FLOOD RISK ASSESSMENT

Proposed Single-Storey Rear and Side Extension

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Flood risk assessment data

Location of site: 381396/393303 (shown as easting and northing coordinates)
Document created on: 19 October 2026
This information was previously known as a product 4.
Customer reference number: G7CFTYUUEMFT

Map showing the location that flood risk assessment data has been requested for.



Environment Agency site location plan, selected area at 381396 / 393303.

Project	AR120580
Site	25 Brookburn Road, Chorlton, Manchester

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Applicant	Ms A. Patel
Prepared by	A.M. Design
Assessment date	28 October 2026
EA data reference	G7CFTYUUEMFT
Planning status	Householder planning application

Document status: Planning submission, Revision A. The existing finished floor level and lawful roof-water outfall should be confirmed before construction.

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Executive summary

This site-specific Flood Risk Assessment supports a householder application for demolition of the existing conservatory and construction of a single-storey rear and side extension at 25 Brookburn Road, Chorlton. The proposed extension has an approximate footprint of 38.6 m², replacing an existing conservatory of approximately 17.0 m², giving a net increase in built footprint of about 21.6 m².

Matter	Assessment
Flood zone	The selected location is in Flood Zone 2 on the Environment Agency Flood Map for Planning.
Development type	Minor development: householder extension significantly below 250 m². Residential use and vulnerability classification remain unchanged.
Primary source	Fluvial flooding associated with Chorlton Brook, immediately beyond the rear boundary corridor.
EA model information	Chorlton Platt Gore 2024 and Upper Mersey 2017 models. The EA confirms that no site-specific height or depth data are available at the selected location.
Overall conclusion	Subject to the finished-floor, resilient-construction and positive-drainage measures in this FRA, the extension can remain safe without materially increasing flood risk elsewhere. The drainage response is proportionate to a minor householder extension and does not rely on dedicated on-site attenuation storage.

Key condition: set the extension finished floor level no lower than the existing dwelling floor level. Where practicable, provide a 300 mm freeboard above adjacent external ground and use flood-resilient detailing.

1. Introduction

This FRA has been prepared from the submitted planning and structural drawings and Environment Agency flood-risk assessment data. It follows the Environment Agency standing advice for a minor extension in Flood Zones 2 and 3 and considers the lifetime of the development, including climate change.

The assessment is proportionate to a small householder extension. It does not constitute hydraulic modelling or a detailed topographical survey. The available Environment Agency data are strategic-scale data and the source document states that they are not intended for individual property-scale prediction.

