

SITE: Old Leys, Walford, Ross-On-Wye, Herefordshire HR9 5QU
TYPE: Planning Permission
DESCRIPTION: Proposed extensions, alterations and conversion of the stable block to create ancillary living accommodation at Old Leys
APPLICATION NO: 222088
GRID REFERENCE: OS 358771 - 218977
APPLICANT: Mr & Mrs G Frecknall
AGENT: Mr Philip Staddon

Our knowledge of the development proposals has been obtained from the following additional sources provided following our previous response in July 2022 and October 2022:

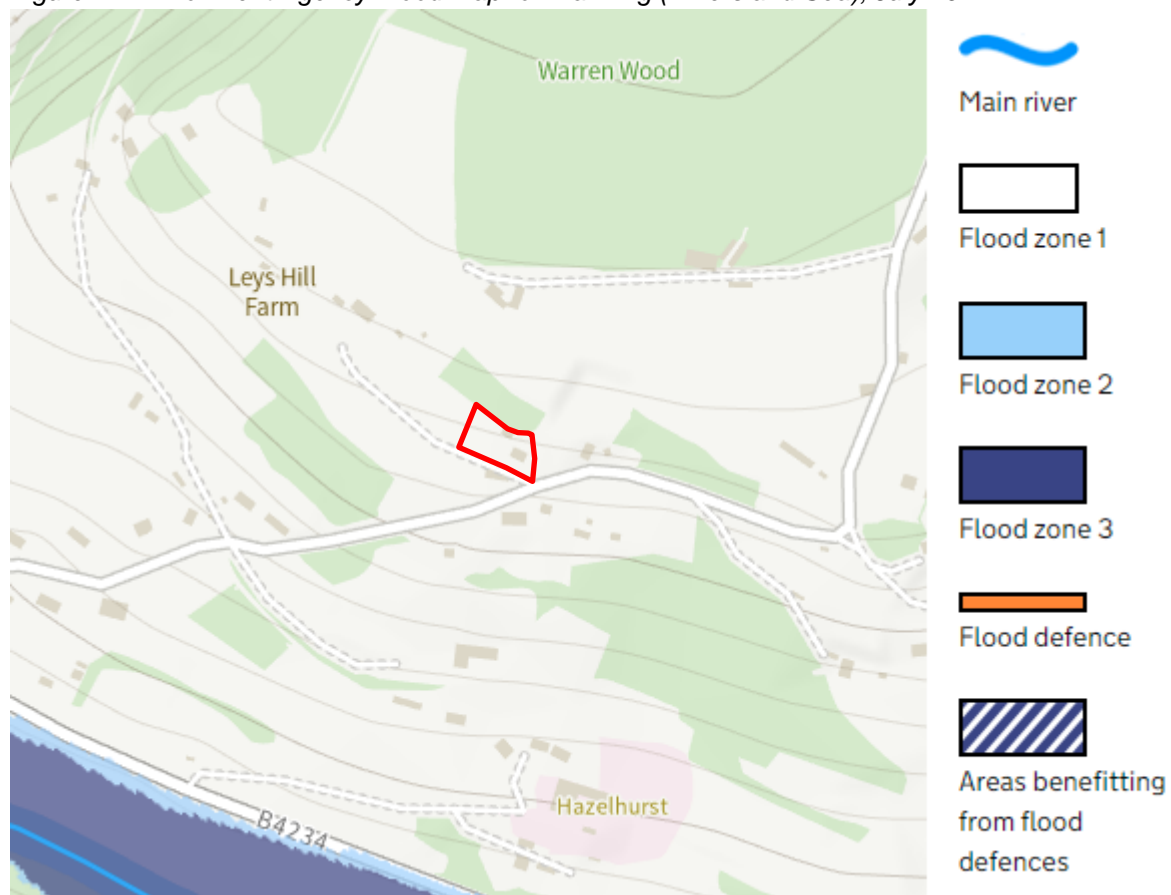
- Surface Water Calculations (Ref: 10802- V1.1);
- Foul Water Revised Vp Calculations (Ref: 10802- V1.2);
- Revised Drainage Layout (Ref: 10802-550 B);
- Cross Section Through Drainage Field (Ref: 10802-551 B);
- Construction Details (Ref: 10802-552 A);
- Site Investigation Report – July 2021 (Ref: 12848/GNS/SI/21).

Overview of the Proposal

The Applicant proposes the extension and conversion of a stable block to create living accommodation. The site covers an area of approx. 0.2ha. The River Wye flows approx. 495m to the south of the site. Oxlet Brook flows approx. 590m to the east of the site. The topography of the site slopes down from north to south by approx. 10m from 123mAOD in the north-western site corner to 113.2mAOD in the south-western site corner.

Site Location

Figure 1: Environment Agency Flood Map for Planning (Rivers and Sea), July 2022



Flood Risk

Fluvial Flood Risk

Review of the Environment Agency's Flood Map for Planning (Figure 1) indicates that the site is located within the low risk Flood Zone 1. As the proposed development is less than 1ha and is located within Flood Zone 1, in accordance with Environment Agency standing advice, the planning application does not need to be supported by a Flood Risk Assessment (FRA). This is summarised in Table 1:

Table 1: Scenarios requiring a FRA

	Within Flood Zone 3	Within Flood Zone 2	Within Flood Zone 1
Site area less than 1ha	FRA required	FRA required	FRA not required*
Site area greater than 1ha	FRA required	FRA required	FRA required

**except for changes of use to a more vulnerable class, or where they could be affected by other sources of flooding*

Surface Water Flood Risk

Review of the EA's Risk of Flooding from Surface Water map indicates that the site is not at risk of surface water flooding.

Other Considerations

Review of the EA's Groundwater map indicates that the site is not located within a designated Source Protection Zone or Principal Aquifer.

Surface Water Drainage

Infiltration testing has been undertaken at the site; however, it appears to not strictly adhere to the BRE 365 guidance. We understand that one trial hole was excavated to 0.6mBGL with a further 300mm x 300mm x 300mm pit in the bottom to give an overall depth of 0.9m. Three tests were conducted, and the slowest infiltration rate obtained was an acceptable $1.471 \times 10^{-5} \text{m/s}$.

A groundwater level assessment has not been undertaken. **This must be conducted prior to construction to ensure that the base of the soakaway is a minimum of 1m above groundwater level.**

We note proposals for a cellular soakaway. MicroDrainage calculations have been provided to estimate the required soakaway sizing for a 1 in 100yr + 40% CC event. The required soakaway volume is 7.7m^3 ; the proposed soakaway dimensions are now 10.5m x 2m x 0.4m, which will provide an adequate attenuation volume of 8.4m^3 .

Foul Water Drainage

Percolation testing was initially undertaken at the site whereby three trial pits have been excavated; two were 460mm deep and one was 470mm deep. The slowest Vp rate recorded at the site was stated to be 11.1s/mm, which is notably fast. We had assumed this is due to the very shallow nature of the trial pits. Given this, we note that an additional trial pit has been excavated to 1mBGL in the proposed drainage field location. As expected, an acceptable Vp rate of 15.4s/mm was obtained.

The drainage field sizing has been amended to use the Vp rate of 15.4s/mm; the required drainage field sizing is now 19.25m^2 . The proposed dimensions have been amended on the Drainage Layout drawing accordingly.

The location of the drainage field will be downslope of the proposed dwelling to achieve a gravity fed discharge. The drainage field is shown to be orientated parallel to the site contours, as requested.

The invert level of the proposed drainage field has still not been specified on the drainage layout drawing. However, the cross-section drawing has been amended and now shows that the drainage field will be constructed at a minimum of 500mmBGL. This is a more favourable invert level. The Drainage Layout should still be updated accordingly for construction purposes.

We note that the site is steeply sloping. Should the adjacent highway to the south of the site be affected in the future by foul water flooding from the drainage field, this must be adequately dealt with by the Applicant. The deeper invert level will help mitigate against the risk.

Overall Comment

We hold no objections to the proposed development.