



86 Addison Way, Bognor Regis, PO22 9HZ
Flood Risk Assessment



Site Address: 86 Addison Way, Felpham, Bognor Regis, PO22 9HZ
Proposal: Double-storey front elevation extension (enlargement of bedroom, new entrance/office)

1.0 Introduction

This Flood Risk Assessment (FRA) has been prepared to support a Householder Planning Application for a residential extension at 86 Addison Way, PO22 9HZ.

The proposed development consists of a double-storey extension to the front elevation. The works are confined entirely to the existing hardstanding footprint (driveway/front garden hardstanding). There is no incremental loss of permeable soft landscaping; the impermeable area of the site remains unchanged. Rainwater runoff will be managed via the existing drainage network with new diversion works as required.

2.0 Site Location & Topography

- **Address:** 86 Addison Way, Felpham, Bognor Regis, West Sussex, PO22 9HZ.
- **Topography:** The site is located on a residential street. The ground levels are relatively flat, typical of the coastal plain of Felpham.
- **Existing Surfacing:** The front of the property (where the extension is proposed) is currently occupied by hardstanding (driveway/paving). No greenfield land or garden space is being disturbed by the footprint of the extension.

3.0 Sequential Test & Flood Zone Classification

According to the Environment Agency's Flood Map for Planning (Rivers and Sea):

- **Flood Zone: Flood Zone 1 (Low Probability)**
- **Definition:** Land having a less than 0.1% annual probability of river or sea flooding (1 in 1000 year event).

Assessment: The site is located in the lowest risk category for fluvial (river) and tidal (sea) flooding. As the proposal is for a minor extension (non-dwelling house) in Flood Zone 1, the Sequential Test is satisfied, and an Exception Test is not required.

4.0 Sources of Flood Risk

4.1 Fluvial (River) and Tidal (Sea)

The site is not within the theoretical floodplain. There are no main rivers proximal to the site that pose a risk of fluvial flooding. While the site is located within the coastal district of Felpham, the site elevation is sufficiently above the tidal floodplain mapping (Flood Zone 1) to render tidal inundation risk negligible.

4.2 Surface Water (Pluvial)

The Environment Agency's Risk of Flooding from Surface Water (RoFfSW) map indicates that the area is categorised as "Very Low" risk.

The proposed extension is modest and located on existing hardstanding. It does not alter the existing

ground levels or create new impermeable areas that would increase runoff volumes.

4.3 Groundwater

There are no historical records of groundwater flooding at this location. The construction is for a standard domestic extension with shallow foundations; no basement or below-ground habitable space is proposed that would be vulnerable to groundwater emergence.

4.4 Sewer/Artificial Drainage

The property is connected to the mains sewerage network. Surface water is currently managed via the existing hardstanding draining to the highway drainage system or private soakaway.

5.0 Proposed Development & Vulnerability Classification

5.1 Vulnerability

Table 2 of the NPPF Planning Practice Guide classifies residential dwellings as "More Vulnerable" uses.

- **Existing:** More Vulnerable (residential house).
- **Proposed:** More Vulnerable (extension to residential house).

As the site is in Flood Zone 1, there is no policy restriction on the development of More Vulnerable uses.

5.2 Impact of Development

- **Impermeable Area:** The extension is built on existing hardstanding.
 - **Pre-development:** Hardstanding area 78.7 m²
 - **Post-development:** Hardstanding area 68.9 m²
 - **Net change:** 9.8 m²
- **Loss of Green Space: None.** The proposal utilises the existing front driveway/hardstanding area. No gardens, lawns, or soft landscaping are being removed or covered.

6.0 Surface Water Drainage Strategy

The proposal adheres to the principle that development should not increase flood risk elsewhere. Since the development results in no net increase in impermeable area, the rate and volume of surface water runoff leaving the site will remain unchanged from the existing scenario.

Drainage Methodology:

1. **Roof Water:** Rainwater from the new roof extension will be collected via gutters and downpipes.
2. **Diversión:** The rainwater will be diverted as required to connect to the existing surface water drainage system serving the property (either the existing soakaway or the highway gully connection).
3. **Maintenance:** Existing drainage features will be inspected and cleared during construction to ensure no blockages occur.

Flood Risk Management:

- No new drainage outfalls are being created that could surcharge neighbouring properties.

- Finished floor levels of the extension will be set at or above the existing dwelling's finished floor level (FFL) to maintain a dry refuge.

7.0 Mitigation & Resilience

Given the low-risk environment (Flood Zone 1) and the scale of the proposal (minor extension on existing hardstanding), the following standard measures are proposed to ensure the development remains safe:

1. **Drainage Connection:** Ensure new roof downpipes discharge to the existing drainage network (soakaway or sewer) without causing ponding against the new foundation.
2. **Levels:** Ensure the ground levels adjacent to the new extension slope away from the structure to direct water towards the existing drainage points.
3. **Material Use:** Standard domestic construction materials resistant to incidental moisture.

8.0 Conclusion

1. **Policy Compliance:** The proposed development is situated in Environment Agency Flood Zone 1. It is compliant with the National Planning Policy Framework (NPPF) and Arun District Council local planning policy regarding flood risk.
2. **No Increased Risk:** Because the extension is located entirely on existing hardstanding with no loss of green space and no net increase in impermeable area, the proposal will not increase the risk of surface water flooding to the subject property or neighbouring properties.
3. **Safe Development:** The development is safe for its lifetime given the low probability of flooding from all sources and the proposed management of rainwater via diversion to the existing system.