2. Site and development

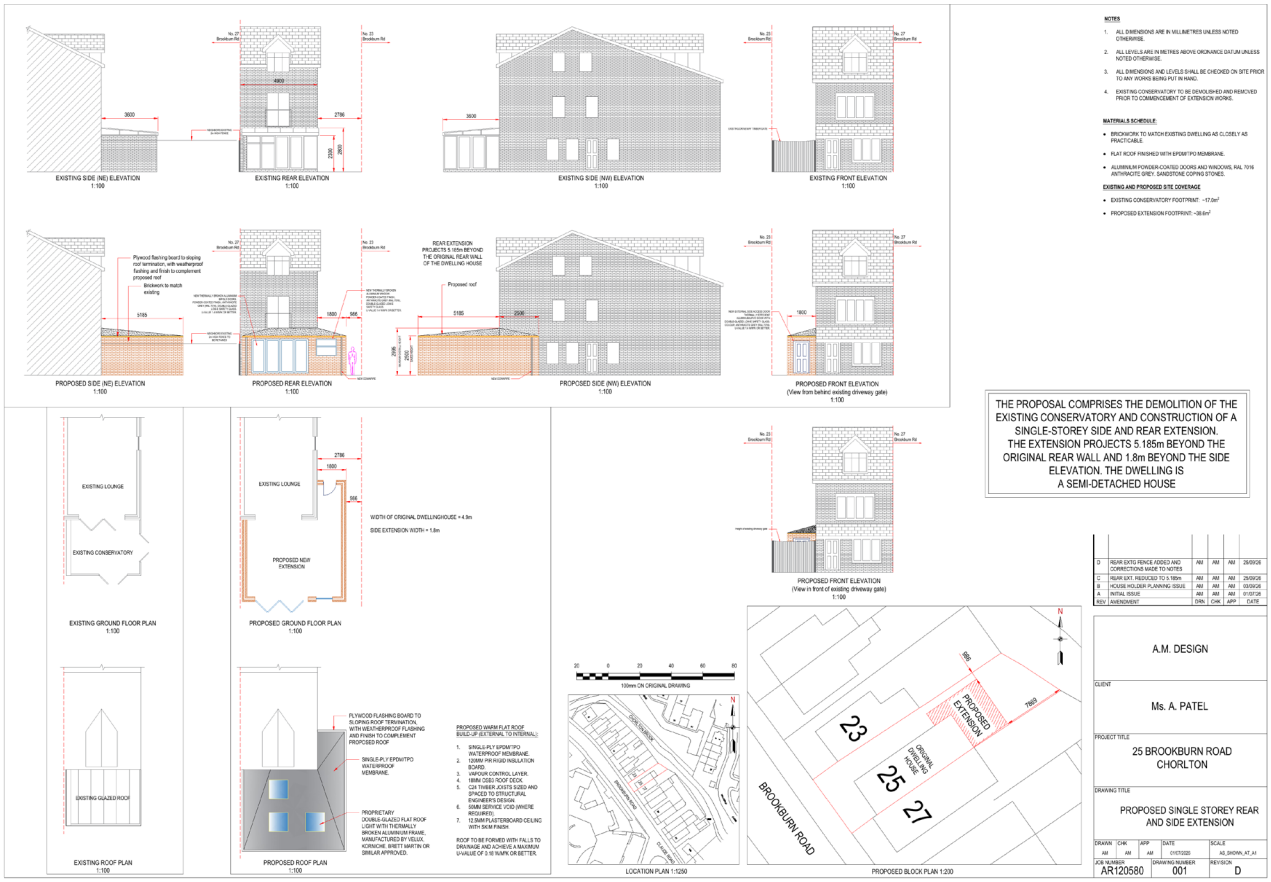
2.1 Site location and existing use

The site is 25 Brookburn Road, Chorlton, Manchester, centred approximately at National Grid Reference 381396 / 393303. It comprises an existing semi-detached dwelling with a rear conservatory, garden and driveway. Chorlton Brook is situated immediately to the rear of the residential plots within a defined river corridor.

2.2 Proposed works

- Demolition and removal of the existing conservatory.
- Construction of a single-storey rear and side extension extending approximately 5.185 m beyond the original rear wall and 1.8 m beyond the side elevation.
- Approximate proposed footprint: 38.6 m²; approximate existing conservatory footprint: 17.0 m².
- Warm flat roof with managed falls, gutters and downpipes.
- No change from residential use and no creation of a separate dwelling or basement.

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Drawing AR120580-001-D: location, block plan, plans and elevations.

