

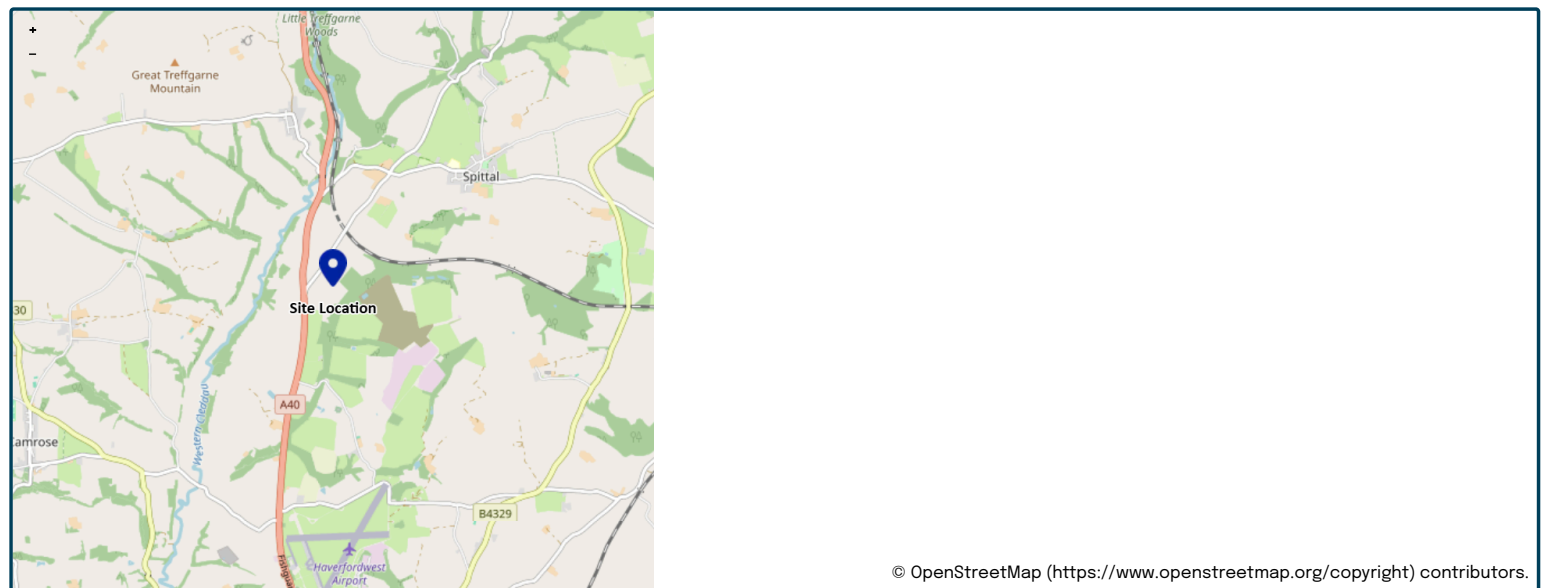
This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013), the SuDS Manual C753 (CIRIA, 2015) and the non-statutory standards for SuDS (Defra, 2015).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

## Project details

Date	<input type="text" value="20/08/2025"/>
Calculated by	<input type="text" value="Ewan Thomas"/>
Reference	<input type="text" value="Withy Ph3"/>
Model version	<input type="text" value="2.1.2"/>

## Location

Site name	<input type="text" value="Withyhedge Landfill Phase 3"/>
Site location	<input type="text" value="Rudbaxton"/>



Site easting (British National Grid)	<input type="text" value="196015"/>
Site northing (British National Grid)	<input type="text" value="221687"/>

## Site details

Total site area (ha)	<input type="text" value="10.9"/>	ha
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# Greenfield runoff

## Method

Method

IH124

## IH124

	<u>My value</u>	<input type="radio"/>	<u>Map value</u>
SAAR (mm)	<input type="text" value="1212"/> mm	<input type="radio"/>	<input type="text" value="1212"/>
How should SPR be derived?	<input type="text" value="WRAP soil type"/>		
WRAP soil type	<input type="text" value="2"/>	<input type="radio"/>	<input type="text" value="2"/>
SPR	<input type="text" value="0.3"/>		
QBar (IH124) (l/s)	<input type="text" value="37.76"/> l/s		

## Growth curve factors

	<u>My value</u>	<input type="radio"/>	<u>Map value</u>
Hydrological region	<input type="text" value="9"/>	<input type="radio"/>	<input type="text" value="9"/>
1 year growth factor	<input type="text" value="0.88"/>		
2 year growth factor	<input type="text" value="0.93"/>		
10 year growth factor	<input type="text" value="1.42"/>		
30 year growth factor	<input type="text" value="1.78"/>		
100 year growth factor	<input type="text" value="2.18"/>		
200 year growth factor	<input type="text" value="2.46"/>		

## Results

Method	<input type="text" value="IH124"/>	
Flow rate 1 year (l/s)	<input type="text" value="33.2"/>	l/s
Flow rate 2 year (l/s)	<input type="text" value="35.1"/>	l/s
Flow rate 10 years (l/s)	<input type="text" value="53.6"/>	l/s
Flow rate 30 years (l/s)	<input type="text" value="67.2"/>	l/s
Flow rate 100 years (l/s)	<input type="text" value="82.3"/>	l/s
Flow rate 200 years (l/s)	<input type="text" value="92.9"/>	l/s

Please note runoff estimation is subject to significant uncertainty. Results are therefore normally reported to only 1 decimal place. Where 2 decimal places are provided, this does not indicate accuracy to this level, it has been adopted to prevent 'zero' figures from being reported. Outputs less than 0.01 l/s are reported as 0.01 l/s.

## Disclaimer

This report was produced using the Greenfield runoff rate estimation tool (2.1.2) developed by HR Wallingford and available at uksuds.com (<https://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 [uksuds.com/terms-conditions](https://www.uksuds.com/terms-conditions) (<https://www.uksuds.com/terms-conditions>). The outputs from this tool have been used to estimate 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, Centre for Ecology and Hydrology, Wallingford Hydrosolutions or any other organisation for the use of these data in the design or operational characteristics of any drainage scheme.