Settlement: Hereford (Newton Farm, Redhill)

Location of Investigation

Figure 1: Large Scale Map showing the location of flooding within Newton Farm, Hereford

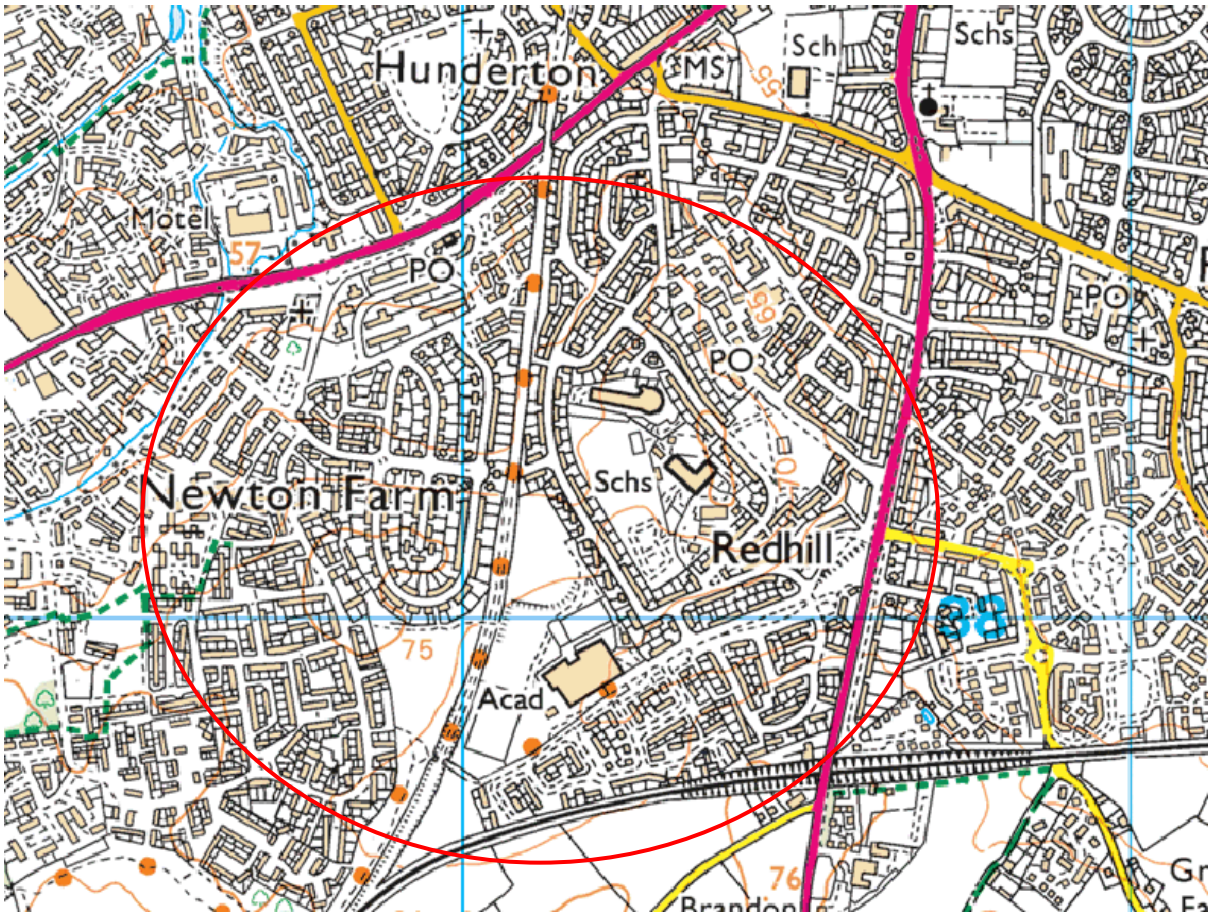

Figure 2: Environment Agency's Flood Map for Planning (Rivers and Sea), June 2021

Date of key flood event	October 2019, February 2020
Authorities with risk management duties or functions relating to the event	Herefordshire Council (Land Drainage Authority)

Key Flood Event

Flood Type: Fluvial and Surface Water

Watercourse Catchment: Newton Brook

Two properties flooded from the Newton Brook.

There were two other locations where surface water flooding occurred.

No respondents reported a history of flooding at their property prior to 2019. However, Herefordshire Council records identify some history of flooding.

Number of Internally Flooded Properties related to key flood event	6
Number of Internally Flooded Properties during most acute flood	6
Impact on Strategic Highway Network	None reported
Impact on Critical Services	None reported
Health Risks	No injuries or loss of life were reported

Description of Flooding

The Surface Water Flood Map indicates an area of flood risk which coincides with the Newton Brook, where properties were reported as flooding in 2019 and 2020. The most likely flood mechanism for these properties is therefore fluvial flows from the Newton Brook. However, this is contradicted by a single report from a respondent on Belmont Road who indicated that an overflowing drainage system was the source of the flooding and described 'water and sewerage' entering.

The Flood Map for Planning shown above suggests that all of the properties which reported flooding are in Flood Zone 1, however the mapping does not consider flood risk from watercourses with catchments smaller than 3 km2 and so the fluvial risk from the brook is not represented. The two properties are probably at risk of fluvial flooding from this source.

Surface water flooding contributes to flood risk in this area of Hereford. This is supported by a report from a resident on Charlton Avenue who describes flooding as having come from 'The Great Western Way' (a local cycle path/foot path).

A property off Great Western Way is at risk of surface water flooding owing to the general topography and the absence of a surface water drainage network.

One respondent on Falstaff Road described the source to flooding to a blocked gully. This supports the idea of surface water flooding being the primary source of flooding in this area and indicates that sewer capacity may have contributed to the flooding.

Three properties adjacent to the Hereford Academy were constructed lower than the road level. The roof downpipes discharge into a surface water drainage network that is maintained by Welsh Water.

The properties either flooded because the private surface water gullies serving the properties blocked, or because the surface water drainage network surcharged during the storm.

It should be noted that the respondents provided little information on flood mechanisms, so this report is based largely on flood mapping and historic evidence.

Damage to Cultural Heritage Sites: There are no listed properties located within the Flood Zone.

Previous reports of floods

Prior to the flood events on 26th October 2019 and 16th February 2020, no previous flood events have been reported.

Previous Flood Risk Studies

There are no flood risk studies previously undertaken at this location.

Conclusions

The Withy Brook was diverted when Sydwall Road was constructed and now cascades over weir. Some improvements could be made to the weir, but the improvements may not result in a tangible improvement to fluvial flood risk.

Welsh Water have been informed of the existing surface water flood risk identified for the properties at Hereford Academy and will advise on any forthcoming mitigation measures.