

Flood Risk Assessment for 29 Mead Road, Changers Ford



Figure 1 North-West Elevation



Figure 2 South-East Elevation

Location

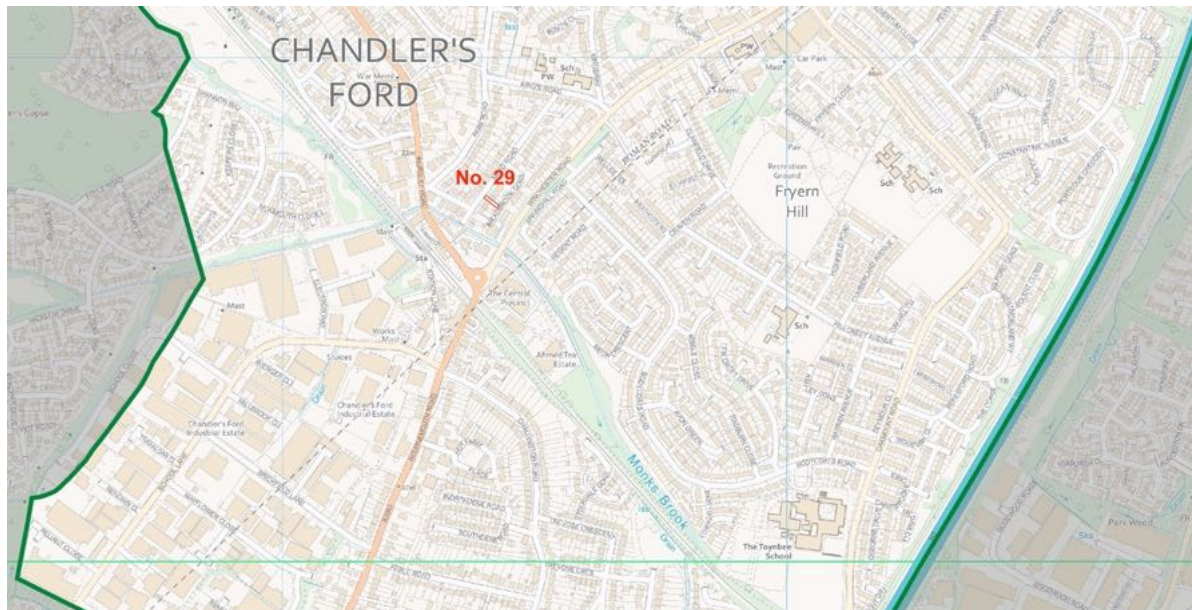


Figure 3 Location Plan – 29 Mead Road shown north of Monks Brook



Figure 4 Location Plan

- 1.1 This Flood Risk Assessment has been prepared on behalf of Mrs T Bui to review the Flood Risk at 29 Mead Road, Chandler's Ford. The proposed application is for a rear single storey extension to the property.
- 1.2 Mead Road runs in a south-west / north-east direction with its most south-westerly end

abutting the course of Monks Brook.

- 1.3 29 Mead Road is located approximately 65m to the north-west of Monks Brook.
- 1.4 29 Mead Road is a traditionally build 2-storey semi-detached residential property finished externally with facing brickwork and render.
- 1.5 The existing suspended floor of the house is currently positioned approximately 525mm above the adjacent ground level.

Assessment

- 1.6 With reference to the UK Government Flood Warning Web site this location is at High Risk from surface water (the chance of flooding of greater than 3.33% each year) and medium risk from rivers and the sea (the chance of flooding of between 1% and 3.33% each year) as referenced from <https://check-long-term-flood-risk.service.gov.uk/risk> 29 Mead Road is in Flood Zone 3 and a flood risk assessment is required.

