MID SUSSEX DISTRICT COUNCIL

Flood Risk & Drainage Team
Estate Services & Building Control

Planning Application Consultation Response

Application Details

Application Number	**DM/24/2563**
Response Date	2025-05-22
Site Location	17 Valebridge Road Burgess Hill West Sussex RH15 0RA
Development Description	Proposed demolition of an existing storage building to the rear of the property and erection of a new detached 4 bedroom dwelling with integral garage and a further detached garage and car porch (Amended plans received 10 February and tree report received 17 March 2025)
Recommendation[1]	**Objection**

Thank you for reconsulting the Flood Risk and Drainage Team on the above application. We have reviewed Flood Risk Appraisal and the Flood Risk Assessment (GeoSmart 2025-01-09) submitted in support of the application.

Flood Risk

Information

The Planning Practice Guidance for Flood Risk and Coastal Change requires all sources of flood risk to be considered consistently with how fluvial and tidal flood risk is considered within the National Planning Policy Framework. This means that surface water flood risk extents should be considered comparable to flood zones when assessing a development's vulnerability to flooding and the need for a site-specific flood risk assessment.

For clarity Mid Sussex District Council's Flood Risk and Drainage Team (in line with advice from West Sussex Lead Local Flood Authority) utilise the below table when considering flood risk.

Annual exceedance	Flood Zone	Surface Water Flood Risk
Greater than 3.3% (>1:30-year)	3b	High
Between 1% and 3.3% (1:100-year and 1:30-year)	3a	Medium
Between 0.1% and 1% (1:1,000-year and 1:100-year)	2	Low
Less than 0.1% (<1:1,000-year)	1	Very Low

Application specific comment

The Environment Agency released updated flood risk mapping following the new National Flood Risk Assessment (NaFRA2) in early 2025. The updated mapping uses new and improved methods to assess flood risk. The site is in flood zone 1 and is at low fluvial flood risk (risk of flooding from Main Rivers).

[1] *In line with guidance from the Planning Department the Flood Risk and Drainage Team, where considered appropriate, utilise conditions to address detailed drainage design and detailed design of flood mitigation measures.*

The flood zones continue to reflect undefended, present-day flood risk from rivers and the sea. They do not account for climate change or the presence of flood defences, maintaining alignment with planning policy principles.

The Environment Agency released the updated Risk of Flooding from Surface Water (RoFSW) mapping on January 28, 2025.

The RoFSW was created using a combination of local flood model information and national flood modelling. These were used to generate the probabilities of flood risk for each 2m grid square of land, with the aim of using the best available flood risk information in any one location.

As well as present day (2025) risk of flooding from surface water, climate change scenarios (2040 – 2060) have been produced to indicate the predicted impacts of climate change on future flood risk.

Climate change allowances are based on the latest UK Climate Projections (UKCP18) from the Met Office. They use a mid-range allowance within Representative Concentration Pathway (RCP) 8.5.

A near-term epoch (2040 – 2060 "2050s" epoch) and central allowances are being used initially, to support short and medium-term decisions informed by the highest flood likelihood projections.

In the absence of climate change allowances provided until 2125 (NPPF (*Guidance Flood risk and coastal change considers* "Residential development can be assumed to have a lifetime of at least 100 years" *Paragraph: 006 Reference ID: 7-006-20220825* Revision date: 25 08 2022) the Environment Agency have advised that "the time horizon [is] too short for most development types" and the "Climate change scenario [is] insufficiently precautionary" and "may be relevant to inform assessments, but additional information [is] usually needed" to established the designed flood level for the site.

