



Clancy Consulting Ltd

19 Upper King Street,
Norwich,
NR3 1RB.

Project Camden Hub Hotel, Camden High Street				Job no. 8/2022	
Calcs for 1 in 1 Year 15 min Event				Start page no./Revision 1	
Calcs by RB	Calcs date 15/08/2019	Checked by LP	Checked date 15/08/2019	Approved by LP	Approved date 15/08/2019

DESIGN RAINFALL

In accordance with the Wallingford Procedure

Tedds calculation version 2.0.01

Design rainfall intensity

Location of catchment area	London
Storm duration	D = 15 min
Return period	Period = 1 yr
Ratio 60 min to 2 day rainfall of 5 yr return period	r = 0.440
5-year return period rainfall of 60 minutes duration	M5_60min = 20.0 mm
Increase of rainfall intensity due to global warming	p _{climate} = 0 %
Factor Z1 (Wallingford procedure)	Z1 = 0.65
Rainfall for 15min storm with 5 year return period	M5_15min _i = Z1 × M5_60min = 12.9 mm
Factor Z2 (Wallingford procedure)	Z2 = 0.62
Rainfall for 15min storm with 1 year return period	M1_15min = Z2 × M5_15min _i = 8.0 mm
Design rainfall intensity	I _{max} = M1_15min / D = 31.9 mm/hr

Maximum surface water runoff

Catchment area	A _{catch} = 620 m ²
Percentage of area that is impermeable	p = 100 %
Maximum surface water runoff	Q _{max} = A _{catch} × p × I _{max} = 5.5 l/s