



"Always the BEST Option" until site and soil conditions rule it out.

Site Address	107 Abraham's Road , South Ripley Qld 4306		
Client Name	Ripley Ventures Pty Ltd		
Designed By	Chris Taylor	Designers Ph Number	0400 301 364
Lic Plumber Name		Plumber Ph Number	
Council Area		AES Certif Number	
		Date	9/08/12

This Calculator is a guide only, receiving soil classification, surface water, water tables and all other site constraints addressed by the design.

System Designers site and soil calculation data entry		IMPORTANT NOTES	
Is this a new home installation Y or N	Y	>>	Minimum single vent size is 80mm.
Number of person	50		or 2 x 50mm house vents
Daily Design Flow Allowance Litre/Person/Day	15		a septic tank outlet filter is NOT RECOMMENDED
Is this a trench extension option? If not, The minimum number of AES rows required is 2	1	>>	The maximum lth of a single AES pipe run is 30 meters
Infiltration surface Soil Category as established by site and soil evaluation, CATEGORY	4.3	>>	Catagory may require design considerations. Ref AS1547
Design Loading Rate based on site & soil evaluation DLR (mm/day)	5	>>	Soil conditioning may be necessary. Ref AS1547 & Comments.
AES FOOTPRINT MUST BE LEVEL WITH TRENCH EXTENSION	14	>>	Consideration required for Sloping sites. Ref AS154. refer comment.
Is this design a gravity system Y or N	Y	>>	A House Vent & LOW VENT required on this system
PLEASE CHECK YOU HAVE FALL FROM TANK TO AES SYSTEM PIPES			

COMMENTS :- " The outcome must be important to everyone. "

- Ripping of receiving surface is required in clay soil structures in Cat 4,5,6. In addition refer to AS 1547. Always excavate and rip parallel to the site slope/AES pipe.
- Specialist soils advice and special design techniques will be required for clay dominated soil having dispersive or shrink/swell behaviour. Refer AS1547
- All Sloping sites require special consideration and management through design of slope percentage, surface water and construction methods as per AS1547.
- Plumbers are reminded that good construction techniques as per AS1547 are especially important in these soil types. Refer 1547 & AES installation Instructions

AES System Calculator Outcomes			AES dimensions		
Total System load - litres / day (Q).	750	l/d		AES System	Extension Area
Min Length of AES pipe rows to treat loading	25.0	lm	Lth m : (L)	30.9	
Number of FULL AES Pipe lengths per row	10	lths	Width m :(W)	0.90	
Buffer Capacity of AES System pipe in Litres	2141	ltr.	Sand Depth :	0.75	
AES Additional infiltration extension required	122.2	m2	Area m2	27.8	122.2

Please ensure your slope percentage figure is 0% & the infiltration footprint is level for a trench extension design

IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPTION ENTER "Y"		Y	Enter Custom Width m >	2.9
AES INFILTRATION FOOT PRINT AREA - $L = Q / (DLR \times W)$	Length	Width	Minimum AES foot print required .	
	51.7	x 2.9	=	150.0 m2 total

Single rows have 2 parts with a 200mm strait raised connector. The 1st part would contain the extra pipe if number of pipes are not even. IE 3+2, 4+3, 5+4, etc

Code	AES System Bill of Materials.		Chankar Environmental Use Only	
AES-PIPE	AES 3 mtr Lths required	10 lths		
AESC	AESC Couplings required	8		
AESO	AESO Offset adaptors	4		
AESODV	AES Oxygen demand vent	1		
TOTAL SYSTEM SAND REQUIRED (Guide Only)		79 m3		
PLEASE email your AES CALC and Drawings to DESIGNREVIEW@ENVIRO-SEPTIC.COM.AU			Designreview@enviro-septic.com.au	

> The AES Calculator is a design aid to allow checking of the AES components and configuration and is a guide only. Site and soil conditions referencing AS 1547:2000 are calculated and designed by a Quailified Designer

> Chankar Environmental has no responsibility for the soil evaluation, loading calculations or DLR entered by the designer for this calculator.

> AES pipes can be cut to lenght on site. They are supplied in 3 meter lths only.