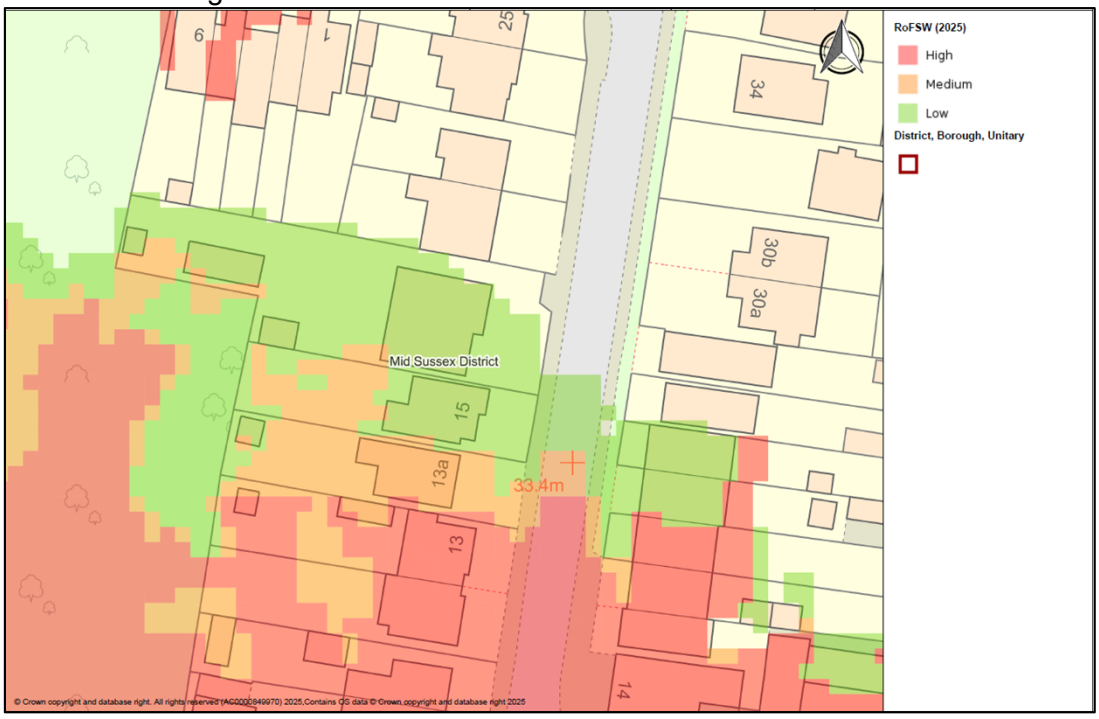

Figure 1: Risk of Flooding from Surface Water present day 2025 (Source: EA)

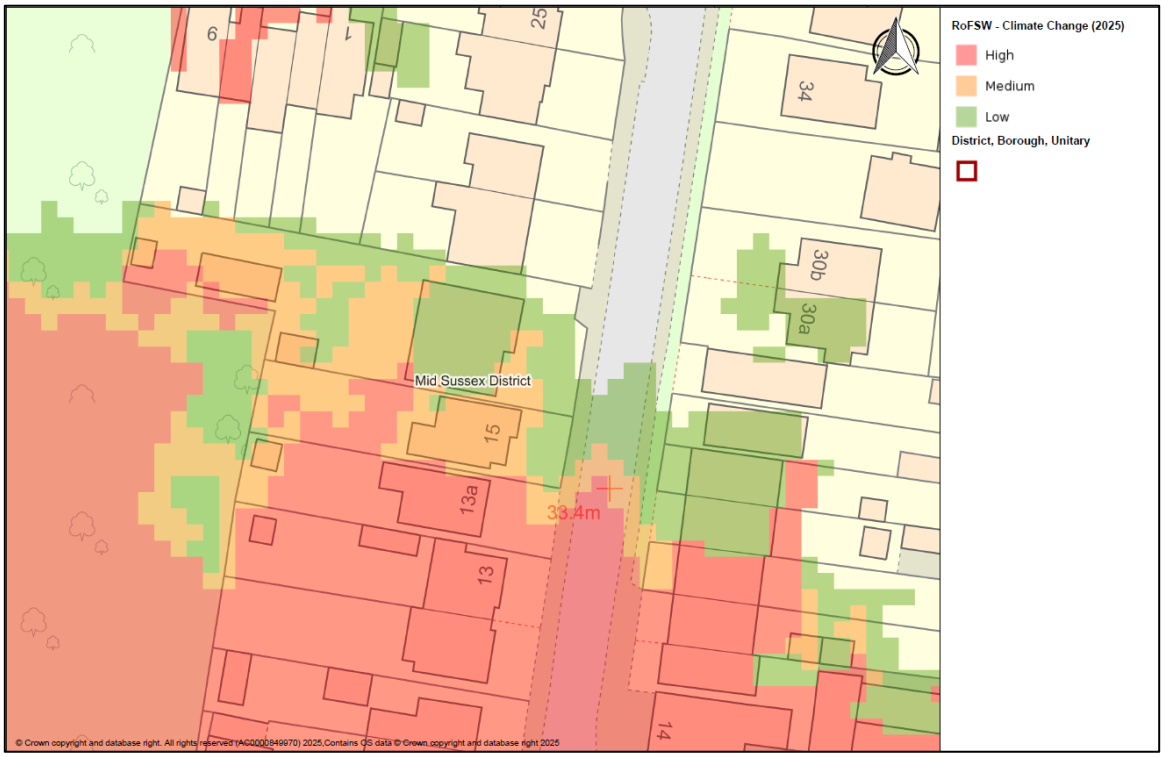

Figure 2: Risk of Flooding from Surface Water –Climate Change 2040 – 2060 (Source: EA)

The Risk of Flooding from Surface Water mapping suggests the site is shown to be at very low to medium surface water flood risk (comparable to flood zone 1 and 3a) for the present day (2025) and to be at very low to high surface water flood risk (comparable to flood zone 1 and 3b) within the climate change range of 2040 – 2060.