3. Planning and flood-risk context

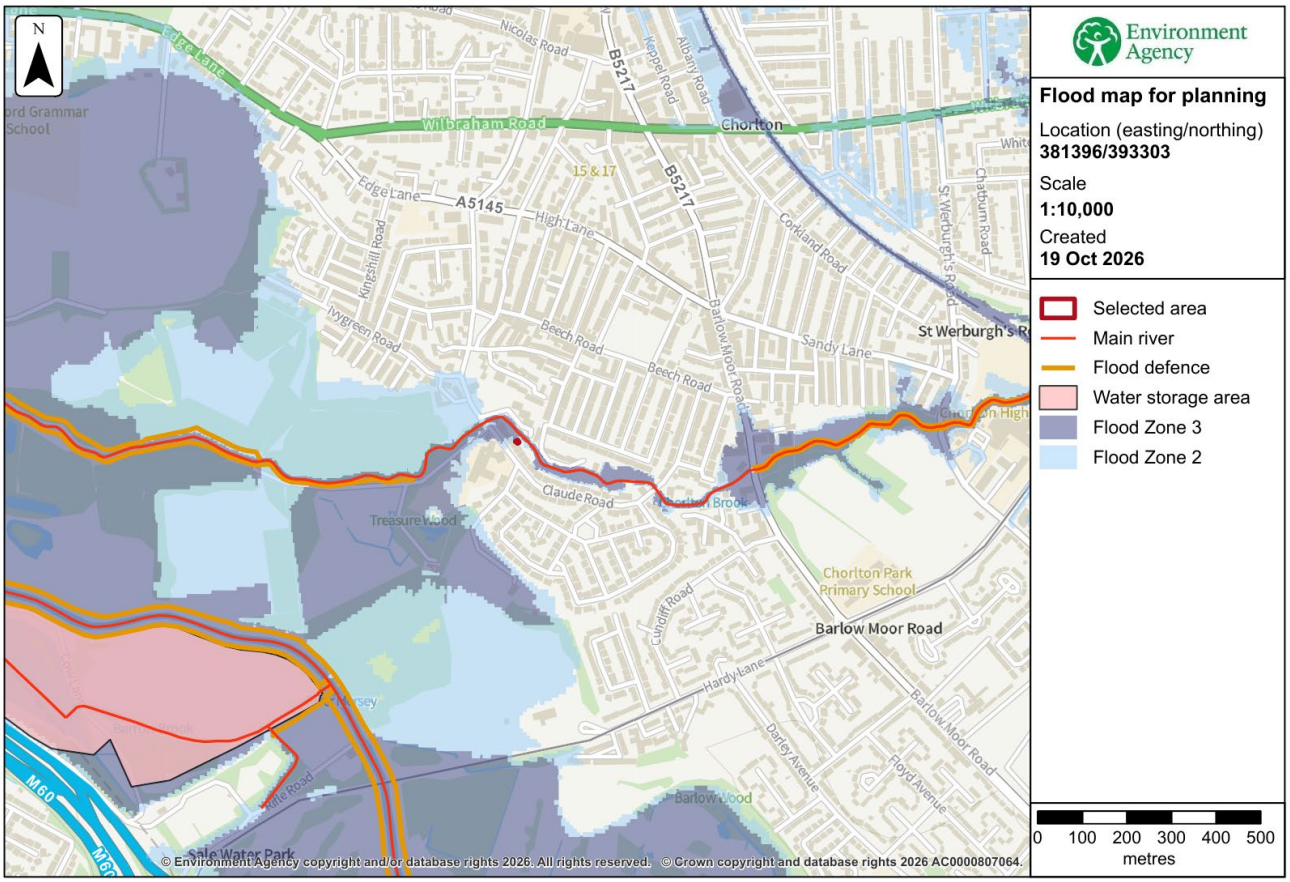
An FRA is required because the proposal lies in Flood Zone 2. Environment Agency standing advice defines a householder extension of no more than 250 m² as a minor extension. The proposal falls within this category. The sequential test is generally not required for a minor development, but the proposal must still be safe, avoid increasing flood risk elsewhere and use flood-resilient design where appropriate.

Requirement	Project response
Site-specific FRA	Provided by this document.
Consider all flood sources	Fluvial, surface water, sewer, groundwater, reservoir and artificial sources are reviewed.
Climate change	EA climate-change model extents and precautionary design measures are considered.
Surface water management	Retain existing drainage characteristics where feasible; apply the drainage hierarchy and control runoff.
Safe design	Maintain or raise internal floor level and include resistance/resilience measures.
Risk elsewhere	Avoid land raising or solid obstructions across the garden that could materially impede flood conveyance.

4. Flood risk from rivers

4.1 Flood zone and watercourse

The Environment Agency data identify the selected location as Flood Zone 2. Flood Zone 2 represents land with an annual probability of river flooding between 0.1% and 1%, ignoring the presence of defences and excluding climate-change effects. The development remains residential and does not increase the number of occupants solely because of flood risk.



Environment Agency Flood Map for Planning, created 19 October 2026.

4.2 Defences and modelled information

The EA dataset records nearby embankments and engineered high ground, including assets with recorded standards of protection of 5 and 50 years where data are available. Recorded conditions are “Fair” for two of the listed 50-year assets. Defence performance should not be relied upon as the sole means of making the development safe.

The Chorlton Platt Gore 2024 model provides the closest model nodes. The closest listed defended node is Node 8 at 381406 / 393317, approximately 17 m from the selected coordinate. Its modelled levels are 24.15 mAOD for the 1% AEP event, 24.19 mAOD for the 0.5% AEP event and 24.52 mAOD for the 0.1% AEP event. Under the defended climate-change scenario at the same node, the listed levels range from 24.31 mAOD for 1% AEP +41% to 24.58 mAOD for 1% AEP +85%, with 24.85 mAOD for 0.1% AEP +53%. These are nearby model-node levels, not predicted site depths.

