CALCULATIONS

Location Carlyle Road lot 61

Project Number 5-1653

Lot No: 61

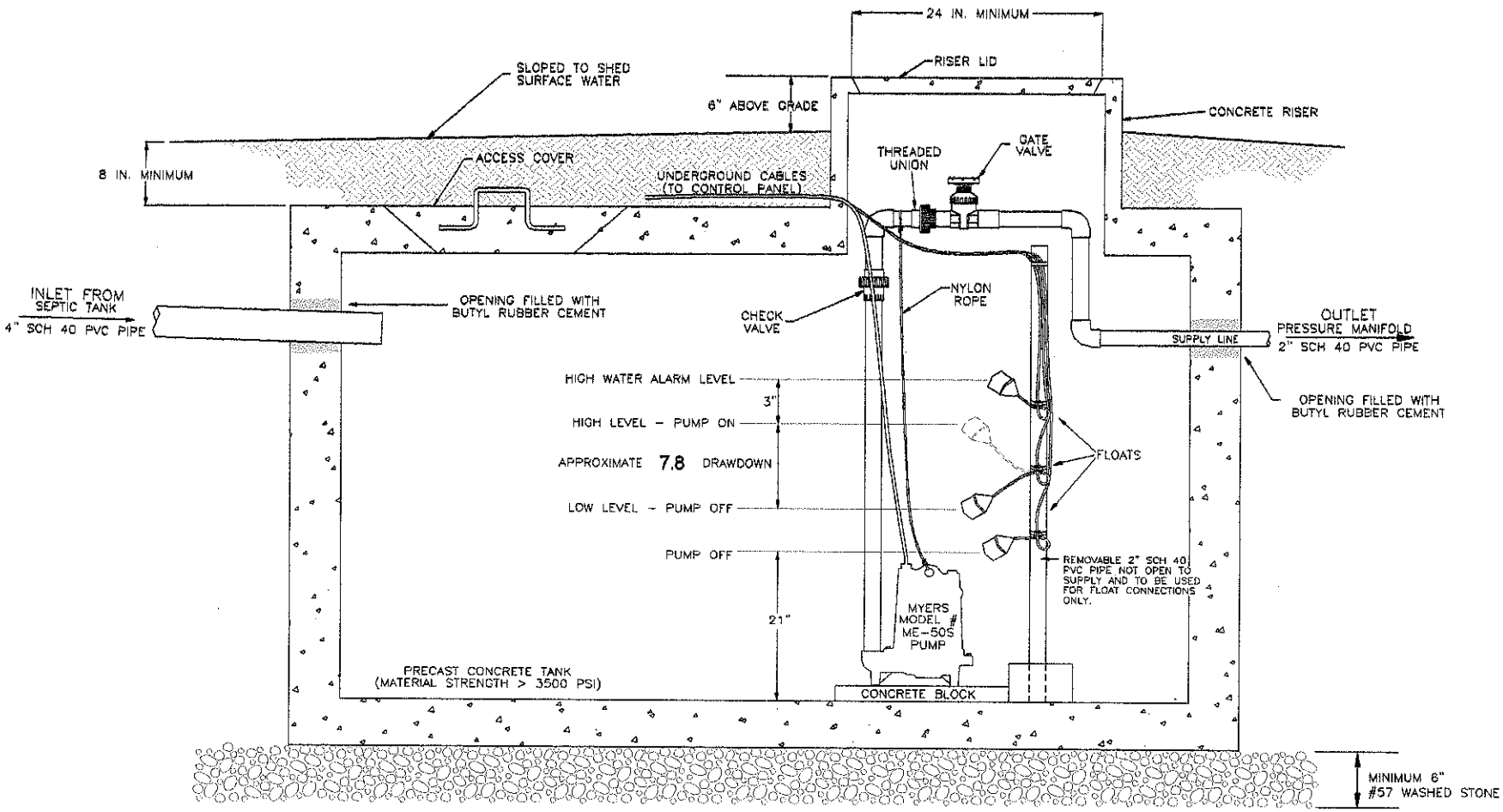
No. of Bedrooms	3	
Design Flow	360	$^{gal}/_{day}$
LTAR	0.3	$^{gal}/_{ft^2\ day}$
EZ-Lay? (YES OR NO)	yes	
Estimated Supply Line Length	55	ft.
Supply Line Volume	9.57	gal.
Required Feet of Line	300	ft.
Amount of Line from Layout	360	ft.
Gallons per Minute	28.44	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Minimum Standard Tank Size	1000	
Lateral Line Volume	235.08	gal.
Dosing Volume	164.56	gal.

Note: Dosing Volume based on 70% of the lateral line volume.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
28.44	1.62
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
40.67	3.13
45	3.77
48.14	4.28
50	4.58
57.11	5.89
58.47	6.14
60	6.42

Tank Draw Down	7.8	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	5.79	minutes
Estimated Elevation Head	6.3	ft.
Pressure Head	2	ft.
Friction Factor	1.62	ft./100 ft. *(From the interpolater.)*
Friction Head	0.89	ft.
Total Dynamic Head (+15%)	10.57	ft.



NOTES

1. TANK DIMENSIONS VARY BY MANUFACTURER.
2. DRAWDOWN WILL VARY WITH TANK DIMENSIONS. DRAWDOWN SHOWN BASED ON 21 GALLONS PER INCH.

1000 GALLON PUMP TANK

PROJECT NO. 5-1653	PROJECT NAME: Carlyle Road lot 61
PROJECT MGR.	
SCALE NTS	SHEET TITLE: PUMP TANK DIAGRAM

S&EC
Soil & Environmental Consultants, Inc.
11010 Raven Ridge Road Raleigh, North Carolina 27614 Phone: (919) 846-5900 Fax: (919) 846-9467
Web Page: www.SandEC.com