The PPG states that the design flood event for surface water is the 1:100 plus an allowance for climate change (Para. 002) which is the same as for river flood events.

Based on the latest guidance that all sources of flooding should be considered consistently, part of the site would be considered functional floodplain (Flood Zone 3b); it's location part within the 1:30 surface water flood extent with climate change.

The proposed development is a 'more vulnerable' development (NPPF, Annex 3).

Utilising the 'Flood risk vulnerability and flood zone 'incompatibility' table (PPG, Para. 079 and Figure 1) more vulnerable development should not be permitted in Flood Zone 3b.

Floodwater Displacement and Impeding Flow Routes

Where it is not possible to locate all development outside the design flood extent, it may be necessary to provide compensatory flood storage to replace the volume of water displaced up to the design flood level. This is to ensure that the development does not increase the risk of flooding elsewhere as a result of displacing floodwater.

Compensatory flood storage is required to be established on a level-for-level, volume-for-volume basis. An equal volume of water displaced by the development should be provided and located outside of the existing flood extent.

Flood storage can be provided as either a 'block' which covers the same area as the development or may be distributed across the site at convenient locations within the same flood compartment. Though notably, an equal volume must apply at all levels, typically in 'slices' at contours of 100mm between the lowest point on site and the design flood level. This will ensure that there is no adverse impact off site in any flood up to and including the design flood event.

Development should avoid obstructing any flood flow paths. This is crucial to avoid diverting floodwater and worsening off-site flood risk. The preferred approach is ideally to locate the development outside the overland flow path.

If the development changes existing flood flow paths, the scheme must compensate for this by providing equivalent flood flow capacity. Compensation cannot increase or decrease flow rates in addition to volumes as this could have an adverse impact on flooding to the surrounding area.

Application specific comment

The proposed development will result in a loss of floodplain and will impede flow routes across the site.

The development proposes an unacceptable means of managing the loss of floodplain storage. As such, development should not be permitted due to failure to show that there would be no increase in flood risk elsewhere.

Finished Floor Levels

MSDC applies the Environment Agency's standing advice sets out specific finished floor level requirements . For residential development, finished floor levels must be elevated above the design flood level (1:100+CC) and incorporate an additional margin of safety (freeboard) to address uncertainties in flood analysis. A 300mm freeboard is considered adequate, while sleeping accommodation necessitates a 600mm buffer.

The internal layout of the building should adhere to the Sequential Approach, prioritising the placement of sleeping quarters on higher floors whenever feasible, as opposed to solely raising ground floor levels.

Application specific comment

The Flood Risk Assessment (GeoSmart 2025-01-09) states Finished Floor Levels (FFL) of the proposed development should be set at least 0.3 m above surrounding ground levels. As such, development should not be permitted as the FFLs should be set a minimum of 300mm above the design flood level (1:100+CC) inline with the Environment Agency's standing advice to ensure the residential development is safe for its lifetime of at least 100 years.

Historical Flood Risk

Mid Sussex District Council's records do not contain records of the site flooding. Our records also contain no records of flooding within the area immediately surrounding the site. However, according to our records Valebridge Road has previously flooded.

Mid Sussex District Council's records are not complete, and flooding may have occurred which is not recorded. A site having never flooded in the past does not mean it won't flood in the future.

Sewers on Site

The Southern Water public sewer map does not show any public sewers located within the redline boundary of the site. However, sewers are located along Valebridge Road and rear of the site.

There may be sewers located on the site not shown on the plan which are now considered public sewers. Any drain which serves more than one property, or crosses into the site from a separate site may be considered a public sewer. Advise in relation to this situation can be found on the relevant water authority's website.

Surface Water Drainage

Information

Surface water drainage will ultimately need to be designed to meet the latest national and local planning and drainage policies and guidance. The drainage system will need to consider climate change, the allowances for which should be based on the climate change guidance from the Environment Agency at the time of detailed design.

Detailed drainage design should consider the impact a flooded outfall could have on the proposed drainage system.