The EA document expressly states that no height or depth data are available at the selected location. Site flood depth cannot therefore be reliably derived without a topographical survey tying the dwelling threshold and surrounding ground levels to Ordnance Datum. The design response in this FRA is consequently precautionary.

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5. Other sources of flooding

Source	Assessment and response
Surface water	The extension increases impermeable area by about 21.6 m² over the conservatory baseline. Roof runoff must be positively drained and not discharged toward neighbouring land or Chorlton Brook.
Sewer flooding	No site-specific sewer flood record has been provided. New connections should be agreed with Building Control and, where relevant, United Utilities. Backflow protection should be considered where low-level drainage could surcharge.
Groundwater	No intrusive ground investigation or groundwater monitoring is available. Piled/ground-beam foundations are indicated, which may reflect local ground constraints. Groundwater ingress precautions should be confirmed during construction.
Reservoirs	The EA source recommends checking long-term reservoir flood mapping. No reservoir-specific evidence was included in the supplied documents. This is not considered the controlling risk for this small extension, subject to the current national mapping.
Canals/artificial sources	No canal or other artificial source has been identified in the supplied site information as a material direct risk.
Drainage exceedance	External levels and thresholds should route exceedance water away from the dwelling and neighbouring property, while retaining a safe route toward garden areas.

6. Climate change

Climate change can increase peak river flows and rainfall intensity over the lifetime of the dwelling. The EA data include defended and defences-removed climate-change model extents. The site-specific report cautions that model datasets may not include the latest allowances and that the applicant must demonstrate safety for the development lifetime. For this small extension, climate resilience is addressed by retaining/raising floor levels, safeguarding flow routes, using water-resistant construction at low level and controlling roof runoff.

7. Finished floor level and flood-resilient design

A surveyed existing finished floor level has not been supplied. Before construction, a competent surveyor should record the existing dwelling floor level, extension threshold level, external ground levels and, preferably, levels to Ordnance Datum. The following performance specification applies:

- The extension finished floor level shall be no lower than the existing habitable ground-floor level.
- Where practicable, raise the internal floor level at least 300 mm above immediate external ground, while maintaining accessible access requirements through suitable local detailing.
- Avoid lowering the existing dwelling threshold or forming below-ground accommodation.
- Provide flood-compatible floor construction and robust damp-proof membrane continuity. Seal service penetrations and use water-resistant insulation and finishes within the potentially affected low-level zone.
- Locate electrical sockets, controls and vulnerable services at least 600 mm above finished floor level where practicable. Position the consumer unit and boiler above likely flood level.
- Use demountable flood barriers or proprietary flood-resistant door products at vulnerable external openings if wanted by the owner, while maintaining a safe means of escape.
- Specify non-return valves on low-level drainage connections where surcharge risk is identified by the drainage designer.

8. Surface water drainage strategy

The proposed works are a small householder extension that partly replaces an existing conservatory. The net increase in impermeable roof area is approximately 21.6 m². Roof water will be collected by conventional gutters and downpipes and discharged to the existing lawful surface-water drainage arrangement, subject to confirmation

