FLOOD RISK ASSESSMENT

FOR THE PROPOSED SINGLE-STOREY
REAR EXTENSION AND INTERNAL REMODELLING AT:
3 AUDLEY CLOUGH,
CLITHEROE
BB7 1FX

Job No. 7260
Version: 1.1

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1.0 INTRODUCTION

This Flood Risk Assessment (FRA) has been prepared by Sunderland Peacock and Associates in support of a householder planning application for a proposed rear extension to a detached dwelling at 3 Audley Clough, located within the Halfpenny Meadows residential development in Clitheroe, within the authority of Ribble Valley Borough Council. The FRA responds to the Council's request for further information due to the site's identification as being at risk of surface water flooding, with data from the Government's Flood Risk Map for Planning indicating that the site is currently subject to a potential flood depth of up to 20cm during a high surface water flood event.

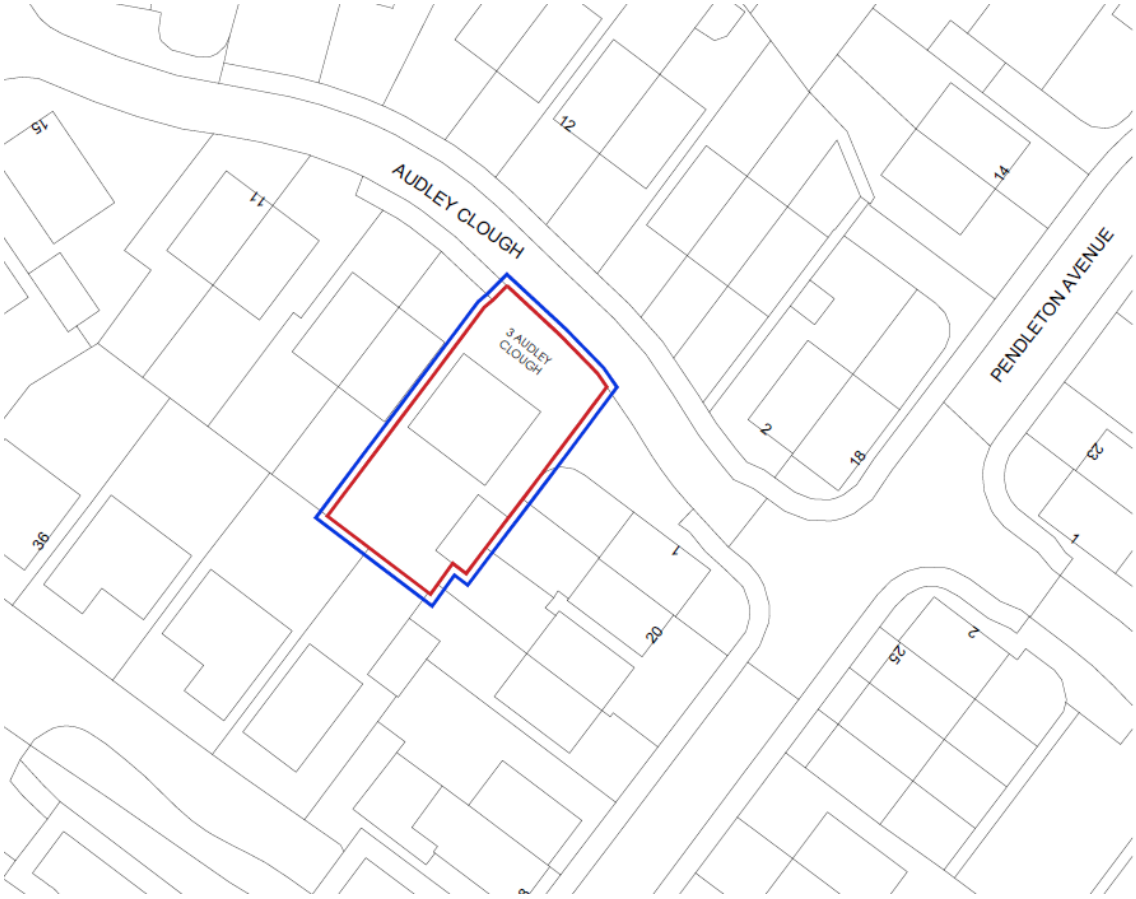


Figure 1 - Location Plan showing the location of 4 Abbeycroft, The Sands, Whalley, (not to scale).

2.0 SITE DESCRIPTION

The site forms part of a modern residential development at Halfpenny Meadows, situated in Clitheroe, Lancashire. The property is a detached two-storey dwelling with front driveway and garden space, and a rear garden where the extension is proposed. The surrounding area comprises predominantly residential properties of similar scale and style, constructed with modern drainage infrastructure. The site is served by adopted highways and benefits from foul and surface water drainage connections to the wider estate network. The Environment Agency's mapping confirms that the site is not within Flood Zones 2 or 3 (river or tidal flooding) but is within an area at risk from surface water flooding in high rainfall events.