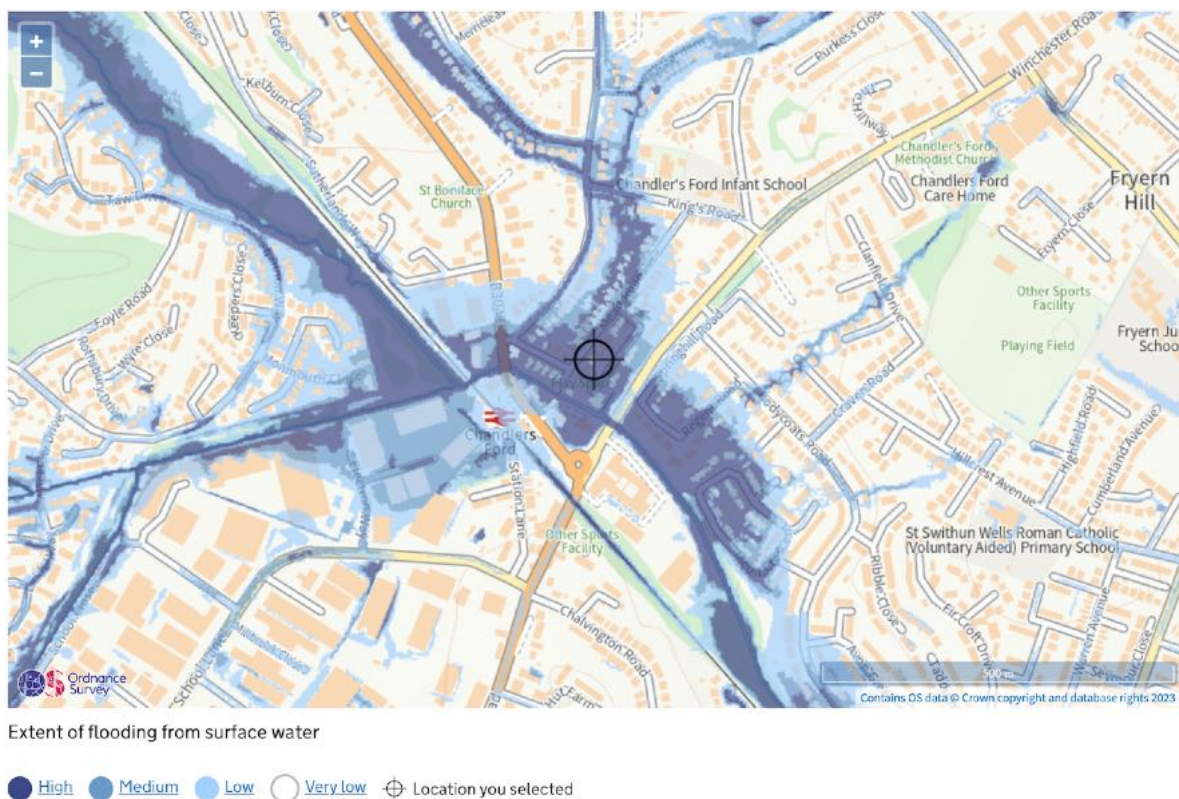


Figure 5 UK Government Flood Risk Map – Surface Water



Extent of flooding from rivers or the sea

● High ● Medium ● Low ● Very low ⊕ Location you selected

Figure 6 UK Government Flood Risk Map – Rivers or Sea

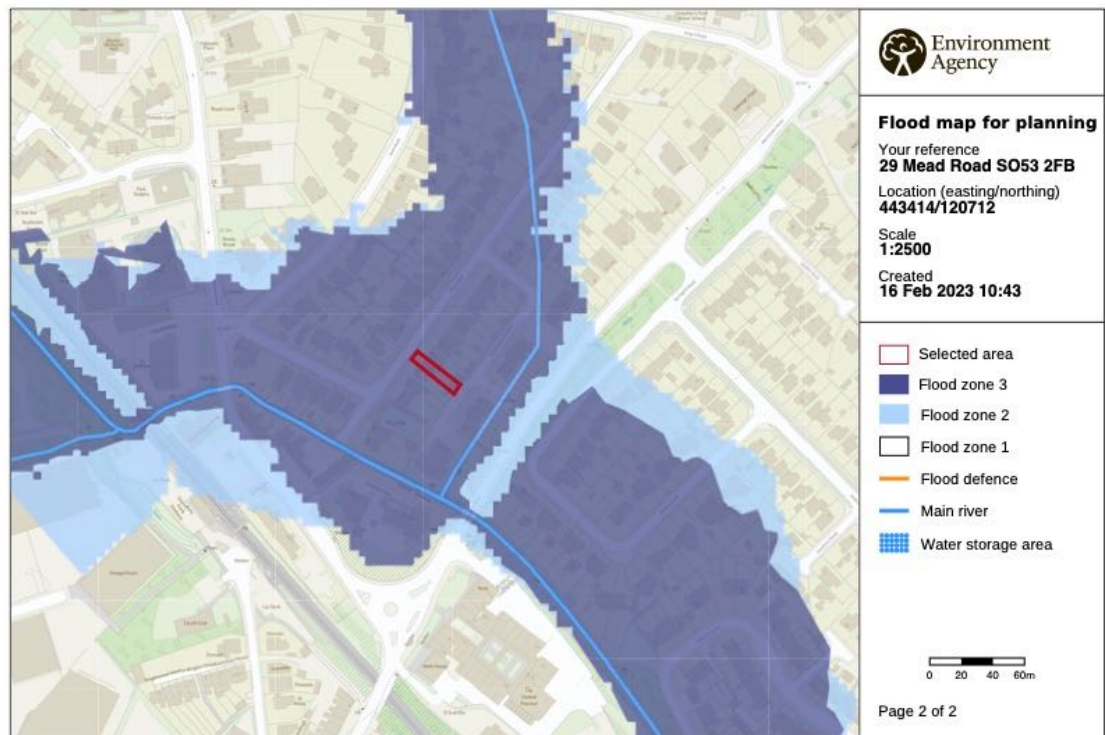


Figure 7 Environment Agency Flood Risk Information for Planning



- 1.7 **Flood risk:** The Environment Agency states that flood risk from rivers or sea is medium. The flood risk from surface water is low and to a depth below 300mm. There has been no flooding in recent years and water levels in the Pillhill Brook are normally less than 100mm. Water levels do rise during heavy and sustained periods of rain but have been largely dry since the Environment Agency carried out flood prevention measures further upstream.
- 1.8 **Construction:** The building will be constructed to meet the requirements of Part H: drainage and water disposal, Section H3 rainwater drainage.
- 1.9 **Ground Levels:** The proposed extension replaces an existing extension and conservatory, increasing the footprint of the house by 1.68m². The floor level of the proposed extension will be built to correspond with the floor level of the existing house, ie: 525mm above the adjacent ground level.
- 1.10 **Flood levels:** There is a monitoring station (no. 1051) for Monks Brook in Winchester Road which runs parallel to Mead Road approximately 80m to the south-east, with a site datum of 18.96m Above Ordnance Datum. The normal range of the water depth is 0.03m to 1.04m with the highest recorded level and 1.12m deep.
