CALCULATIONS

Location	Davidson Woods	
Project Number	01-1308	
Lot No:	Lot 53	
No. of Bedrooms	3	
Design Flow	360	$^{gal}/_{day}$
LTAR	0.25	$^{gpd/ft^2}$
50% RED.? (YES OR NO)	YES	
Supply Line Length	121	ft.
Supply Line Volume	21.054	gal.
Required Feet of Line	240	ft.
Amount of Line from Layout	240	ft.
Gallons per Minute	16.44	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Minimum Standard Tank Size	1000	
Number of panels	55	
Lateral Line Volume	199.3846	gal.
Dosing Volume	133.59	gal.
	Note: Dosing Volume based on 67% of no. of panels times 3.6 gallons.	
Tank Draw Down	6.4	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	8.13	minutes
Elevation Head	13.6	ft.
Pressure Head	2	ft.
Friction Factor	0.84	ft./100 ft. *(From the interpolater.)*
Friction Head	1.02	ft.
Total Dynamic Head (+15%)	19.11	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