

Flood Risk Assessment – Elms Farm, Westwood, BA15 2AL

April 2026

Introduction

- 1.1 This FRA has been prepared to support an Appeal for “*Erection of a self-build dwelling with hard and soft landscaping, parking and associated works following demolition of the existing agricultural barn.*”
- 1.2 The application site is a formed of an existing agricultural building and associated land at Elms Farm, Elms Cross.



Figure 1 - Site Plan

- 2.5 Indeed, the JBA Groundwater Emergence data set published with the SFRA indicates that most areas across Wiltshire are at some degree of groundwater flood risk.
- 2.6 Groundwater flooding is the emergence of groundwater at the ground surface, depending on the geology of the area. It is caused by the water table rising after prolonged rainfall, causing it in some areas to emerge above ground level. It is most likely to occur in low-lying areas underlain by permeable rock (aquifers).
- 2.7 The groundwater at the site is anticipated to be between 0.025m and 0.5m below the ground surface (Paragraph 4.5 Wiltshire Council Level 1 Strategic Flood Risk Assessment).
- 2.8 The finished floor levels of the proposed dwelling will be raised 300mm above the outside ground level, and a damp proof membrane, to ensure that in a storm event any increase in groundwater will not impact the property or future residents.

Conclusion

- 3.1 In terms of flood risk:
- **Fluvial:** the site is in Flood Zone 1 and therefore not at risk from fluvial flooding;
 - **Pluvial:** there is no risk of surface water flooding at the site even in extreme storm events and taking into account allowances for climate change;
 - **Groundwater:** the site is not necessarily at risk of groundwater flooding, although is identified by the Council as an area where water could be within 0.025m and 0.5m of the surface.
- 3.2 The proposed dwelling will ensure some measures are included to ensure an increase in the depth of groundwater, will not impact the property of future residents, including the position of the finished floor levels 300mm above the ground and the inclusion of a damp proof membrane.