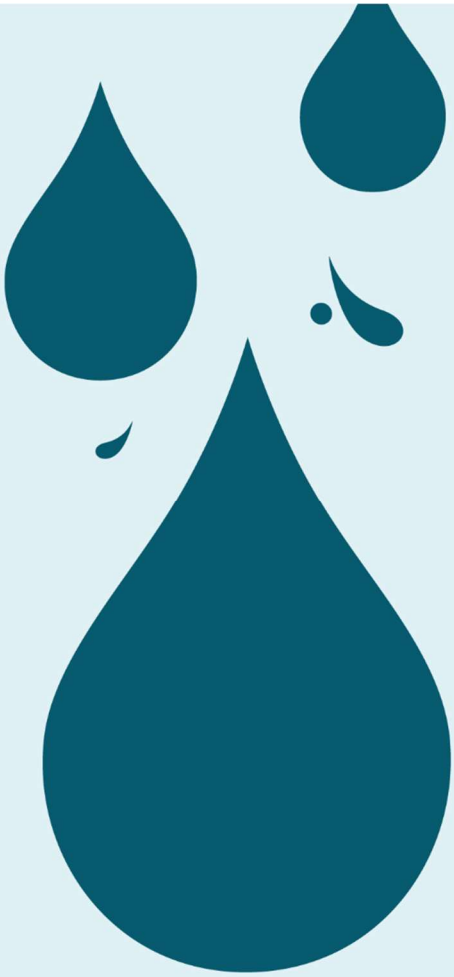
Planning Guidance for Developers

Rainfall Interception Technical Note



Hampshire County Council

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This document has **6** pages including the cover.

Document history

Revision	Purpose description	Originated	Reviewed	Authorised	Date
Rev 1.0	Rainfall Interception	SDH	PP	SR	Dec 2025
Rev 2.0	Added note for innovation	SDH	SR	SR	Feb 2026
Rev 3.0					

Hampshire County Council

Flood and Water Management,
The Castle, Winchester,
Hampshire,
SO23 8UD

Tel: 0845 603 5638
Fax: 01962 847055
www.hants.gov.uk

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1. Aims and Objectives

This guidance is for anybody proposing to submit technical drainage information as part of a planning application for major development with surface water drainage. It sets out how Hampshire County Council expects the National Standards for Sustainable Drainage Systems (SuDS) Standard 2 (rainfall interception) to be applied in practice. Please note that where there are contradictions between the National Standards and Local Policy, the more stringent requirements shall apply.

The level of detail required for supporting information varies depending on the type of planning application being made.

1.1. How to use this document

This document is written to provide more detailed support where needed on how to meet the requirements of the National Standards for SuDS. It should be read in conjunction with Hampshire County Council's Planning Guidance document.

1.2. National Standards for Sustainable Drainage Systems

In July 2025, the government introduced the National Standards for Sustainable Drainage Systems (SuDS), replacing previous guidance. These standards guide developers, designers, and local authorities, and will apply to planning applications in Hampshire from January 2026. The seven standards cover:

1. Runoff destinations
2. Everyday rainfall (interception)
3. Extreme rainfall and flooding
4. Water quality
5. Amenity
6. Biodiversity
7. Design

This document set out what should be submitted by developers to evidence that the proposals meet standard 2 only. Please see the other technical notes for details about meeting the other standards.

1.3. Standard 2 – Rainfall Interception

The National Standards for SuDS Standard 2 states:

'*Apply a 'SuDS approach' so that at least the first 5mm of rainfall for the majority of rainfall events does not result in runoff from the site to surface waters or piped drainage systems. Evidence shall be provided that the approach to managing runoff from 'everyday' rainfall has been developed alongside and in support of the management of runoff quality (standard 4) and the delivery of amenity and biodiversity benefits (standards 5 and 6)'*.

2. Interception Guidance

Standard 2 requires retaining the first 5 mm of rainfall on-site—covering 80% of summer events (May-Oct) and 50% in winter (Nov-Apr). Runoff must be managed through collection, infiltration, or storage in SuDS. Compliance can be demonstrated via hydraulic models (simulating infiltration and evapotranspiration) or simplified calculations to confirm interception requirements. Tidal sites won't need to provide interception.

Table 1 outlines SuDS design requirements for adequate interception storage. This should include an interception feature and contributing areas plan. Please provide this information for both hydraulic modelling and hand calculations. At initial design, an interception strategy is sufficient. Enhanced SuDS designs may exceed Table 1's interception capacity[1], but this must be evidenced with detailed design drawings and calculations.

