

WAVIN Stormwater Management

AquaCell Soakaway designed in accordance with CIRIA 156

Project & Site Details

Project Number	S25211-A-1	Produced by	Mark Henly
Client	Mr G Lewis	Checked by	Mark Henly
Site Name	Land to the West of North Lodge		
Location	Codford BA12 0NJ	Date	26/03/2026

Drainage Details

Area	367 m ²	Climate Change	40 %
Catchment Type	Roof	Effective Area	462 m ²
Area Reduction Factor	0.9	Additional Inflow	0.00 l/s

Discharge Parameters

Infiltration Rate	1.94E-05	Soil Type	Chalk
Factor of Safety	1.5	Source	S.I.R
Effective Infiltration Rate	1.29E-05		
Additional Outflow*	0.00 l/s	Depth to Groundwater (m)	Unknown

*flat rate from pump only

Rainfall Data

R value					0.35		Storm Return Period			1 in 100 years	
M5-60					19		Country			England and Wales	
								Storage		Time To	
Time	Z1 Value	y mm	Z2 Value	p mm	Value i	a	b	Height		Half -Empty	
5min	0.36	6.84	1.81	12.38	0.15	-69.03	0.037	0.215		1.95	
10min	0.51	9.69	1.89	18.31	0.11	-50.71	0.037	0.315		2.73	
15min	0.61	11.59	1.91	22.14	0.09	-40.61	0.037	0.378		3.18	
30min	0.78	14.82	1.91	28.31	0.06	-25.49	0.037	0.472		3.80	
1hr	1.00	19.00	1.99	37.81	0.04	-16.59	0.037	0.609		4.62	
2hr	1.21	22.99	2.03	46.67	0.02	-9.74	0.037	0.702		5.13	
4hr	1.53	29.07	2.01	58.43	0.01	-5.61	0.037	0.779		5.52	
6hr	1.71	32.49	1.97	64.01	0.01	-3.74	0.037	0.752		5.38	
10hr	2.00	38.00	1.97	74.86	0.01	-2.23	0.037	0.697		5.10	
24hr	2.55	48.45	1.89	91.57	0.00	-0.50	0.037	0.294		2.57	
48hr	3.00	57.00	1.81	103.17	0.00	0.29	0.037	-0.243		-2.89	

Soakaway Parameters

Length	5.5 m	Width	5.0 m
Depth	0.8 m	Void	95 %

Results

Critical storm duration (hrs)	4hr	
Required Storage Height (m)	0.779	PASS
Half Time Empty (hrs)	5.52	PASS

AquaCell Modular Units

No. Units Long	5.5	No. Units Wide	10
No. Units Deep	2		
Total Number of Units	110	Unit Type	Unknown



CONNECT TO BETTER