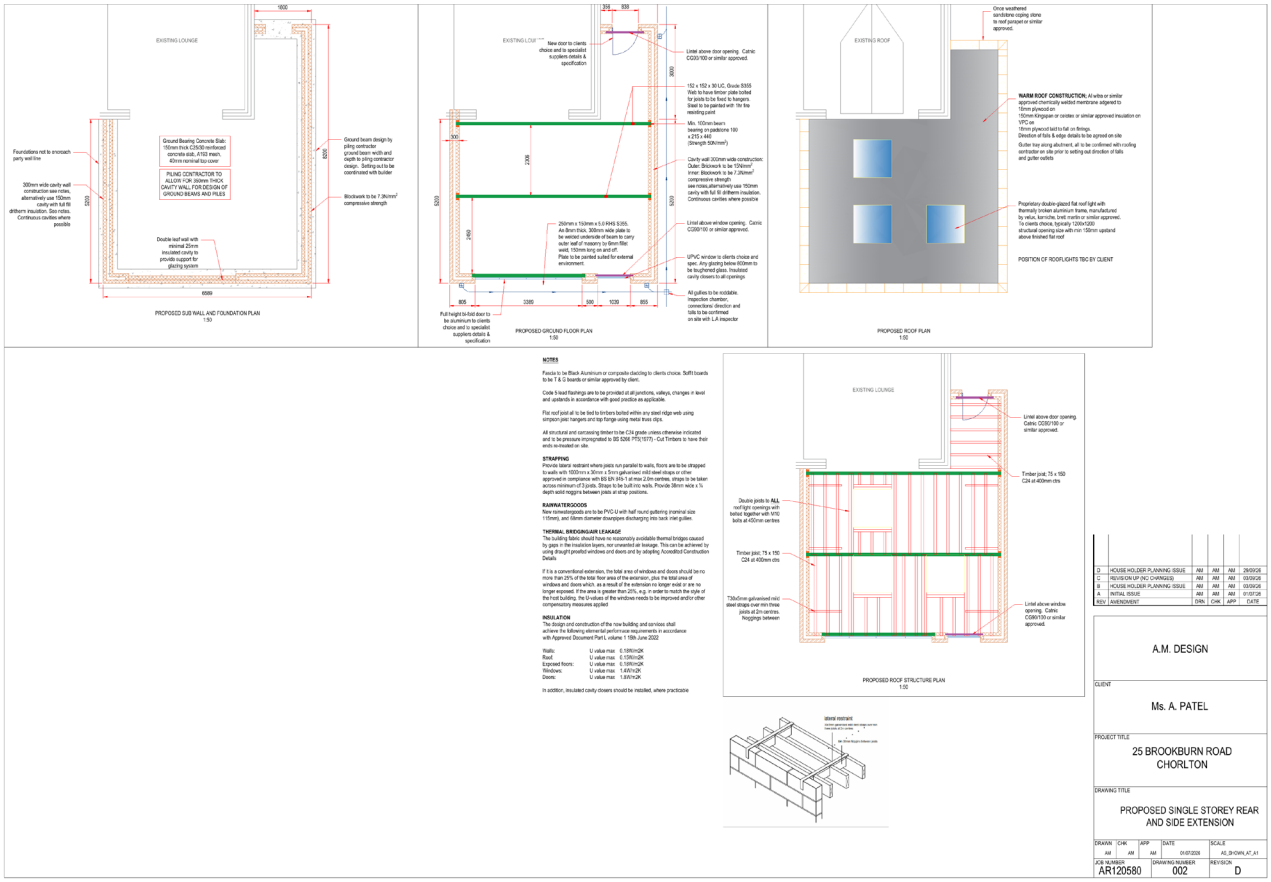
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of the existing connection during construction. No direct or uncontrolled discharge to Chorlton Brook, adjacent land or the public highway is proposed.

Given the limited net increase in impermeable area, the continued residential use and the intention to retain a positive, lawful drainage outfall, dedicated on-site attenuation tanks, crates, ponds or below-ground surface-water storage are not proposed as part of this householder scheme. The drainage approach is proportionate to the scale of development and maintains the existing pattern of roof-water disposal. A rainwater butt may be provided voluntarily for water reuse, but it is not relied upon as flood storage or as a prerequisite to the conclusions of this assessment.

Design basis for no dedicated storage. The proposal is not a new dwelling or major development, does not introduce a basement or a change to a more vulnerable use, and replaces approximately 17.0 m² of existing conservatory with a 38.6 m² extension. The resulting net increase is modest. Provided roof water is positively conveyed to the existing lawful outfall and exceedance is directed away from buildings and adjoining land, separate attenuation storage would not provide a proportionate flood-risk benefit for this scheme.

- Confirm existing roof and yard drainage routes before works commence.
- No infiltration system or soakaway is proposed by this FRA. If the existing lawful outfall cannot be confirmed and infiltration is subsequently considered, its suitability would need to be established separately, with appropriate testing and separation from foundations, boundaries and groundwater.
- Provide roddable gullies and accessible maintenance points as shown on the structural drawing.
- Size gutters and downpipes for the relevant design rainfall, including an allowance for climate change, and arrange overflows or exceedance routing away from the dwelling and neighbouring property.
- Do not connect additional surface water to the foul sewer without the sewerage undertaker's agreement.



Drawing AR120580-002-D: foundation, floor, roof and rainwater arrangements.