Table 1 - Guidance on interception storage compliance by SuDS type[1]

Feature	Feature design	Interception Compliant
Green roofs or walls	Only drains their own surface area	Yes
	Takes water from beyond roof area	No
Rainwater Harvesting	All surface which drains to the rainwater harvesting system	Yes
	Garden water butts designed to empty between storms and evidence by calculations.	Yes
	Water butts for garden use	No
Soakaway or infiltration systems	If designed in accordance with BRE365 and infiltrates ≥ 1 in 1 storm event.	Yes
	Infiltrates ≤ 1 in 1 or not in accordance with BRE365.	No
Permeable surfaces	Only drains their own surface area (lined or unlined)	Yes
	Unlined, takes water from adjacent impermeable area (≤ permeable surface area),	Yes
	Infiltration rates > 1x10-6 m/s and takes water from adjacent impermeable area (≤ 5 x permeable surface area)	Yes
	Lined and takes water from adjacent impermeable surface	No
Swales	Lined or unlined, longitudinal gradient < 1:100, ≥ 500mm of suitable base material and contributing area ≤ 5 x swale base area*	Yes
	Unlined, longitudinal gradient < 1:100, Infiltration rates > 1x10-6 m/s and contributing area ≤ 25 x swale base area*	Yes
	Unlined, within 5m of swale outlet, flat gradient, raised outlet (temporary storage)	Yes
	Longitudinal gradient > 1:100	No
	Unlined within 5m of swale outlet	No
Infiltration trenches	Roads drained by infiltration trenches	Yes
Detention basins	Flat, unlined base, contributing area ≤ 5 x basin area below outlet level (any soil type)	Yes
	Flat, unlined base, infiltration rates > 1x10-6 m/s, contributing area ≤ 25 x basin area below outlet level	Yes
	Lined detention basins or where the outlet is level with the basin base	No
Bioretention areas/ rain gardens	Unlined, vegetated, contributing area ≤ 5 x bioretention component surface area	Yes
Attenuation ponds	attenuation ponds with a permanent water pool maintained by the outlet structure.	No

[1] Derived from the National Standards for Sustainable Drainage Systems section 2.7.

Interception mimics network water losses. Unlisted technologies that evidence evapotranspiration, infiltration, or reuse may be accepted, but without calculations demonstrating effectiveness they will be only credited for their own footprint. Modelling should demonstrate no runoff from the site in the 1 in 1 storm event.

2.1.1. Example of interception strategy at initial design

The table below is an example of how an interception strategy could be applied at initial design (outline or where layout hasn't been set). Other methods may be acceptable. This should identify for the development site in question, which interception SuDS features might work at the site. This should show that some form of interception is possible on the site in question. The final selection of intercepting SuDS should be identified and appropriately designed at detail design stage (full or reserved matters applications).

Table 2- Example of an interception strategy table

SuDS	Viability at (Site Name)	Reason for viability rating
Green roofs or walls	Yes/ No	*Give reason why considered viable or not viable at the application site.*
Rainwater Harvesting		
Soakaway or infiltration systems		
Permeable surfaces		
Swales		
Infiltration trenches		
Detention basins		
Bioretention areas and rain gardens		

