

Flood Risk Assessment

2 St John's Close, Dodworth, Barnsley, S75 3RY

1. Introduction and Purpose

This Flood Risk Assessment has been prepared by Hirst Architects Ltd on behalf of the applicant, Mrs Nicola Rodgers in support of the planning application at 2 St John's Close, Dodworth, Barnsley, S75 3RY. It has been prepared following Barnsley Metropolitan Borough Council's invalid letter dated 11 May 2026, which confirms that the application site lies within Flood Zone 3 and that a Flood Risk Assessment is required before the application can be processed. [1] [2]

The assessment is proportionate to the nature of the application. The proposal relates to the amalgamation and remodelling of two existing adjoining residential dwellings to form one single dwellinghouse for multi-generational family living. It does not introduce a new residential use to the site, does not create an additional dwelling, and does not create a self-contained annex or separate flat. [1]

This document should be read alongside the submitted existing and proposed plans and elevations prepared by Hirst Architects Ltd, the submitted Design and Access Statement, and the planning application forms.

2. Site and Proposal

Site address	2 St John's Close, Dodworth, Barnsley, S75 3RY
Local planning authority	Barnsley Metropolitan Borough Council
Existing use	Two domestic dwellings within an established residential area
Proposed use	One single dwellinghouse within Use Class C3
Summary of works	Physical amalgamation of the two existing dwellings, internal reconfiguration, roof alterations, front gable extensions, dormer window, revised entrance treatment, fenestration changes and associated external works
Flood Zone	Flood Zone 3, as identified by Barnsley Metropolitan Borough Council in the invalid letter dated 11 May 2026
Development type for FRA purposes	Householder/minor residential alteration and extension to existing domestic accommodation, with no new dwelling created

The site is already developed and residential in character. The existing built form comprises a pair of adjoining semi-detached residential dwellings with off-street parking and domestic curtilage. The proposal rationalises the two properties into a single coherent dwelling, retaining the residential character of the site and avoiding subdivision or intensification into additional units. [1]

The revised proposed ground-floor layout includes living accommodation, kitchen, utility, bathrooms, boot room, storage, playroom, snug and a dayroom. No ground-floor bedroom is proposed. First-floor accommodation includes family bedrooms, bathrooms, ensuite, office and storage. The internal arrangement is intended to function as one dwelling for one multi-generational household. [1]

3. Relevant Guidance and Requirement for FRA

GOV.UK guidance confirms that a Flood Risk Assessment should be completed for all development, including minor development and changes of use, proposed in Flood Zones 2 or 3. The same guidance also states that a local planning authority may refuse an application if a Flood Risk Assessment is not included or is not satisfactory. [2]

Barnsley Council's own development and flood risk guidance states that a Flood Risk Assessment is required for all proposals for new development located in Flood Zones 2 and 3, and that an application may be invalidated if a required Flood Risk Assessment is not submitted. [3]

The Environment Agency's standing advice confirms that minor extensions in Flood Zone 2 or 3 should follow the advice for minor extensions. A minor extension is described in the guidance as a householder or non-domestic extension with a floor space of no more than 250 square metres. This assessment has therefore been prepared as a proportionate householder/minor development Flood Risk Assessment. If the local planning authority considers the additional floor area to fall outside the minor extension threshold, the assessment should be reviewed and, if necessary, supported by Environment Agency Product 4 data or specialist hydraulic advice. [4]

The Environment Agency flood zones dataset defines Flood Zone 3 as land with a 1% or greater annual probability of flooding from rivers, or a 0.5% or greater annual probability of flooding from the sea, ignoring the benefit of flood defences. The dataset is a strategic planning dataset and is not, by itself, a property-level flood-depth assessment. [5]

4. Sequential Test and Exception Test

The application relates to an existing residential site and is not seeking a new dwelling in a new location. The proposal remains residential and does not increase the flood vulnerability classification of the site. The works are domestic alterations and extensions to an existing dwelling arrangement and should therefore be considered in the context of the Government's standing advice for householder/minor development. [1] [4]

GOV.UK guidance states that householder development such as residential extensions, conservatories or loft conversions is exempt from the sequential test. On that basis, a separate sequential test is not considered necessary for this application. [4]

The Planning Practice Guidance table on flood risk vulnerability and flood zone compatibility indicates that more vulnerable development in Flood Zone 3a may require the exception test, and that more vulnerable development should not be permitted in Flood Zone 3b functional floodplain. This assessment proceeds on the basis that the application is householder/minor development to an existing residential property and not a new residential allocation or new dwelling. If the Council's Strategic Flood Risk Assessment identifies the site or the proposed built development as falling within Flood Zone 3b functional floodplain, further advice should be sought before determination. [6]

5. Flood Risk Sources Considered

This section considers the principal sources of flood risk in a proportionate way having regard to the submitted householder/minor development proposal, the Council's validation request, and Government standing advice.

