

ref: 304

Foul Sewage and Surface Waste Assessment for

Land adjacent to Wishing Wells Farm, Old London Road, Hickstead, RH17 5LZ

Proposed: Development of a new building to accommodate horse lorries, associated offices and a valeting facility for high-end vehicles. Replacement and upgrade of a retail premises with dedicated customer parking. New widened access. Removal and re-positioning of new gates. Solar panels and electric vehicle charging points

The Mid Sussex District Plan sets out a framework for new development within the District. Detailing policies and specific proposals for the development and use of land, in order to guide most day to day planning decisions.

DP41: Flood Risk and Drainage

Strategic Objectives: 1) To promote development that makes the best use of resources and increases the sustainability of communities within Mid Sussex, and its ability to adapt to climate change; and 12) To support sustainable communities which are safe, healthy and inclusive.

Evidence Base: Gatwick Sub Region Water Cycle Study; Strategic Flood Risk Assessment; Water. People. Places SuDS guidance.

Proposals for development will need to follow a sequential risk-based approach, ensure development is safe across its lifetime and not increase the risk of flooding elsewhere. The District Council's Strategic Flood Risk Assessment (SFRA) should be used to identify areas at present and future flood risk from a range of sources including fluvial (rivers and streams), surface water (pluvial), groundwater, infrastructure and reservoirs.

Particular attention will be paid to those areas of the District that have experienced flooding in the past and proposals for development should seek to reduce the risk of flooding by achieving a reduction from existing run-off rates.

Sustainable Drainage Systems (SuDS) should be implemented in all new developments of 10 dwellings or more, or equivalent non-residential or mixed development²² unless demonstrated to be inappropriate, to avoid any increase in flood risk and protect surface and ground water quality. Arrangements for the long term maintenance and management of SuDS should also be identified.

For the redevelopment of brownfield sites, any surface water draining to the foul sewer must be disconnected and managed through SuDS following the remediation of any previously contaminated land.

SuDS should be sensitively designed and located to promote improved biodiversity, an enhanced landscape and good quality spaces that improve public amenities in the area, where possible.

The preferred hierarchy of managing surface water drainage from any development is:

1. Infiltration Measures
2. Attenuation and discharge to watercourses; and if these cannot be met,
3. Discharge to surface water only sewers.

Land that is considered to be required for current and future flood management will be safeguarded from development and proposals will have regard to relevant flood risk plans and strategies.

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Location is in Flood Zone 1

Land within flood zone 1 has a low probability of flooding from rivers and the sea and states the risk is very low. This means the area has a chance of flooding of 0.1% each year.

The area of the plot is 0.35 hectare (ha) so the development concerned is less than 1.0 hectare in flood zone 1 and would not require a flood risk assessment (FRA) as part of the planning application.

However, Mid Sussex Planning Authority's strategic flood risk assessment (SFRA) includes future flood risk from surface water.

The Environment Agency's (EA) main flood maps (fluvial & pluvial) show the site lying in fluvial and surface water flood zone 1, **low risk**

- The surface water flood risk shows a water depth in a **low-risk** scenario, with a flood depth between 0mm and below 300mm within a 15metre radius of this property. Low risk means this area has a chance of flooding between 0.1% and 1% each year. So, the following mitigation are as follows:

- DEFRA

OS10 K Grid from DEFRA Data Platform

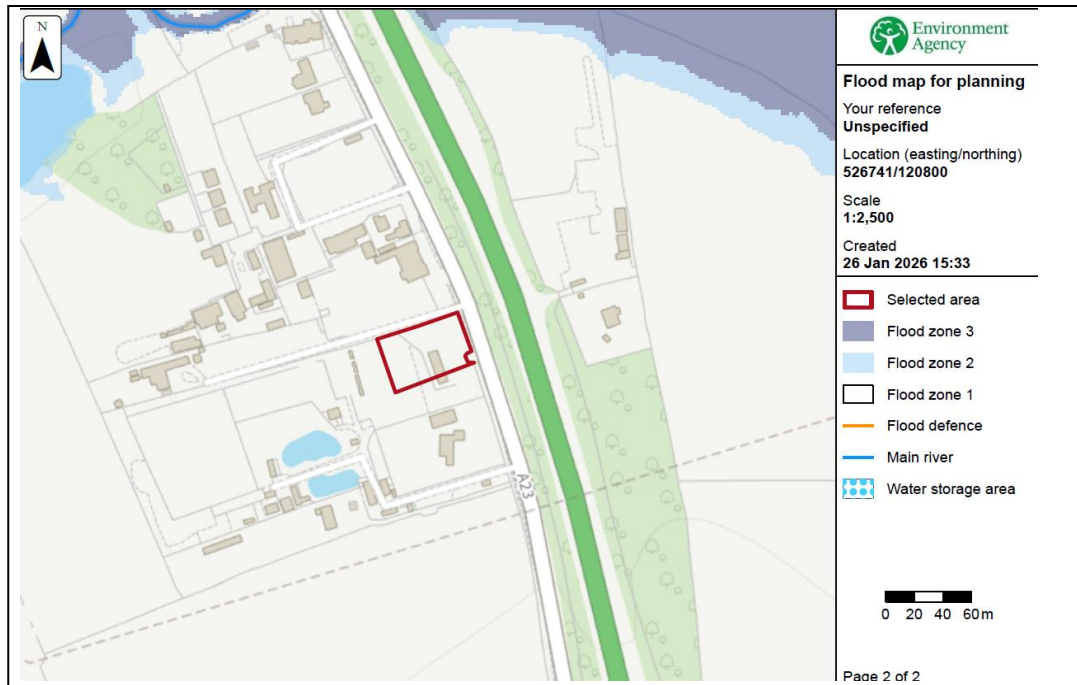
Risk of Flooding from Surface Water: 1 in 1000 years (see on next page).

The proposals will create an increased footprint to the existing buildings, however this will create a minimal increase in surface water risk as a storm saver rainwater attenuation and harvesting system forms.

- The floor levels will be equal to, and no lower than, the existing floor levels within the property
- The proposal will seek to utilise permeable paving
- A cellular attenuation tank/s will be designed (size, invert level and top level plus minimum cover thickness to be confirmed by drainage engineers. Anticipate welded seams required due to proximity buildings.
- A full Foul and SuDS Assessment statement will follow under separate cover
- New planting will mitigate the surface water risk by absorbing water from the soil and subsequent release to the atmosphere, so allowing the soil to absorb new rainfall
- British Geological Survey's online geology map shows the site's geology is Weald clay. The high clay content precludes the use of infiltration structures. A day of soakage testing aligned to BRE 365 is scheduled of 25-2-26. Following the analysis and results a detailed drainage strategy layout that includes exceedance flow arrows will be submitted to accompany the statement and Drainage Maintenance Plan (DMP)

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Environment Agency Flood map for planning



Environment Agency Flood map for planning 1 in 30 Year risk of flooding



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1 in 100 Year risk of flooding



1 in 1000 Year risk of flooding



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It is proposed for surface water to drain to on-site rainwater harvesting attenuation that is to be filtered and re-used throughout the building for non-potable use such as toilets, irrigation and vehicle washing. Harvested rainwater minimises the use of mains water drainage infrastructure.

Foul water will be disposed of via an onsite sewage treatment plant, eg, Klargestar

The proposals, therefore, satisfy the general objectives of Policy DP41 of the Mid Sussex District Plan.

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