

Flood Risk Assessment (FRA)

Site Address:

Rookery Farm
Flansham Lane
Bognor Regis
West Sussex
PO22 6EP

Proposed Development:

Construction of a **single-storey residential dwelling (250 m² footprint)**.

Local Planning Authority: Arun District Council

Prepared For: Full Planning Application

Date: March 2026

1. Introduction

This Flood Risk Assessment (FRA) has been prepared to support a **full planning application for the construction of a single-storey dwelling** at Rookery Farm, Flansham Lane, PO22 6EP.

The objectives of the assessment are to:

- Identify potential flood risks affecting the development site
- Assess the risk from all potential flood sources
- Demonstrate that the development will remain safe during extreme rainfall events
- Confirm the proposal will not increase flood risk elsewhere

The assessment follows guidance contained within:

- National Planning Policy Framework (NPPF)
 - Planning Practice Guidance – Flood Risk and Coastal Change
 - Environment Agency flood risk guidance
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2. Site Location

The site is located at **Rookery Farm along Flansham Lane**, to the north-east of Bognor Regis in West Sussex.

The site characteristics include:

- Rural agricultural land
- Farm buildings and associated residential uses nearby
- Open countryside typical of the coastal plain landscape

The site lies approximately:

- **3 km north of the coastline**
- **2 km north-east of central Bognor Regis**

The surrounding land is relatively flat, characteristic of the coastal plain landscape of West Sussex.

3. Development Description

The proposed development consists of:

- Construction of a **single-storey residential dwelling**
- Building footprint of approximately **250 m²**
- Associated landscaping and domestic curtilage
- Access from **Flansham Lane**

Surface water generated by the development will be managed through **on-site soakaways** designed in accordance with sustainable drainage principles.

The development represents a **low-density residential use**, which generates relatively limited surface water runoff.

4. Flood Risk Policy

Planning policy requires development proposals to consider flood risk through the **Sequential Test**, ensuring development is directed to areas of lowest flood risk.

Flood zones defined by the Environment Agency are summarised below:

Flood Zone	Probability
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Zone 1 Low probability (<0.1% annual chance)

Zone 2 Medium probability

Zone 3 High probability

Residential development is considered **appropriate within Flood Zone 1**.

5. Flood Zone Classification

Environment Agency Flood Map data indicates that the site is located within:

Flood Zone 1 – Low Probability

This means the land has:

Less than a 0.1% annual probability of flooding from rivers or the sea.

The site is therefore considered suitable for residential development under national planning guidance.

6. Sources of Flood Risk

6.1 River Flooding (Fluvial)

No Environment Agency **Main Rivers** are located within the immediate vicinity of the site.

Local watercourses in the area consist primarily of agricultural drainage ditches which serve surrounding farmland.

Given the site's classification within Flood Zone 1, the risk from river flooding is considered:

Very Low

6.2 Coastal Flooding

The nearest coastline lies south of the site along the Bognor Regis seafront.

The site is located approximately **3 kilometres inland**, reducing the risk from coastal flooding.

Existing coastal defence infrastructure along the Bognor Regis coastline also contributes to flood protection in the wider area.

Risk level:

Low

6.3 Surface Water Flooding

Surface water flooding occurs when rainfall intensity exceeds the capacity of drainage systems.

Government flood mapping indicates **generally low surface water flood risk within the postcode area**, though isolated ponding may occur during severe storms.

Given the rural nature of the site and permeable ground conditions typical of farmland, the surface water flood risk is assessed as:

Low

6.4 Groundwater Flooding

The site is not located within an area identified as having significant groundwater emergence risk.

Groundwater flood risk is therefore considered:

Low

6.5 Sewer Flooding

The proposed development will utilise **on-site soakaways**, reducing reliance on public sewer infrastructure.

Risk from sewer flooding is therefore minimal.

7. Surface Water Drainage Strategy

Surface water generated by the development will be managed through **Sustainable Drainage Systems (SuDS)**.

The proposed drainage strategy includes:

Soakaways

Surface water from:

- Roof areas
- Driveways
- Hardstanding

will discharge to **soakaway systems designed in accordance with BRE Digest 365**.

Soakaways will allow water to infiltrate naturally into the ground, mimicking natural drainage conditions.

Additional SuDS Measures

Where appropriate, the development may include:

- Permeable paving
- Rainwater downpipe drainage to soakaways
- Landscaping designed to direct water away from the building

This approach ensures that **post-development runoff does not exceed existing greenfield runoff rates**.

8. Climate Change

Future climate projections indicate an increase in:

- Extreme rainfall events
- Storm intensity

Although the site lies within **Flood Zone 1**, the proposed drainage strategy incorporates infiltration-based systems which provide resilience against future rainfall increases.

The low-density nature of the development further limits flood risk impacts.

9. Flood Mitigation Measures

Although flood risk is low, several precautionary measures will be incorporated into the development:

- Finished floor levels set slightly above surrounding ground level
- Ground levels graded away from the dwelling
- Surface water managed via soakaways
- No basement construction proposed

These measures ensure the dwelling remains safe during extreme rainfall conditions.

10. Safe Access and Egress

Access to the property will be via **Flansham Lane**, which remains operational during normal weather conditions.

Due to the site's position within **Flood Zone 1**, flood waters are not expected to impede access or egress during typical flood events.

11. Conclusion

This Flood Risk Assessment demonstrates that:

- The site lies within **Flood Zone 1 (low flood risk)**.
- Flood risk from **rivers, the sea, groundwater, and surface water is low**.
- The proposed **single-storey 250 m² dwelling** represents a modest development.
- Surface water will be managed through **soakaways in accordance with sustainable drainage principles**.

The development will therefore:

- **Remain safe from flooding**
- **Not increase flood risk elsewhere**
- **Comply with national planning policy and local authority requirements**

The site is therefore considered **suitable for the proposed residential development**.