SITE: TYPE: DESCRIPTION:	Land adjacent to Delmere, Upper Hill Planning Permission Erection of detached dwelling house within the curtilage of the existing dwelling and erection of a detached garage for the existing dwelling
APPLICATION NO:	201538
GRID REFERENCE:	OS 347015, 253093
APPLICANT:	Mr T Stephens
AGENT:	Mr DF Baume

Our knowledge of the development proposals has been obtained from the additional sources following on from our response in February 2021, June 2021 and February 2022:

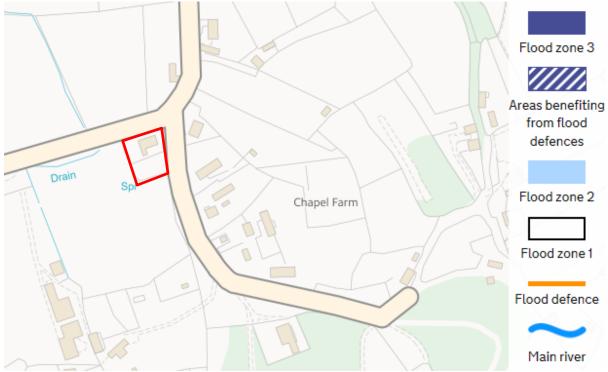
- Drainage Position Statement Assessment (06.10.2022);
- Draft Deed of Easement (2022);
- Email correspondence from Agent (01/11/2022).

Overview of the Proposal

The Applicant proposes the construction of a new dwelling and two new garages. The site covers an area of approx. 0.16 ha and is currently residential. A small watercourse flows to the north-west of the site boundary. The topography of the site slowly slopes to the north west of the site.

Site Location

Figure 1: Environment Agency Flood Map for Planning (Rivers and Sea), June 2021



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.

In accordance with Environment Agency standing advice, the planning application does not need to be supported by a Flood Risk Assessment (FRA) undertaken in accordance with National Planning

Policy Framework (NPPF) and its supporting Planning Practice Guidance. 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				

This guidance is in accordance with requirements of the NPPF and Policy SD3 of the Core Strategy. Guidance on the required scope of the FRA is available on the GOV-UK website at https://www.gov.uk/planning-applications-assessing-flood-risk.

Surface Water Flood Risk

Review of the EA's Risk of Flooding from Surface Water map indicates that the site is not directly at risk of surface water flooding. The flood risk map for surface water indicates there is a risk of surface water flooding directly to the west of the site, it is not anticipated that this will affect the site, however it should be acknowledged within the detailed drainage design and ensured that no surface water runoff leaves site and potentially exacerbates this situation.

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 on site and demonstrates that the site is suitable to use infiltration techniques for the surface water strategy. The Applicant has provided a surface water management plan that includes a strategy for the 1 in 100 year +40% climate change event. The strategy utilises a large soakaway located on the perimeter of the site that provides sufficient capacity to drain the impermeable surfaces, it should be ensured that the soakaway is situated a minimum of 5m from any building foundations. It has been demonstrated that the groundwater level is sufficiently deep enough so that the drainage features are located a minimum of 1m above the groundwater level.

The final alignment of the soakaway should be finalised at detailed drainage design at Discharge of Condition stage. Currently the alignment of the soakaway on a gradient will mean that attenuated surface water runoff will collect at one end of the crate system.

The new access and parking areas will be constructed with permeable material and drain naturally.

Foul Water Drainage

The foul water drainage strategy includes the use of an individual package treatment plant and drainage field for the property situated to the south of the property. We acknowledge and accept that the drainage field is to be located a minimum of 7m away from building foundations and has an area of 29.4m² which has been converted into linear meterage of 49m, achieved by laying sufficient length of pipe in a continuous loop with 600mm wide trenches.

The Applicant has undertaken percolation tests in accordance with BS6297 and although the results submitted confirm that on site infiltration techniques are viable, they have not been undertaken in the

area proposed for the drainage field currently. At Discharge of Conditions stage, further percolation testing should be undertaken in the proposed location of the drainage field to inform the final detailed drainage design plans.

The Applicant has confirmed that they do not own the land on which the drainage field is proposed to be located. An easement between the Applicant and landowner has been drawn up and submitted to ensure that future access to the proposed drainage field for the homeowners can be achieved. The location of the drainage field in the middle of an agricultural field should also be considered as the use of agricultural machinery could damage the drainage infrastructure. The Applicant will need to confirm that this has been taken into account and discussed with the landowner.

The new proposed location of the drainage field will be approximately 85m and 115m away from both boreholes and 50m from the nearby spring, which is downgradient.

The current orientation of the drainage field indicated on the foul drainage layout shows it spread over the contour lines of 114.0 and 114.5mAOD. The package treatment plant requires 110mm diameter inlet that is 550mm below ground level making the outlet from the PTP at 114.34mAOD. As the proposed Finished Floor Levels of the new dwelling will be 115.12mAOD, we therefore confirm that a gravity connection to the drainage field is viable. The location of the drainage field should be confirmed at detailed drainage design at Discharge of Conditions and be aligned with the contours.

Overall Comment

Should the council be minded to grant planning permission, we recommend that the following information is provided within suitably worded planning conditions:

- Confirmation of percolation test results undertaken in the area proposed for the drainage field to aide the final design.
- Detailed surface water and foul drainage design plans in line with the above comments.