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9. Impact on floodplain storage and flow routes

The proposal occupies a small area within an established residential plot and replaces an existing conservatory in part. The extension should be constructed without raising the wider garden, introducing solid boundary structures that obstruct floodwater, or diverting flows onto adjoining land. Subject to these controls, the net change in floodplain storage is limited and is not expected to materially affect strategic flood conveyance. This conclusion is proportionate to minor development and should be revisited if local level information demonstrates regular inundation or material flood depths at the building footprint.

10. Access, egress and emergency planning

The dwelling is existing and the extension does not intensify the land use. Residents should register for Environment Agency flood warnings where available and maintain a household flood plan. During a flood warning, occupants should avoid entering flowing or standing floodwater, move people, pets, vehicles and valuables away from the rear garden/river corridor, isolate utilities only if safe to do so, and follow instructions from emergency services. Safe evacuation should be toward Brookburn Road and away from Chorlton Brook, subject to conditions and official advice at the time.

11. Construction-phase controls

- Monitor weather and flood warnings during excavation and foundation works.
- Keep excavations, plant, materials and temporary works outside the river corridor and do not stockpile material where it may obstruct overland flow.
- Prevent cement, silt, fuels or construction runoff entering surface-water drainage or Chorlton Brook.
- Secure lightweight materials and maintain temporary drainage throughout the works.
- If previously unidentified drainage, groundwater or flood pathways are encountered, stop affected work and obtain drainage/engineering advice.

12. Residual risk and maintenance

Residual risks include an event exceeding the modelled probability, defence failure, blockage of Chorlton Brook, intense rainfall exceeding drainage capacity, sewer surcharge and uncertainty arising from the absence of site-specific levels and depths. The owner should inspect and clear gutters, downpipes, gullies and drainage controls at least twice yearly and after major storms; maintain any non-return valves and flood barriers in accordance with manufacturer instructions; and keep flood-warning contact details current.

13. Conclusions

Conclusion	Finding
Need for FRA	Confirmed because the site is in Flood Zone 2.
Scale and vulnerability	Minor householder extension below 250 m²; no change in residential vulnerability classification.
Safety	Achievable by maintaining/raising floor level, resilient construction, managed drainage and household emergency planning.
Wider flood risk	No material increase anticipated provided garden levels and flow routes are not obstructed and runoff is appropriately managed.
Planning position	The proposal is considered acceptable in flood-risk terms, subject to implementation of this FRA and confirmation of the existing lawful roof-water outfall before construction. Dedicated attenuation or below-ground storage is not considered proportionate to the limited net increase in impermeable area.

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14. Pre-construction verification schedule

Item	Action	Responsibility
Levels	Survey existing dwelling FFL, proposed FFL and adjoining ground; record to mAOD where practicable.	Applicant / surveyor
Drainage	Confirm the existing lawful roof-water outfall and that the proposed gutters and downpipes are connected to it. No dedicated attenuation storage is proposed.	Designer / contractor
Thresholds	Detail external doors to maintain flood resistance without compromising accessible access.	Designer
Services	Agree elevated service and socket positions, sealed penetrations and any backflow protection.	Contractor / M&E installer
Construction	Confirm pollution prevention, weather monitoring and site drainage controls.	Principal contractor

15. References

- Environment Agency, Flood risk assessment data for 381396 / 393303, customer reference G7CFTYUUEMFT, created 19 October 2026.
- Environment Agency, Preparing a flood risk assessment: standing advice, updated 28 May 2026.
- Environment Agency, Flood risk assessments: applying for planning permission, updated 28 May 2026.
- Environment Agency, Flood risk assessments: climate change allowances.
- National Planning Policy Framework and Planning Practice Guidance: Flood risk and coastal change.
- A.M. Design drawing AR120580-001-D, Householder Planning Issue, 25 September 2026.
- A.M. Design drawing AR120580-002-D, Householder Planning Issue, 29 September 2026.

Appendix A. Source documents supplied

The following documents should accompany the planning submission and be read with this FRA:

- G7CFTYUUEMFT.pdf – Environment Agency flood risk assessment data
- AR120580 - 001-D.pdf – planning drawing
- AR120580 - 002-D.pdf – structural / Building Regulations drawing
- Sketch1.pdf – elevations sketch

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