



Project: 119 Charville Lane. Hayes for Designed Images

Ref: DB03/01-02 first designed 03/01/2023

Designer: DB

Company: Graf UK Limited
Willington, Shipston on Stour, Warwickshire, CV36 5AS
Tel: 01608 661500
e-mail: mail@grafuk.co.uk web site: www.grafuk.co.uk

Catchment Details:

Buildings	171	m ² x 95 %
Dense surfacing	112	m ² x 90 %
Effective Area	263.25	m ²

Storage Details:

Product	RainBloc	
Length	4 units =	4.8 m
Width	6 units =	3.6 m
Depth	2 units =	0.84 m
Volume Ratio	95 %	

Rainfall Details - FSR Method:

Return Period	100 years
Climate Change Factor	40 %
r value	0.44
M5-60	20.7 mm
Summer Storm Profile	

Duration	Intensity mm	mm/h	Required storage(m ³)
30 min	34.2	95.7	11.534
45 min	38.7	72.3	12.590
60 min	42.0	58.7	13.152
2 hours	49.8	34.8	13.645
6 hours	62.0	14.5	12.488
24 hours	80.1	4.7	7.346

Outflow Details:

Infiltration rate	Attenuation only
Attenuation Control	Orifice Plate
Orifice Diameter	23 mm
Discharge rate	1 l/s

Results:

Outcome	Pass
Critical Storm Duration	2.07 hrs
Critical Rainfall Rate	34 mm/h
Hmax	0.831 m
Time to half empty	1.9 hrs
Volume Required	13.642 m ³

Tank Operation:

