

CALCULATIONS

Project

E57006 Enviroparks, Hirwaun

Date
18.9.12

Subject

To calculate the existing surface water runoff rates at Hirwaun

By Chkd
HM SG

Ref.

Output

Aim

To determine the existing surface water runoff rates for a range of return periods to meet the requirements of the EA Wales.

The site currently comprises entirely Greenfield land.

As a result the IH 124 Method (ICP SuDS) was used to determine the existing surface water runoff rates.

Area = 7 ha Report Reference FRA October 2008, Issue 1

Return Period = 1, 30, 100 years current best practice CIRIA C697

SAAR (m) = 2125 selected within Micro Drainage

Soil = 0.5 selected within Micro Drainage

REGION = 9 selected within Micro Drainage

The following parameters were input into Micro Drainage.

Return Period	1 in 1 year	1 in 30 year	1 in 100 year
Discharge Rate (l/s)	124.7	249.9	308.9

Burrator House
 Peninsula Park
 Exeter, EX2 7NT



Date 18/09/2012 12:15
 File

Designed by hmontgomery
 Checked by

Micro Drainage

Source Control W.12.6

ICP SUDS Mean Annual Flood

Input

Return Period (years)	100	Soil	0.500
Area (ha)	7.000	Urban	0.000
SAAR (mm)	2125	Region Number	Region 9

Results 1/s

QBAR Rural 141.7
 QBAR Urban 141.7

Q100 years 308.9

Q1 year 124.7
 Q30 years 249.9
 Q100 years 308.9