5.1 Rivers and the sea

Barnsley Council's invalid letter identifies the application site as being within Flood Zone 3. For this site, the relevant Flood Zone 3 risk is understood to relate to river/fluvial flood risk rather than tidal or sea flooding, given the inland location in Barnsley. The proposal is therefore treated as being within a high probability fluvial flood zone for planning validation purposes. [1] [5]

The development does not create a new dwelling in the floodplain. It remodels existing residential buildings and consolidates two existing dwellings into a single dwellinghouse. The proposal does not introduce a materially more vulnerable land use than the existing residential use and does not introduce additional independent residential units. [1]

5.2 Surface water

Government guidance requires applicants to consider surface water as part of the flood risk assessment process. The Flood Map for Planning service can be used to identify whether a development is at risk of surface water flooding, and the separate long-term flood risk service provides information on surface water, rivers and the sea, reservoirs and groundwater where data is available. [2] [7]

The proposal is not for a new housing estate or a major hardstanding scheme. Any additional roof area and external surfacing associated with the works should be managed so that surface water is not directed towards neighbouring land, the public highway, or the lower parts of the building. New external surfaces should be permeable where practical, or otherwise drained to a suitable on-site drainage arrangement in accordance with Building Regulations Part H and any requirements of the local drainage authority or statutory undertaker.

5.3 Groundwater

No basement accommodation, below-ground living space or lowering of existing habitable floor levels is proposed. The proposal therefore avoids introducing new accommodation in a below-ground location where groundwater ingress would be more difficult to manage. Any below-ground services, ducts or penetrations should be sealed appropriately during detailed design.

5.4 Sewer and drainage exceedance

The existing dwellings are already served by domestic drainage infrastructure. The proposal should retain or improve the existing drainage arrangements and should not increase discharge rates in a way that would increase flood risk elsewhere. As a precautionary measure, non-return valves should be considered on low-level foul or combined drainage connections where technically appropriate and acceptable to Building Control or the relevant drainage undertaker.

5.5 Reservoirs, canals and artificial sources

No works are proposed to a reservoir, canal, culverted watercourse or flood defence. The proposal does not involve engineering operations that would alter any reservoir flood pathway. The applicant and design team should nevertheless

use the Government long-term flood risk service to check all mapped sources of risk before construction-stage design is finalised. [7]

6. Finished Floor Levels and Flood Mitigation

The Environment Agency standing advice recommends that floor levels should be set at least 600mm above the estimated flood level, with flood-resistant materials used to at least 600mm above the estimated flood level. The guidance also recognises that, where floor levels cannot be raised in this way, extra flood resistance and resilience measures should be included. [4]

In this case, the proposal relates to the remodelling and extension of existing residential buildings. Raising the entire floor level of the existing dwelling by 600mm is unlikely to be practical or proportionate because the new accommodation must connect into existing rooms, entrances and circulation. The design response is therefore to ensure that no proposed ground-floor accommodation is set below the existing adjacent finished floor level and to incorporate flood resistance and resilience measures as part of detailed design.

The Ordnance Datum survey dated 6 July 2026 records existing ground-floor finished floor levels of 127.65 mAOD and 127.87 mAOD in the two building parts identified as 1 and 2 respectively on the survey. The proposed level strategy is to retain those respective levels in the altered parts of the building and to set any new ground-floor accommodation no lower than the existing floor level to which it connects. The junction between the two existing levels will be accommodated within the internal circulation without lowering either surveyed level. The current proposed ground-floor plan does not include a bedroom, with sleeping accommodation located at first-floor level. These proposed finished floor levels and the junction between them are to be expressly annotated on the revised proposed ground-floor drawing before submission, so that the planning drawings and this assessment show the same levels in mAOD.

