LP PPBPS SYSTEM
FOR WASTEWATER TREATMENT

Owner/Applicant: Ralph Wetzl

Address: 140 Hunters Pointe Lane
Mooresville, NC 28117

Phone: 704-658-1313

County: Iredell

Location: SUNSET POINTE AT THE HARBOUR LOT 47

Source of Wastewater Flow: 4 Bedroom Single Family Residence
Estimated Gallons Per Day Flow: 480
System Flow: 25.42

Design Specifications

Drainfield Size: 271
Loading Rate (gpd/ft.^{2}): 0.3
Depth of Gravel in Trench: NA (PPBPS)
Gravel Size: NA (PPBPS)
Trench Depth: 36 in.
Trench Width: 24 in.
Septic Tank Size: 1000
Pump Tank Size: 1000

Estimated Supply Line Length: 127
Supply Line Diameter: 2 in. SCH 40 PVC
Supply Line Volume: 22.10
Dosing Volume: 149.54
Supply Manifold: N/A
Supply Manifold Length: N/A
Supply Manifold Volume: N/A

Recommended Float Controls: Use existing floats.

Recommended Control Panel: Use existing control panel.

Pressure Head: 2 ft.
Friction Head: 2.26
Elevation Head: 16.21
Total Dynamic Head: 23.54

Threaded Union: In Tank
Gate Valves: 1 in Tank
1 per lateral
Check Valves: In Tank
Anti-Siphon Hole: NA
Additional Comments: Usable soil area and LTAR utilized for design based on improvements permit (see attached.)

SUNSET POINTE AT THE HARBOUR LOT 47
LP PPBPS

DESIGN FLOW (gpd):	480
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.3
TOTAL AREA TRENCH BOTTOM:	813
TOTAL LATERAL LENGTH:	271
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	266.6666667
SUPPLY LINE LENGTH:	127
TOTAL DYNAMIC HEAD:	23.54
MANIFOLD SIZE:	N/A
DOSING VOLUME:	149.54
PUMP TANK DRAW DOWN*:	7.1
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	1000

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

SUNSET POINTE AT THE HARBOUR LOT 47

Project #: 01-1602

LAYOUT FOR 4 BEDROOM HOME

March 11, 2010

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		2.80			100.00		
INSTR. 1			102.80				
HOUSE CNR				10.03	92.77		
P. TANK				17.07	85.73		
1	PINK			4.00	98.80	28	28
2	RED			4.14	98.66	39	39
3	ORANGE			4.43	98.37	52	52
4	BLUE			5.33	97.47	77	77
5	***PINK***	***(existing)***		***5.86***	***96.94***	***56+17***	***73***
6	***RED***	***(existing)***		***7.18***	***95.62***	***61+13***	***74***
7	***BLUE***	***(existing)***		***7.30***	***95.50***	***66***	***66***
8	***ORANGE***			***8.24***	***94.56***	***58***	***58***
9	PINK			8.79	94.01	47	47
10	RED			9.29	93.51	35	35
					Total	**402**	**549**

	LINE LENGTH	LTAR GPD/FT2	SYSTEM TYPE	SOIL LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION
**** System***	***271***	***0.300***	***MOD.***	***0.300***	***PPBPS***	***LOW PRESSURE***
Repair	278	0.300	MOD.	0.300	PPBPS	LOW PRESSURE

Notes:

** TBM located top of ground at EIP at corner of lot (see site plan)

**TBM is assumed to be 100'

**All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**BS, HI, and FS indicate rod readings

LP PPBPS TAPSHEET -SUNSET POINTE AT THE HARBOUR LOT# 47

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench Area	Number of Panels
5	*PINK*	96.94	*73*	0.156	**0.41**	219	17
6	*RED*	95.62	*74*	0.156	**0.41**	222	17
7	*BLUE*	95.50	*66*	0.156	**0.41**	198	15
8	*ORANGE*	94.56	*58*	0.156	**0.41**	174	13
	total	**feet =**	**271**	**gal/min =**	**25.42**		62

Des. Flow	**480**
Pump Run=	**5.88**
soil LTAR	**0.3**
LTAR +5%	**0.315**
LTAR with mod.	**0.6**
LTAR with mod.. + 5%	**0.63**

.156 equals 5/32 inch hole