

Flood Risk Assessment (FRA) template

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1 Site description

1.1 Site address

7 Glebe Close, Southwick BN42 4TF

1.2 Vulnerability classification

The development is "Less Vulnerable" according to the Planning Practice Guidance (PPG), as it is a residential extension to an existing dwelling.

1.3 Flood zone incompatibility

The site is located within a "very low flood risk zone, where all development types are appropriate. There is no incompatibility between the vulnerability classification and the flood zone.

1.4 Lifetime of development

The proposed extension is expected to have a standard residential design life of 100 years.

1.5 Local Plan policies and SFRA recommendations

Local planning policies and the Strategic Flood Risk Assessment (SFRA) generally recommend:

Avoiding development in higher risk areas where possible.

Managing surface water runoff on-site.

Incorporating SuDS where practical.

The proposed development complies with these requirements, as it is located in a very low-risk area and does not increase off-site flood risk.

2 Assess flood risk

2.1 Existing site

The property is a two-storey dwelling within a residential cul-de-sac. The site is predominantly flat and urbanised, with no nearby watercourses. It lies within a "very low Flood zone", indicating a less than 1 in 1,000 annual probability of river or sea flooding.

2.2 Fluvial flood risk

2.2.1 Design flood event

There are no nearby rivers that pose a flood risk to the site.
Design fluvial flood event: very low probability (<0.1% annual chance).

2.2.2 Residual fluvial risk

Residual fluvial risk remains negligible, as there are no flood defences required or present in the area.

2.3 Tidal flood risk

2.3.1 Design flood event

The site is located inland and elevated above coastal flood levels.
Design tidal flood event: very low probability (<0.1% annual chance).

2.3.2 Residual tidal risk

Residual risk is minimal due to the site's distance from the coast and local topography.

2.4 Surface water flood risk

2.4.1 Design flood event

EA surface water flood mapping identifies the area as Very Low Risk, meaning <0.1% annual probability of surface water flood.

2.4.2 Residual risk

Residual risk remains very low. The proposed extension will not significantly increase impermeable area.

2.5 Sewer flood risk

No historical sewer flooding is recorded within this part of Southwick.
Risk is considered very low.

2.6 Groundwater flood risk

The SFRA identifies the area as low susceptibility to groundwater flooding.
Ground levels and local geology make groundwater flood risk minimal.

2.7 Reservoir flood risk

EA mapping shows the site is not within a reservoir inundation zone.
Risk: very low.

2.8 Canals and other artificial sources of flood risk

There are no canals, storage ponds, industrial facilities or artificial water bodies within proximity that could pose a flood risk.
Risk: none.

2.9 Coastal erosion risk implications on tidal flood risk

The site is inland and not affected by coastal erosion zones.
No impact on flood risk.

2.10 Interactions of various sources

No combined or interacting flood mechanisms affect the site. The overall flood risk from all sources remains very low.

2.11 Design flood level according to all the sources identified

All sources indicate a very low flood probability (<0.1% annual chance).
No specific flood level constraints apply to the development.

2.12 Exception Test

Not required.
The site is in a very low flood risk zone, and the development is Less Vulnerable, so the Sequential Test alone is sufficient.

2.13 Summary of flood risks

- ☐ The site is in a "very low risk flood zone "(very low fluvial/tidal flood risk).

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☐ All other flood sources (surface water, sewer, groundwater, artificial structures, reservoirs) present very low or negligible risk.

☐ The proposed extension will not raise flood risk elsewhere.

Overall flood risk: Very Low.

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3 Avoid flood risk

3.1 Evidence of the Sequential Test

The extension is within an existing developed plot in a "very low flood risk zone", the lowest risk zone. The Sequential Test is therefore passed.

3.2 Sequential Approach

The development is located in a part of the site with existing built form, ensuring the most appropriate and lowest-risk area is used. No alternative lower-risk location is available or necessary.

4 Control flood risk

4.1 Proposed site levels

- ☐ The proposed extension will be built in line with existing dwelling levels.
- ☐ Finished Floor Level (FFL) of the extension will match the existing FFL of the house.
- ☐ No significant change in ground level is proposed; therefore, no additional flood risk is created.

4.2 Flood flow route

- ☐ No overland flood flow routes have been identified across the site.
- ☐ Surface water flows naturally towards existing drainage channels/roads, consistent with surrounding residential properties.
- ☐ The extension will not obstruct any natural or engineered flow routes.

4.3 Existing or proposed flood risk management infrastructure

- ☐ Existing infrastructure: conventional residential drainage system, including gutters, downpipes, and local sewers.
- ☐ Proposed infrastructure: minor modification of downpipes to accommodate roof extension; connection to existing drainage system.
- ☐ No additional flood defences are required due to very low flood risk.

5 Mitigate flood risk

5.1 Risk to people

- ☐ Residents and visitors are not at significant risk from flooding due to the very low flood probability.
- ☐ Minor surface water ponding may occur in extreme rainfall, but this will not impede safe access to the property.

5.2 Risk to property/building

- ☐ The building is elevated above all mapped flood levels.
- ☐ Standard building regulations and construction methods ensure the extension remains safe in extreme conditions.
- ☐ Flood-resilient materials may be incorporated as good practice, though not strictly necessary.

5.3 Risk to essential services

- ☐ The property is connected to mains electricity, gas, water, and drainage.
- ☐ Given the low flood risk, no disruption to essential services is anticipated.

5.4 Floodplain storage and conveyance compensation

- ☐ Not applicable.
- ☐ The site is outside functional floodplain (Flood Zone 1), and no floodplain storage is affected by the development.

5.5 Surface water management

- ☐ Rainwater from the roof will discharge into existing soakaways or drainage points.
- ☐ No increase in impermeable area is proposed.

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☐ Minimal surface water management measures (such as gutters, downpipes, and soakaway checks) will maintain existing runoff rates, ensuring no increase in flood risk downstream.

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6. Manage flood risk

6.1 Safe access and escape

- ☐ Access to the property is via Glebe Close, which remains safe under all foreseeable flood conditions.
- ☐ No known obstructions exist for emergency vehicles or residents.

6.2 Evacuation plan

- ☐ Given the very low risk, a formal evacuation plan is not required.
- ☐ Standard household emergency procedures are considered sufficient

6.3 Residual flood risk

- ☐ The residual risk remains very low.

6.4 Betterment provision

- ☐ Optional improvements (betterment) could include:

Minor rainwater harvesting or improved guttering.

Use of water-resistant finishes in the ground floor areas.

- ☐ These measures would provide enhanced resilience, but are not required due to the low flood risk.

7. Summary of measures

The extension is located in a very low flood risk zone (very low flood risk).

Proposed site levels match existing levels; no raised floor or excavation is required.

Surface water drainage will be maintained through existing systems; no additional risk created.

No floodplain storage is impacted, and natural surface water flow is preserved.

Standard building methods and materials provide sufficient protection.

Safe access and egress is available at all times.

Residual risk is very low, with minor surface water ponding as the only potential hazard.

Optional betterment measures can be applied for added resilience.

Conclusion: The proposed two-storey rear extension does not increase flood risk to the site or surrounding area. The development is safe, sustainable, and compliant with planning guidance for areas of very low flood risk.

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