

## Sustainable Drainage Strategy Summary

**\*\*Site Address:\*\*** Shed development, BB7 3DD

**\*\*Impermeable Area:\*\*** 1,825 m<sup>2</sup> (0.1825 ha)

**\*\*Surface Type:\*\*** Impermeable roof

**\*\*Allowable Discharge Rate:\*\*** 3 L/s/ha

**\*\*Design Storm:\*\*** 1-in-30-year, 6-hour storm event

**\*\*Climate Change Uplift:\*\*** +20% (in line with EA guidance)

### 1. Site Drainage Calculations

Parameter	Value
Site Area	445m <sup>2</sup> (0.0445ha)
Runoff Coefficient	0.90
Rainfall Depth (1-in-30yr, 6h)	70 mm
Climate Change Uplift (20%)	84 mm total rainfall
Runoff Volume	$445 \text{ m}^2 \times 0.084 \text{ m} \times 0.9 = 33.64 \text{ m}^3$
Allowed Discharge Rate	$3 \text{ L/s/ha} \times 0.1825 \text{ ha} = 0.1335 \text{ L/s}$
Allowed Discharge Volume over 6h	$0.1335 \text{ L/s} \times 6 \text{ h} = 0.801 \text{ m}^3$

### 2. Surface Water Management Proposal

To comply with SuDS hierarchy and planning requirements:

- Rainwater will be collected from the shed roof via gutters and downpipes.
- Surface water will be directed to an existing water drain.
- Discharge location: Existing surface water drain / watercourse / soakaway (as confirmed on site).
- All SuDS elements will be designed in accordance with CIRIA C753 SuDS Manual and Building Regulations Part H.

### 3. Exceedance Strategy

In events greater than the 1-in-30-year design storm:

- Any exceedance flow will be safely conveyed on-site via overland flow paths directed away from buildings and towards landscaping or lower areas.

### 4. Maintenance

The drainage system will be maintained regularly:

- Inspection and jetting of gutters and downpipes (2× per year minimum).
- Monitoring of flow control to ensure design discharge rate is maintained.
- Debris removal from inlet sumps and outlets quarterly.
- Record keeping and inspections as part of site management.

## Conclusion

This SuDS strategy ensures the proposed development:

- Complies with local planning policy and SuDS design best practices.
- Restricts surface water runoff to greenfield-equivalent rate (3 L/s/ha).
- Mitigates flood risk and climate change

## Drainage Map