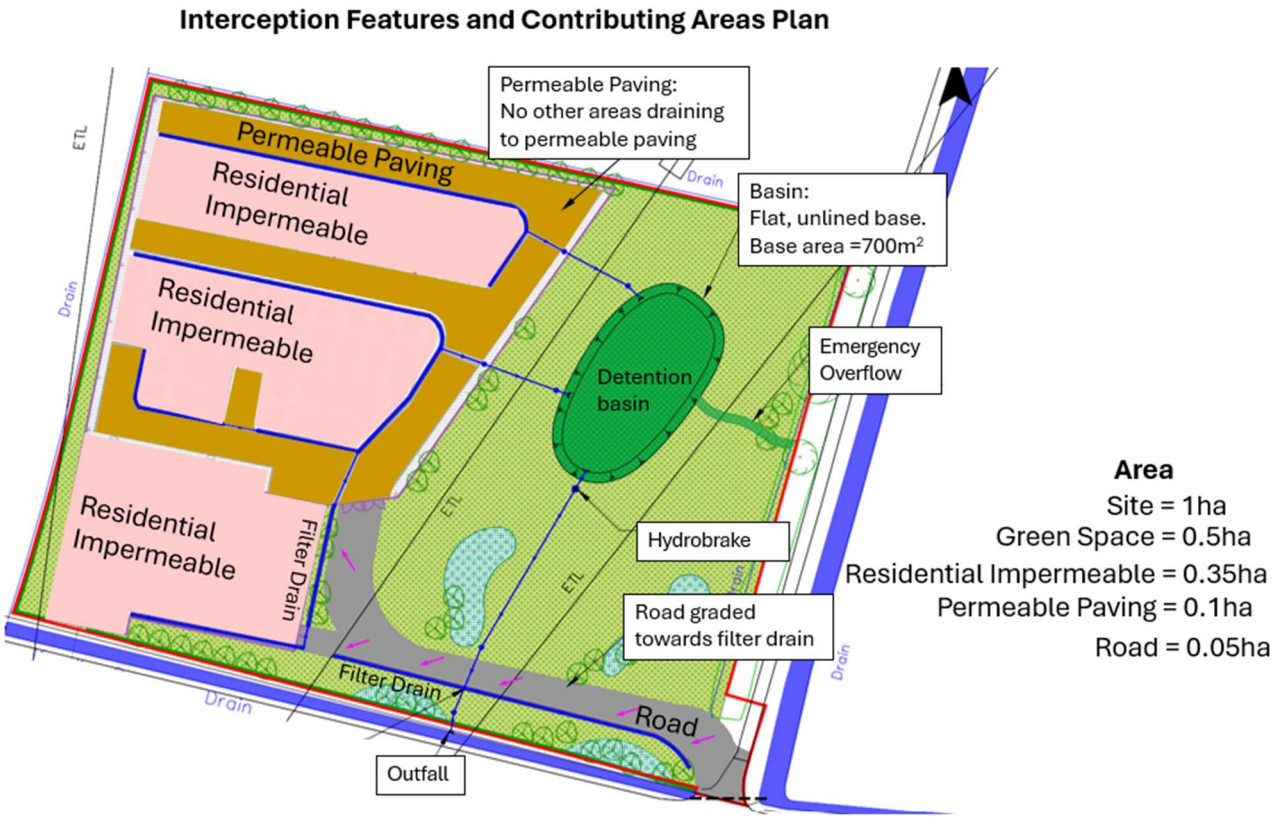
2.1.2. Example of an Interception Features and Contributing Areas Plan

The table and drawing below should be read together. For interception to be fully demonstrated using hand calculations, the area to mitigate should be smaller than or equal to the area intercepted for each row. Please do not sum the columns as excess interception in one area cannot be used to mitigate against an area that does not physically drain into it. Hydraulic model calculations are also an acceptable method for demonstrating interception. If an individual interception feature does not fully achieve interception, additional interception can be provided downstream, as long as it remains within the drainage system serving the area being mitigated (2.6.3 National Standards).

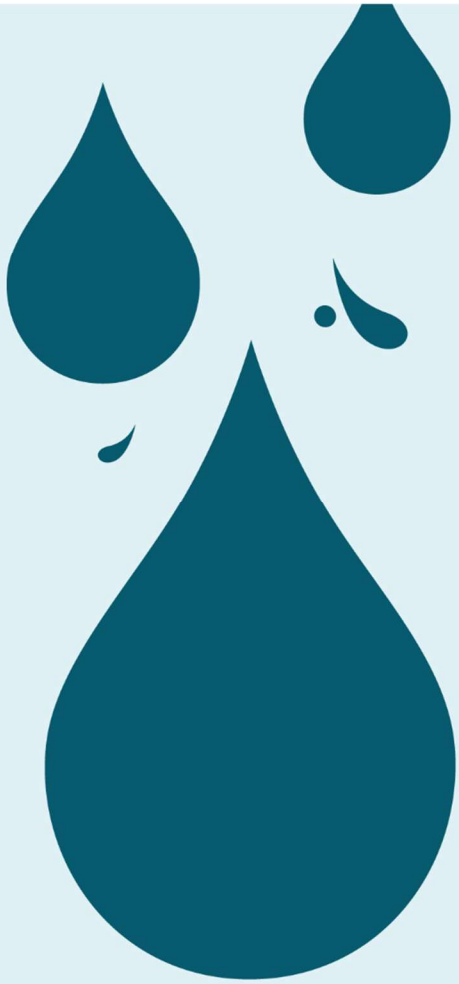
Table 3- Example of an Interception need and mitigation table

Area type	Area to mitigate (m^2)	Criteria used	Area intercepted (m^2)	Interception Achieved?
Road to filter drain	500	Roads drained by infiltration trenches	500	Yes
Self-draining permeable paving	1000	Only drains their own surface area (lined or unlined)	1000	Yes
Residential impermeable area to detention basin	3500	Flat, unlined base, and the contributing area ≤ 5 x the basin area below the outlet level (any soil type)	Basin Base = 700m^2 Max interception: 700*5 = **3500m^2**	Yes

Figure 1 – Example Interception feature and contributing area plan



Please note that an Interception feature and contributing area plan should be submitted with either hydraulic interception modelling or supporting hand calculations. Plans can be done differently from the example as long as the plan submitted clearly shows which areas are draining to which interception features.



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