Colebrook-White Calculation

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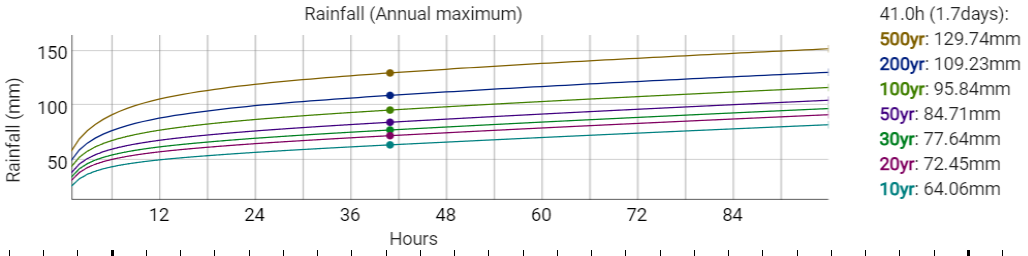
	Project:	Stanwick, Westergate, PO20 3UH		**By:**
	Calculation:	Attenuation System Design		
	FEH22 Rainfall Data			**Approved:**
	Sheet Number:	1	**Date:**	

Catchment Details		
Catchment Area	300	m²
Location	England & Wales	
City/Town	Portsmouth	
Design Storm Details		
Return Period	100	years
Climate Change Allowance	1.45	
Runoff Coefficient	1.00	
Urban Creep Allowance	10	%

FEH22 Data - Westergate



Descriptor	Value
NGR	SU 93500 05500
BFIHOST	0.626
BFIHOST19	0.571
PROPWET	0.34
SAAR6190	768 mm

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	Sheet Number:	2 Date:	

Attenuation Tank Outflow	2	l/s	Acceptable

Results Table

Storm Duration (Mins)	Inflow (l)	Outflow (l)	Storage Required (m³)
5	6,579	600	5.98
10	10,001	1,200	8.80
15	12,216	1,800	10.42
30	16,403	3,600	12.80
45	19,092	5,400	13.69
60	21,068	7,200	13.87
120	25,255	14,400	10.86
240	29,763	28,800	0.96
480	34,356	57,600	0.00
600	35,830	72,000	0.00
1440	41,725	172,800	0.00

Attenuation Tank Design

Tank Shape	Rectangular	
Number of Tanks	1	
Length	8.5	m
Width	5	m
Effective Depth	0.35	m
Void Percentage	95	%

Storage Area Required	13.87	m³	
Storage Area Provided	14.13	m³	Acceptable
Time for Emptying 50%	1.0	hours	Acceptable