At detailed design and construction stage, the following measures should be adopted where applicable and proportionate:

- Finished floor levels to new ground-floor extensions or altered ground-floor rooms should be no lower than the adjoining existing finished floor levels.
- External ground levels should fall away from new entrance points and external wall lines where practical, so that localised surface water is not directed towards the building.
- Service penetrations at low level should be sealed and detailed to reduce the risk of water ingress.
- Electrical sockets, controls and consumer units serving altered ground-floor areas should be raised above low level where practical and consistent with accessibility requirements.
- Low-level construction materials should be selected to improve flood recoverability, including masonry, cementitious or moisture-resistant finishes, closed-cell insulation where suitable, moisture-resistant boards where required, and avoidance of chipboard or easily damaged absorbent materials at low level.
- Demountable door barriers, air-brick covers or comparable property flood resilience measures should be considered for vulnerable external openings, particularly where the final Environment Agency flood data identifies flood depths that would make such measures effective.
- Non-return valves should be considered to foul or combined drainage connections where technically suitable.
- The household should prepare and maintain a simple flood plan, including registration for flood warnings where available, safe storage of valuables above ground-floor level, and arrangements for vulnerable occupants.

7. Safe Access, Occupation and Flood Warning

The proposal retains the existing residential access relationship with St John's Close. It does not introduce a new access point or materially alter the way the site is accessed. The Design and Access Statement confirms that existing pedestrian and vehicular access arrangements are retained with only minor changes, and that the proposal would not result in a material increase in traffic generation. [1]

Given that the proposal remains residential and is for an existing developed site, the flood safety response is based on resilience, early warning and sensible household management rather than relocation of development to another site. The dwelling includes first-floor accommodation which can provide a place of refuge during an extreme flood event if immediate external egress is not safe. Residents should not attempt to walk or drive through flood water and should follow Environment Agency, emergency service and local authority advice during any flood warning or flood event.

The revised proposal does not include a ground-floor bedroom. The household flood plan should nevertheless identify any occupant with mobility needs and include arrangements for early evacuation to a safe location when flood warnings are issued. First-floor accommodation must not be assumed to provide safe refuge without an assessment of flood depths, duration and access to rescue.

8. Surface Water Management and Drainage Strategy

The proposal should be constructed so that surface water run-off is managed within the site and does not increase flood risk elsewhere. Government guidance states that a sustainable drainage strategy is needed where development could affect

drainage on or around the site or is in an area at risk of flooding such as Flood Zones 2 or 3. For a domestic extension of this nature, the strategy can be proportionate and embedded within the Flood Risk Assessment. [2]

The drainage approach should be as follows:

- Existing roof drainage connections should be reviewed before construction and repaired or improved where defective.
- New roof areas should discharge to the existing surface water drainage system only where capacity and connection arrangements are confirmed to be suitable.
- Where technically practical, rainwater should be attenuated or reused through water butts or similar domestic-scale measures.
- New hardstanding should be permeable where practical, or designed so that run-off is not directed towards neighbouring land or the public highway.
- Any final drainage details should comply with Building Regulations Part H and any statutory undertaker requirements.

Barnsley's Sustainable Construction and Climate Change Adaptation SPD states that Local Plan policies CC3 Flood Risk and CC4 Sustainable Drainage Systems should be considered in the design of development and supports the use of permeable surfaces and natural landscape treatment where appropriate. [8]

9. Floodplain Storage and Flood Risk Elsewhere

The development is principally the alteration and modest enlargement of existing built form within an existing domestic curtilage. It does not propose significant land raising, culverting, obstruction of a watercourse, or the creation of a new impermeable development platform. The proposal should therefore not materially displace floodwater or increase flood risk to neighbouring land, subject to the drainage and level measures set out in this assessment.

Any construction-stage works should avoid storing materials in a way that could obstruct overland flow routes during heavy rainfall. Contractors should ensure temporary drainage and site management measures are in place throughout the works.

10. Residual Risk and Construction Stage Controls

Residual flood risk remains because the site has been identified as lying within Flood Zone 3. That residual risk is managed by retaining the existing residential use, avoiding creation of a new dwelling, avoiding basement accommodation, not lowering ground-floor levels, incorporating flood-resilient detailing, maintaining first-floor refuge accommodation, and managing surface water within the site.

