Size	1000 gal.
Panel Volume	3.6 gal.
# of Panels	55
Dosing Volume	132.66 gal.

Note: Dosing Volume based on 67% of # of panels times 3.6 gal/panel

Tank Draw Down	6.3 *Generic Draw Down of 21 gal.per in.*
Pump Run Time	5.88 minutes
Elevation Head	10.16 ft.
Pressure Head	2 ft.
Friction Factor	1.27 ft./100 ft. *(From the interpolater.)*
Friction Head	1.46 ft.
Total Dynamic Head (+20%)	16.34 ft.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42