3.0 PROPOSED DEVELOPMENT

The proposal seeks full planning permission for a single-storey rear extension, extending the existing ground floor footprint to create additional living space. The extension will be constructed within the existing rear private garden area and will be finished in materials matching the host dwelling to maintain design continuity. The scale of the proposed works is modest in relation to the size of the plot and the wider estate layout. The proposed extension will not involve any significant changes to site levels or the diversion of existing drainage infrastructure.

4.0 FLOOD RISK SUMMARY

The primary flood risk at the site arises from surface water accumulation during periods of high-intensity rainfall, with government mapping indicating potential water depths of up to 20 cm in extreme scenarios. This risk is associated with overland flow paths and localised pooling, rather than proximity to rivers or the coast. The proposed extension will be located on an area that is currently impermeable paving, replacing part of the existing garden space. Given its modest footprint and the fact that surface water risk already exists, the development is not expected to materially increase the likelihood or severity of flooding. The site's wider drainage strategy, installed as part of the original development, will remain in place, and the extension will be designed to ensure that runoff is managed appropriately.

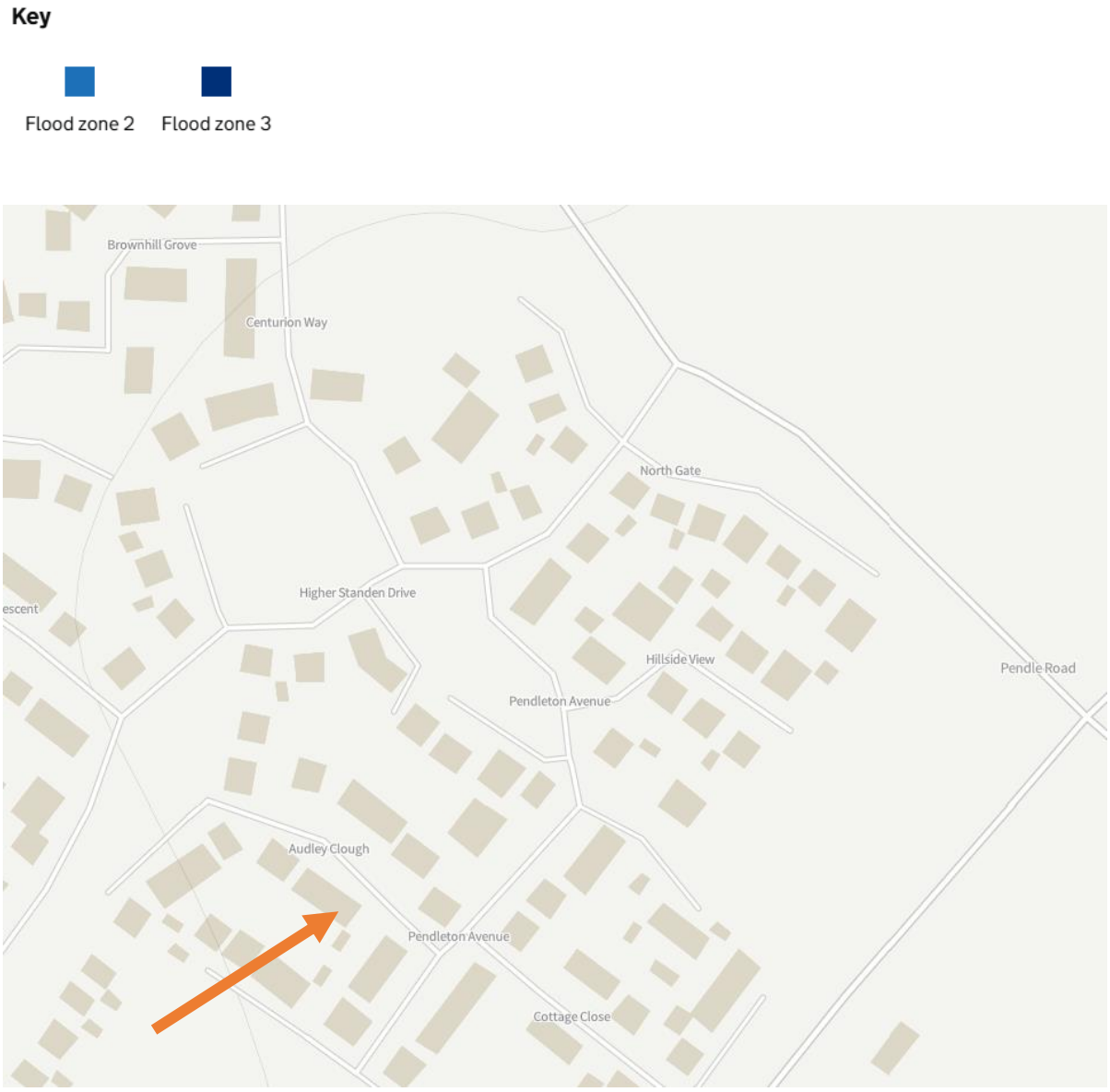


Figure 2 - Flood zone map showing the location of the proposed site.

In terms of flood risk management, the development is considered neutral, with no worsening of the existing situation either on-site or in relation to neighbouring properties. No obstruction to flood routes or increase in impermeable surfaces beyond the current condition is proposed. As such, the scheme is in accordance with the principles set out in the National Planning Policy Framework (NPPF) and associated Planning Practice Guidance, which seek to ensure that flood risk is not increased elsewhere as a result of development.

