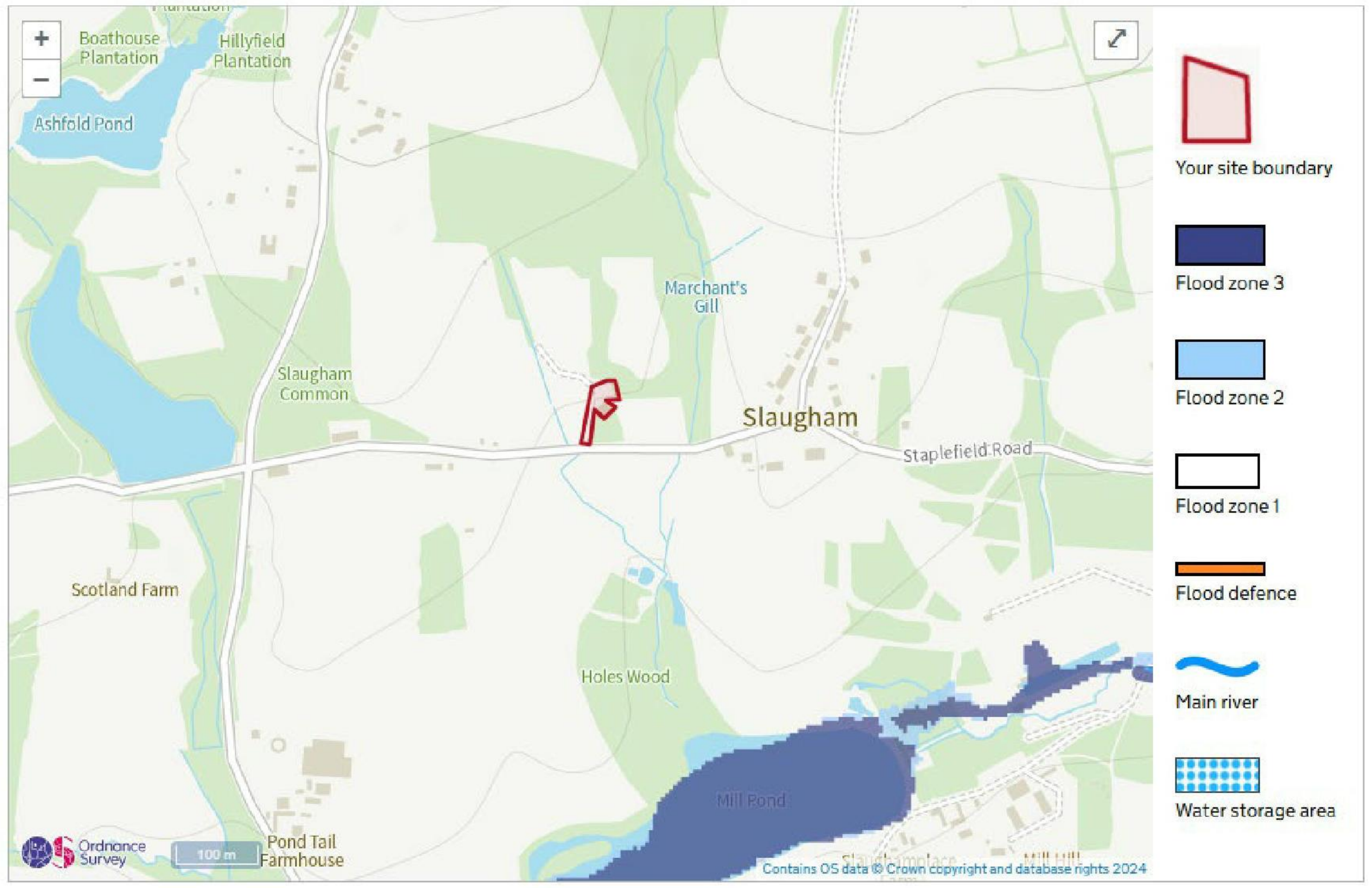
Foul Sewage and Surface Water Drainage Assessment

1. The site comprises of an existing Garden Nursery (not functional at present) with a number of outbuildings and hardstanding areas surrounding the buildings.

2. The EA's indicative floodplain map shows the site is located in Flood Zone 1. See figure below:



3. The site resides within Flood Zone 1, where there is less than a 1 in 100 annual probability of river or sea flooding. Developments in this flood zone have no restrictions other than ensuring surface water drainage proposals do not increase the flood risk on site and the surrounding areas.

4. The site is approximately 1km north of the nearest main watercourse, the River Ouse from Slaugham to Ardingly Reservoir. An ordinary watercourse passes to the west of the site which resides directly upstream of this main watercourse.

5. Topography of the site is generally falls from north to south, and approximately 80m AOD. The site postcode is RH17 6AG and the OS Grid Reference is TQ 25466 28150.

6. Permission is sought for the conversion of an existing barn to provide a single residential dwelling.

7. The site is covered by extensive hard landscape area, approximately some 3000m2. The Proposed development would reduce the extent of hardstanding within the site by at least 50%, thus providing an improvement to surface water drainage across the site (by removing obstacles to percolation). As such, the proposed development does not increase impermeable areas, and therefore does not increase surface water run-off.

8. In accordance with EA's guidelines, the guidance within CIRIA SuDS Manual, and Building Regulations and Water Authorities advice, surface water run-off should be managed as close to its source as possible. The Surface Water Drainage design will be designed to be fully maintainable in accordance with building regulations and the recommendations of CIRIA C753 – SuDS Manual.

9. The preferred means of surface water drainage for any new development is through infiltration into the ground. The effective use of permeable paving is considered to be a practical solution within this development, and according to the British Geological Survey (BGS) maps, it appears that SuDS features based on infiltration would be feasible (Site lies within Upper Tunbridge Wells Sand – Sandstone and Siltsone, Interbedded).

10. With regard to Foul Water Drainage it is, initially, proposed to utilise a cesspit for the development as there are no foul water public sewers within the vicinity of the development site.

11. A Cesspit can be appropriately designed to accommodate the number of end users (1 dwelling) and does not require connection to a mains foul water drainage system. Any unit would be maintained in accordance with the manufacturer's unstruction, and would comply with the warranty provisions.

12. However, should infiltration prove to be definitively feasible, a Package Treatment Plant would be opted to be used, given it sits higher within the hierarchy for methods of foul drainage disposal.

Draft - Drainage Strategy Layout