

DRAINAGE STRATEGY REPORT

Land Adjacent to Dawes Cottage

Demolition of Existing Barn and Erection of Replacement Dwelling

1. Introduction

This Drainage Strategy Report has been prepared in support of a full planning application for the demolition of an existing barn and erection of a replacement barn-style dwelling at land adjacent to Dawes Cottage.

The report sets out the proposed foul and surface water drainage strategy and demonstrates compliance with:

- National Planning Policy Framework (NPPF) Section 14 – Meeting the Challenge of Climate Change, Flooding and Coastal Change;
- Planning Practice Guidance (Flood Risk and Coastal Change);
- Gravesham Borough Council Core Strategy policies relating to flood risk management, sustainable drainage and environmental sustainability.

The development replaces an existing built structure within an established developed parcel and does not extend into undeveloped countryside.

2. Flood Risk Context

The site is located within Flood Zone 1 (low probability of flooding) as defined by the Environment Agency Flood Map.

The proposal comprises a single dwelling on a site well below the 1 hectare threshold. In accordance with national guidance, a site-specific Flood Risk Assessment is not required.

The development will not increase flood risk on-site or elsewhere. The proposed strategy incorporates sustainable drainage principles to ensure runoff is appropriately managed.

3. Existing Drainage Context

The site currently accommodates an existing barn structure within the curtilage of Dawes Cottage. The proposal represents a replacement of built form rather than expansion into previously undeveloped land.

The development does not introduce significant additional impermeable area beyond the established footprint.

4. Foul Water Drainage Strategy

Foul drainage from the proposed dwelling will discharge to the existing mains sewer network serving Dawes Cottage and the surrounding locality.

The connection will:

- Be subject to agreement with the statutory undertaker (Southern Water);
- Comply with Building Regulations Part H;
- Be designed and constructed in accordance with relevant technical standards.

Connection to mains sewerage represents the most sustainable and policy-compliant approach in this location.

No septic tank or private treatment plant is proposed.

5. Surface Water Drainage Strategy

Surface water will be managed in accordance with the drainage hierarchy set out in the Planning Practice Guidance:

1. Infiltration to ground;
2. Discharge to watercourse;
3. Discharge to surface water sewer;
4. Discharge to combined sewer (as a last resort).

The strategy adopts a source-control approach incorporating:

- Rainwater harvesting;
- Grey water recycling (reducing overall water discharge volumes);
- Permeable surfacing where practicable;
- Infiltration measures such as soakaways (subject to BRE 365 testing);
- Attenuation or flow control where necessary.

Where discharge is required, runoff will be limited to sustainable (greenfield-equivalent) rates and will not exceed pre-development levels.

6. Rainwater Harvesting

The proposed dwelling will incorporate a rainwater harvesting system designed to collect roof runoff for reuse in non-potable applications such as WC flushing and irrigation.

This measure:

- Reduces peak stormwater discharge;
 - Reduces reliance on potable water supply;
 - Supports climate resilience and sustainable resource use.
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7. Grey Water Recycling

A grey water recycling system will capture appropriate wastewater streams (e.g., showers and basins) for reuse in non-potable applications.

This reduces:

- Potable water demand;
 - Foul water discharge volumes;
 - Overall strain on drainage infrastructure.
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8. Policy Compliance

The drainage strategy accords with:

- NPPF Section 14, which requires development to avoid increasing flood risk and to incorporate sustainable drainage systems;
- Planning Practice Guidance drainage hierarchy;
- Gravesham Core Strategy objectives relating to environmental sustainability and flood risk management.

The proposal represents a proportionate and policy-compliant drainage solution for a single replacement dwelling.

9. Conclusion

The development:

- Connects foul drainage to mains infrastructure;
- Incorporates rainwater harvesting and grey water recycling;
- Applies sustainable drainage hierarchy principles;

- Ensures no increase in flood risk.

The proposal is acceptable in flood risk and drainage terms.