- 1.11 **Previous flooding:** The owners have not known the house to flood since their occupation, although there are records of Mead Road flooding in 1960, prior to any local flood defence measures.

Design Strategy and resilience measures

- 1.12 The extension has been designed to ensure that the proposed floor levels are no lower than the existing with minimal increase in floor area. The owners will take additional precautions to deal with possible future flooding including:
 - a. The use of low permeability materials including a new concrete floor and a brick plinth cavity wall.
 - b. All new electrical outlets and service points will be positioned 450mm above floor level.
 - c. The new floors will all be on one level.
 - d. Drainage pipes to be fitted with non-return valves.
- 1.13 The owners will sign up to the FRA and EBC flood alerts.
- 1.14 The Monks Brook is regularly maintained, river banks cleared of weeds and obstructions and debris removed from the brook.



Figure 8 Views of property showing existing raised floor level

Conclusion

- 1.15 This Flood Risk Assessment has been prepared by Temple Ford Design on behalf of Mrs T Bui.
- 1.16 The proposed floor level is 525mm above the adjacent ground level.
- 1.17 With reference to items 1.12 to 1.14 appropriate protective measures will be employed to deal with possible flooding.
- 1.18 The brook bed is regularly cleaned, and weeds cut back and the banks kept clear of obstructions and debris to reduce flood risk.
- 1.19 In conclusion it cannot be said that 29 Mead Road will not be subject to flooding, but appropriate measures will be taken to protect the property and mitigate flood damage should it occur.