


CRM Stormflow Stormwater Management using the Wallingford Procedure

Client:	Siaw Ltd	
Project:	3 Kidderpore Avenue, NW3	
Location:	London	
Catchment:	160m ² @ 100 year storm	
Date:	11/04/2011	

Catchment Details:			
Buildings	160	m ²	x 95 %
Dense surfacing		m ²	x 90 %
Effective Area	152	m ²	
Safety Factor against flooding =			1

Storage Details:			
Length	2.4	m	2 cells
Width	1.6	m	2 cells
Depth	0.55	m	2 cells
Total Number of cells			8 cells
Porosity			95 %
Area Increase			0 %
Storage Volume	2.006	m ³	

Outflow Details:			
Infiltration rate	0	m/hr	Discharge rate
			2.5 l/s

Rainfall Details:			
Return Period		100	years
r value		0.42	
M5-60		20	mm
Duration	M100-D	intensity	
	mm	m/hour	
5 min	14.0	0.169	
10 min	20.8	0.125	
15 min	25.1	0.10	
30 min	32.7	0.065	
45 min	37.2	0.050	
60 min	40.5	0.041	
2 hours	48.5	0.024	
4 hours	56.6	0.014	
24 hours	80.3	0.003	

Results:	
Outcome:	Pass
Critical Storm Duration	11 min
Volume Required	1.668 m ³
Hmax	0.457 mm
Time to half empty	5.6 min

The Marley Waterloc 250 box is:
1200mm long, 800mm wide and 290mm deep (30mm overlap when stacked).