PRESSURE MANIFOLD SYSTEM
FOR WASTEWATER TREATMENT

Owner: Corinthian Development LTD

Address: P.O. Box 3421
Mooresville, NC 28117
Phone: 704-664-4822
County: Iredell
Location: Oak Ridge Subdivision Lot #12

Source of Wastewater Flow: 3 Bedroom Single Family Residence
Estimated Daily Wastewater Production: 360 gpd
System Flow: 21.33

Design Specifications

Drainfield Size: 360
Loading Rate: 0.25
Depth of Gravel in Trench: NA (25% reduction)
Gravel Size: NA (25% reduction)
Trench Depth: 36 in.
Trench Width: 36 in.
Septic Tank Size: 1000
Pump Tank Size: 1000

Estimated Supply Line Length: 112
Supply Line Diameter: 2 in. SCH 40 PVC
Supply Line Volume: 19.49
Dosing Volume: 164.56
Supply Manifold: 4 in. SCH 80 PVC
Supply Manifold Length: 4 ft. (minimum)
Supply Manifold Volume: N/A

Recommended Float Controls: SJE Sensor Float Control Switches as Required for Control Panel or County Approved Equivalents
Recommended Control Panel: SJE-Rhombus Model 112 (NEMA 4x) Control Panel or County Approved Control Panel.

Pressure Head: 2 ft.
Friction Head: 1.42
Elevation Head: 11.10
Total Dynamic Head: 16.70

Threaded Union: In Tank
Gate Valves: 1 in Tank
1 at Pressure Manifold
Check Valves: In Tank
Anti-Siphon Hole: NA
Additional Comments: Soil suitability was performed by Rollans Soil & Environmental Services.

Oak Ridge Subdivision Lot #12
PRESSURE MANIFOLD DESIGN

DESIGN FLOW:	360	
SOIL APPLICATION RATE:	0.25	
TOTAL AREA TRENCH BOTTOM:	1080	
TOTAL LATERAL LENGTH:	360	
NUMBER OF FIELDS:	1	
LATERAL LENGTH REQUIRED PER FIELD:	360	
SUPPLY LINE LENGTH:	112	
TOTAL DYNAMIC HEAD:	16.70	
MANIFOLD SIZE:	4 in.SCH 80 PVC	
DOSING VOLUME:	164.56	
PUMP TANK DRAW DOWN*:	7.8	
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.*

OAK RIDGE LOT #12

Project #: 01-1296

LAYOUT FOR 3 BEDROOM HOME

December 22, 2006

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		2.7			100.00		
INSTR. 1			102.70				
HOUSE CNR				10.60	92.10		
P. TANK				13.70	89.00		
1	PINK			5.00	97.70	66	66
2	ORANGE			6.00	96.70	87	87
3	DARK PINK			6.90	95.80	106	106
4	***BLUE***			***7.60***	***95.10***	***133***	***120***
5	***PINK***			***8.40***	***94.30***	***130***	***120***
6	***ORANGE***			***9.20***	***93.50***	***137***	***120***
					Total	**659**	**619**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH SYSTEM	DISTRIBUTION
**** System***	***360***	***0.250***	***ACCEPT.***	***0.250***	***25% RED.***	**PRESSURE MANIFOLD**
Repair	259	0.250	*MOD.*	0.250	PPBPS	LOW PRESSURE

Notes:

** TBM located AT property corner. (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

PRESSURE MANIFOLD TAPSHEET - OAK RIDGE LOT #12

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/Tap	Trench Area
4	*BLUE*	95.1	*120*	SCH 40 1/2	7.11	360
5	*PINK*	94.3	*120*	SCH 40 1/2	7.11	360
6	*ORANGE*	93.5	*120*	SCH 40 1/2	7.11	360

total	**feet =**	**360**	**gal/min =**	**21.33**
		Des. Flow	**360**	
		Pump Run=	**7.71**	
		soil LTAR	**0.275**	
		LTAR +5%	**0.28875**	
		LTAR with ACCEPTED	**0.366666667**	
		LTAR with ACCEPTED + 5%	**0.385**	