CALCULATIONS

Location Olympia Drive Lot 70

Project Number 5-1781

Lot No: 70

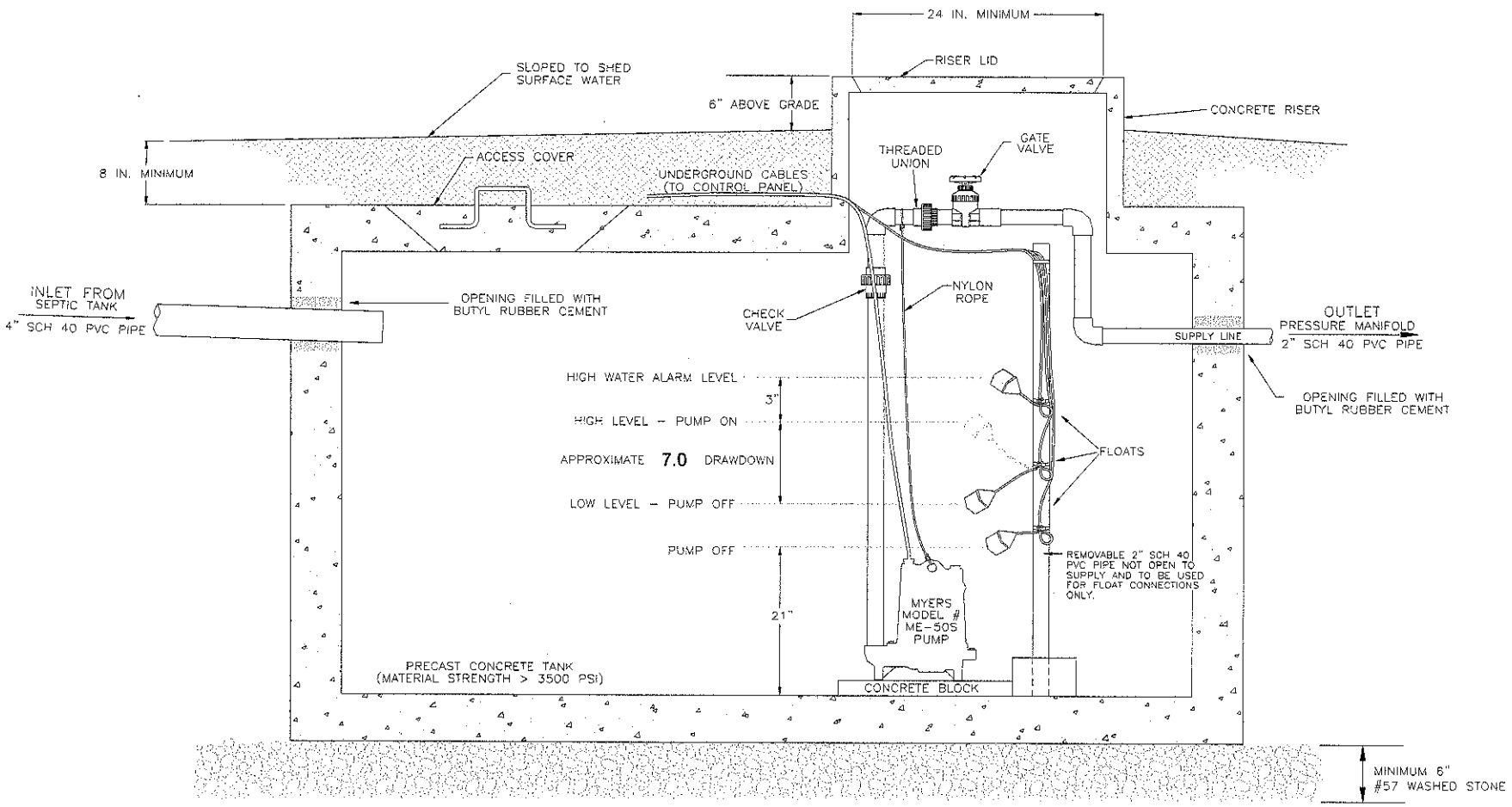
No. of Bedrooms	3	
Design Flow	360	$^{gal}/_{day}$
LTAR	0.3	$^{gal}/_{ft^2\ day}$
Innovative (YES OR NO)	yes	
Supply Line Length	112	ft.
Supply Line Volume	19.488	gal.
Required Feet of Line	300	ft.
Amount of Line from Layout	350	ft.
Gallons per Minute	28.44	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Minimum Standard Tank Size	1000	
Lateral Line Volume	228.55	gal.
Dosing Volume	171.41	gal.

Note: Dosing Volume based on 75% 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	8.2	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	6.03	minutes
Estimated Elevation Head	17.3	ft.
Pressure Head	2	ft.
Friction Factor	1.62	ft./100 ft. *(From the interpolater.)*
Friction Head	1.81	ft.
Total Dynamic Head (+15%)	24.28	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. 5-1781	PROJECT NAME: Olympia Drive Lot 70	S&EC Soil & Environmental Consultants, Inc.
PROJECT MGR.		11010 Raven Ridge Road Raleigh, North Carolina 27614 Phone: (919) 846-5900 Fax: (919) 846-9467 Web Page: www.SandEC.com
SCALE NTS	SHEET TITLE: PUMP TANK DIAGRAM	