

## Greenfield runoff rate estimation for

sites

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Calculated by:	James Farron
Site name:	Cottam Parkway -
	Catchment 4
Site location:	Cottam

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013), the SuDS Manual C753 (Ciria, 2015) and the non-statut standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

	Site Details	
	Latitude:	53.77571° N
	Longitude:	2.77027° W
tory	Reference:	433196545
	Date:	Nov 03 2022 16:16

Runoff estimation ap	proach	IH124		
Site characteristics				Notes
Total site area (ha): 1.0	305			(1) Is Q <sub>BAB</sub> < 2.0 l/s/ha?
Methodology				(1) 10 QBAR < 2.0 #3/114.
Q <sub>BAR</sub> estimation method	d: Calcu	ulate from SF	PR and SAAR	When $Q_{BAR}$ is < 2.0 l/s/ha then limiting discharge rates are set
SPR estimation method	l: Calcu	ulate from S0	OIL type	at 2.0 l/s/ha.
Soil characteristics	Defau	lt E	dited	
SOIL type:	4	4		(2) Are flow rates < 5.0 l/s?
HOST class:	N/A	N/A		Mhaya flavorates and loss than 5.0 Ma consent for discharge is
SPR/SPRHOST:	0.47	0.47	7	Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other
Hydrological charac	teristics	Default	Edited	materials is possible. Lower consent flow rates may be set where the blockage risk is addressed by using appropriate
SAAR (mm):		966	966	drainage elements.
Hydrological region:		10	10	(3) Is SPR/SPRHOST ≤ 0.3?
Growth curve factor 1 y	ear:	0.87	0.87	(a) is 3FN/3FN1031 \( \) 0.3?
Growth curve factor 30	years:	1.7	1.7	Where groundwater levels are low enough the use of
Growth curve factor 100	O years:	2.08	2.08	soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.
Growth curve factor 200	O years:	2.37	2.37	

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Greenfield runoff rates	Default	Edited
Q <sub>BAR</sub> (I/s):	9.18	9.18
1 in 1 year (l/s):	7.99	7.99
1 in 30 years (l/s):	15.61	15.61
1 in 100 year (l/s):	19.1	19.1
1 in 200 years (l/s):	21.77	21.77

This report was produced using the greenfield runoff tool developed by HR Wallingford and available at www.uksuds.com. The use of this tool is subject to the UK SuDS terms and conditions and licence agreement, which can both be found at www.uksuds.com/terms-and-conditions.htm. The outputs from this tool are estimates of greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, CEH, Hydrosolutions or any other organisation for the use of this data in the design or operational characteristics of any drainage scheme.