FLOOD RISK ASSESSMENT REPORT

Project: Householder Extension
Site Address: 18 Brent Court, Emsworth, Hampshire, PO10 7JA
Applicant: Residential Property Owner
Date: May 2026
Document Reference: FRA/18BC/01

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1. INTRODUCTION & SCOPE

This Flood Risk Assessment (FRA) report supports a householder planning application for a small domestic extension at 18 Brent Court, Emsworth. The report addresses national flood risk policies set out in the National Planning Policy Framework (NPPF) and follows the Environment Agency (EA) Standing Advice for Minor Extensions.

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2. SITE LOCATION AND CONTEXT

- **Address:** 18 Brent Court, Emsworth, Hampshire, PO10 7JA.
- **Local Authority:** Havant Borough Council.
- **Current Land Use:** Existing residential dwelling.
- **Proposed Development:** Small ground-floor extension to the rear/side of the existing house.
- **Hydrological Context:** The site sits near the Emsworth shoreline and the River Ems channel.

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3. FLOOD ZONE CLASSIFICATION

According to the EA Flood Map for Planning:

- **Property Curtilage:** Part of the wider boundary and garden intersects a designated high-risk flood zone (Zone 2 or 3).
- **Proposed Footprint:** The physical location of the new extension sits **completely inside Flood Zone 1**.
- **Vulnerability Class:** The residential use is classified as "More Vulnerable". However, placing the footprint in Zone 1 avoids the need for Sequential or Exception tests.

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4. FLOOD RISK ASSESSMENT BY SOURCE

4.1 Fluvial and Tidal Risk (Rivers and Sea)

- **Risk Level:** Low.
- **Analysis:** The risk is contained to the lower-lying garden sections. The proposed structural footprint occupies higher ground outside the modelled flood extent.

4.2 Pluvial Risk (Surface Water)

- **Risk Level:** Very Low to Low.
- **Analysis:** Extreme rainfall could cause localised ponding in surrounding garden areas, but it does not threaten the elevated extension footprint.

4.3 Groundwater and Sewer Risk

- **Risk Level:** Very Low.
- **Analysis:** No historical incidents of groundwater or public sewer flooding are recorded for this specific building footprint.

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5. RISK MITIGATION AND DESIGN STRATEGY

The development adheres to the Environment Agency's standard protection principles:

5.1 Finished Floor Levels (FFL)

- FFLs will match the existing house floor levels exactly.
- The floor level stands well above the adjacent external ground level to safeguard against unexpected flash flooding.

5.2 Flood Resilience and Resistance

- **Infrastructure:** Electrical sockets and wiring connections will be fixed at least 400mm above the finished floor level.
- **Service Lines:** Service entries will be sealed using water-tight grommets and expanding foam.
- **Drainage Protection:** Non-return valves will be fitted to any new drainage runs to stop backflow from the main system during heavy storms.

5.3 Sustainable Drainage (SuDS)

- **Runoff Control:** The extension will not increase local runoff rates.
- **Disposal:** Rainwater will route to existing downpipes or a dedicated soakaway built into the dry Zone 1 area.

- **Land Grading:** Ground levels next to the new walls will slope away from the structure to prevent water pooling.

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6. EMERGENCY EVACUATION AND SAFETY

6.1 Flood Warning System

- Homeowners will register for free automated alerts via the GOV.UK Flood Warning Service.

6.2 Safe Egress Route

- If the garden floods, occupiers can evacuate safely onto Brent Court.
- The road travels north, offering a dry pedestrian route completely away from the coastal flood risk areas.

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7. CONCLUSION

The proposed minor extension poses no threat to life or property. The structure sits safely within Flood Zone 1, meets all local and national planning criteria, and will not increase flood risk elsewhere.