Flooding from the Sea – The site is located a significant distance inland and is elevated well above predicted extreme tide levels. Consequently, the risk of flooding from this source is considered to be negligible and therefore, the impacts of flooding from the sea are not considered further in this appraisal.

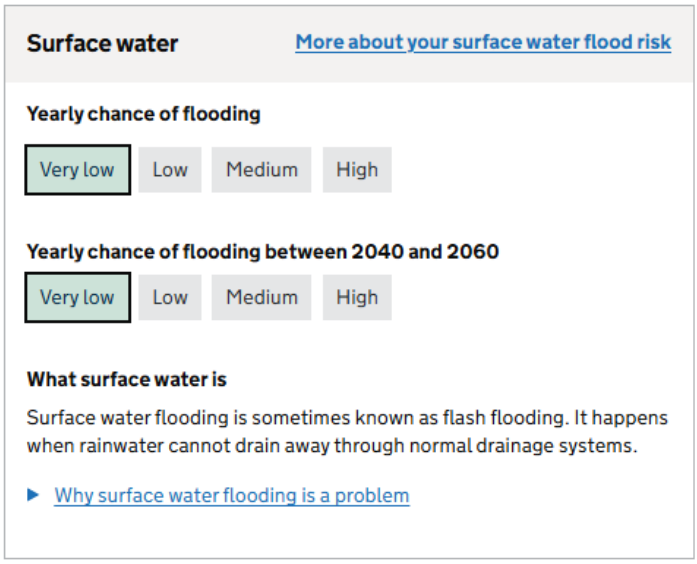
Flooding from Land (overland flow and surface water runoff) – Overland flooding typically occurs in natural valley bottoms as normally dry areas become covered in flowing water and in low spots where water may pond. This flooding mechanism can occur almost anywhere but is likely to be of particular concern in any topographical low spot, or where the pathway for runoff is restricted by terrain or man-made obstructions.

Flooding from Ordinary or Man-made Watercourses – Natural watercourses that have not been examined and man-made drainage systems such as irrigation drains, sewers or ditches could potentially cause flooding.

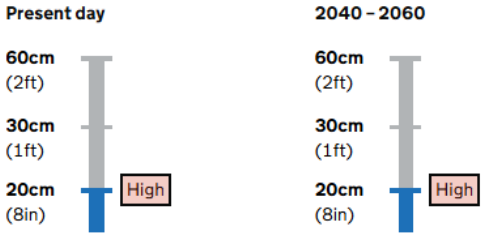
Surface Water Drainage - Surface water runoff from the extension will be managed through connection to the existing drainage system, which has been sufficient to accommodate the current dwelling without issue. The extension does not significantly increase the impermeable area, and the development will include appropriate measures to manage surface water at source where possible, including permeable surfacing and rainwater goods discharging into suitable soakaway or drainage systems as required by Building Regulations.

Surface Water Analysis:

(Taken from: https://check-long-term-flood-risk.service.gov.uk/risk#)



Chance of flooding to 20cm

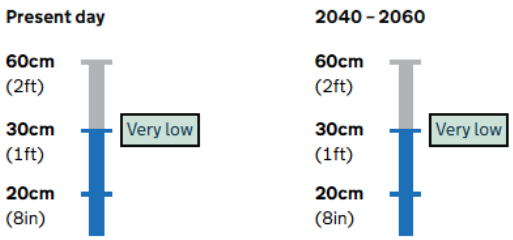


At this location there's a **High** chance of flooding to **20cm** (or 8 inches).

Between 2040 and 2060 this stays at a **High** chance of flooding to **20cm** (or 8 inches).

At 20cm, flood water can get into some homes and buildings, especially if the property has a basement. At this level, water can also damage your car or cause a breakdown.

Chance of flooding to 30cm



At this location there's a **Very low** chance of flooding to **30cm** (or 1ft)

Between 2040 and 2060 this stays at a **Very low** chance of flooding to **30cm** (or 1ft)

5.0 MITIGATION MEASURES

Where possible to minimise the risk of any increase in surface water flooding, the development will incorporate measures including the use of permeable paving for any new hardstanding associated with the extension, maintaining garden areas as soft landscaping where possible, and ensuring rainwater from the new roof area is discharged to existing surface water drains or soakaway systems in accordance with local drainage requirements. Finished floor levels of the extension will be set no lower than the existing ground floor level of the dwelling to provide resilience against ponding water. Where appropriate, water butts will be installed to collect roof runoff for reuse in garden irrigation, reducing discharge during peak rainfall.

6.0 CONCLUSION

This assessment concludes that the proposed single-storey rear extension at 3 Audley Clough is located within an area at risk of surface water flooding of up to 20cm in depth during high rainfall events. However, the extension will not significantly alter the existing flood risk profile of the site or surrounding area. The modest scale of the development, combined with the incorporation of appropriate drainage and surface water management measures, will ensure that there is no worsening of the current situation. On this basis, the proposal is considered acceptable in terms of flood risk and in accordance with the requirements of national and local planning policy.