Before commencement of construction, the contractor should review local flood warnings, avoid leaving open excavations or vulnerable materials exposed during periods of forecast heavy rain, and ensure temporary drainage is maintained. Any final construction issue drawings should record the adopted finished floor levels, threshold details, drainage details and flood resilience measures.

11. Conclusion

This Flood Risk Assessment has been prepared to respond directly to Barnsley Council's validation requirement. The site is identified by the Council as lying within Flood Zone 3, and a Flood Risk Assessment is therefore required. The proposal is domestic in nature, relates to existing residential buildings, and consolidates two dwellings into one single dwellinghouse without creating an additional dwelling or more vulnerable land use.

The assessment demonstrates that the development can be made acceptable in flood risk terms, subject to proportionate mitigation. The scheme should not lower finished floor levels, should incorporate flood resistance and resilience measures at detailed design stage, should manage surface water so that flood risk is not increased elsewhere, and should include a simple household flood plan for the future occupiers.

This assessment must be read with an updated proposed ground-floor drawing showing the finished floor levels in mAOD. The Environment Agency's outstanding technical points, including the design flood level, climate change, residual risk, culverted watercourse, flood resistance and resilience, structural effects and safe access and egress, require further site-specific assessment before the objection can be treated as resolved.

Appendix A: Source Schedule and Links

The following sources have informed this Flood Risk Assessment. The links are included so that Barnsley Council, consultees and the applicant can verify the policy and technical basis of the assessment.

Ref	Source	Relevance	Link
1	Submitted application documents	Design and Access Statement and Hirst Architects planning drawings submitted for application 2026/0342.	Applicant submission documents supplied to Barnsley Council.
2	GOV.UK: Flood risk assessments: applying for planning permission	Used to confirm when a Flood Risk Assessment is required, the need to research flood risk sources, and the requirement for proportionate sustainable drainage information.	https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications
3	Barnsley Council: Development and flood risk	Used to confirm Barnsley Council's local requirement for a Flood Risk Assessment for proposals in Flood Zones 2 and 3 and the risk of invalidation if one is not submitted.	https://www.barnsley.gov.uk/services/planning-and-buildings/development-and-flood-risk/
4	GOV.UK: Preparing a flood risk assessment: standing advice	Used for the standing advice for minor extensions, including proportionality, floor levels, flood resistance and resilience measures, and other permits or consents.	https://www.gov.uk/guidance/flood-risk-assessment-standing-advice
5	Environment Agency / Defra Data Services Platform: Flood Map for Planning - Flood Zones	Used for the definition and status of Flood Zones 2 and 3 and the limitations of the dataset.	https://environment.data.gov.uk/dataset/04532375-a198-476e-985e-0579a0a11b47
6	GOV.UK Planning Practice Guidance: Flood risk and coastal change	Used for flood risk vulnerability and flood zone compatibility, including Flood Zone 3a and 3b considerations.	https://www.gov.uk/guidance/flood-risk-and-coastal-change#Table-2-Flood-risk-vulnerability-and-flood-zone-incompatibility
7	GOV.UK: Check the long-term flood risk for an area in England	Used as a Government source for checking long-term flood risk from rivers and the sea, surface water, reservoirs and groundwater where available.	https://www.gov.uk/check-long-term-flood-risk
8	Barnsley Council: Sustainable Construction and Climate Change Adaptation SPD	Used to support consideration of Local Plan policies CC3 Flood Risk and CC4 Sustainable Drainage Systems and the use of permeable surfaces and sustainable drainage where appropriate.	https://www.barnsley.gov.uk/media/26867/appendix-2-sustainability-spd-adoption-final.pdf
9	Environment Agency Flood Map for Planning portal	Used as the correct portal for downloading a planning flood map and ordering detailed flood risk data such as Product 1 and Product 4 if requested.	https://flood-map-for-planning.service.gov.uk/

Appendix B: Submission Note

This Flood Risk Assessment is intended to accompany the planning validation response to Barnsley Metropolitan Borough Council for application 2026/0342. It should be submitted with the application number clearly referenced. The Council's invalid letter also requests a separate heritage statement and an additional planning fee of £62.00.