The recommendation for a drainage condition to be utilised for an application does not preclude the need for updated calculations or alterations to a drainage strategy. Recommendation for a drainage condition shows that the Flood Risk and Drainage Team are of the opinion that the development has shown that, in principle, drainage could successfully be provided on the site.

Application specific comment

The BGS infiltration potential map shows the site to be in an area with high infiltration potential. Therefore, the use of infiltration drainage such as permeable paving or soakaways may be possible on site. To ensure the drainage hierarchy is followed this will need to be confirmed through infiltration testing on site as part of detailed drainage design.

It is proposed that the development will either attenuate run off before connecting to the existing surface water drain or via a soakaway.

We consider that insufficient information has been provided to meet the minimum information requirements as set out in the MSDC Flood Risk and Drainage Information Check List – Application Stage - https://www.midsussex.gov.uk/planning-building/flood-risk-and-drainage-for-planning/

Foul Water Drainage

It is proposed that the development will connect to the existing foul water drainage on site.

Information into our general requirements for detailed foul water drainage design is included within our 'General Drainage Information Guide'. This level of information will be required to address the recommended drainage condition.

To ensure the final drainage design meets with the latest design requirements we would advise the applicant to confirm the design parameters required prior to undertaking detailed design.

Sequential Test

Paragraphs 174 & 175 of the NPPF explain the aim of the Sequential Test (ST) to steer new development to areas with the lowest risk of flooding from any source. Development should not be permitted if there are reasonably available sites appropriate for the proposal in areas with a lower risk of flooding. The sequential test should be used in areas known to be at risk now or in the future from any form of flooding, except in situations where a site-specific flood risk assessment demonstrates that no built development within the site boundary, including access or escape routes, land raising or other potentially vulnerable elements, would be located on an area that would be at risk of flooding from any source, now and in the future (having regard to potential changes in flood risk).

The Planning Practice Guidance (PPG) reiterates the Sequential Test should be applied to all sources of flooding, including surface water, groundwater and sewer flooding, in addition to fluvial and tidal risk.

The PPG states that the sequential test should be applied to major and non-major development. Non-major development covers any development that falls below the major development threshold but is not considered minor development. Any development that creates a new dwelling is classified as 'non-major development'.

For clarity Mid Sussex District Council's Flood Risk and Drainage Team (in line with advice from West Sussex Lead Local Flood Authority) are adhering to The Planning Practice Guidance (PPG).

Application specific comment

The Flood Risk Assessment (GeoSmart 2025-01-09) submitted incorrectly states the proposal will not be subject to Sequential Test or Exception Test as the site is located within Flood Zone 1.

The Sequential Test has not been applied. The Flood Risk and Drainage Team object to this development due to no evidence having been provided within the application which shows the site would pass the sequential test.

The Exception Test

If the site could be shown to pass the Sequential Test it would then need to provide evidence that it passed the Exception Test.

The Exception Test is a method to demonstrate and help ensure that flood risk to people and property will be managed satisfactorily, while allowing necessary development to go ahead in

situations where suitable sites at lower risk of flooding are not available. Conditions need to be met before the Exception Test can be applied;

1. development that has to be in a flood risk area will provide wider sustainability benefits to the community that outweigh flood risk; and
2. the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

Both elements of the exception test must be passed for the development to be considered acceptable in terms of flood risk.

Application specific comment

No separate exception test document has been submitted in support of the application and it is understood the flood risk elements of the exception test are included within the submitted Flood Risk Assessment Report .

The application does not contain any information to address Point 1 of the Exception Test.

Safe Access

The PPG states that when assessing the safety implications of flood risk for development proposed, the following should be considered:

- the characteristics of a possible flood event, including residual risks from flood risk management infrastructure e.g. the type and source of flooding and frequency, depth, velocity, speed of onset and duration;
- the safety of people within a building if it floods and also the safety of people around a building and in adjacent areas, including people who are less mobile or who have a physical impairment. This includes the ability of residents and users to safely access and exit a building during a design flood and to evacuate before an extreme flood (0.1% annual probability of flooding with allowance for climate change);
- the structural safety of buildings: and
- the impact of a flood on the essential services provided to or from a development.

Flood Hazard Rating

The ‘flood hazard rating’ is used to quantify the safety of access and egress to and from a development. The Defra document ‘Supplementary Note on Flood Hazard Ratings and Thresholds for Development Planning and Control Purpose’ sets out the methodology for planning purposes.

When considering the availability of safe access, the PPG states that this includes the ability of residents and users to safely access and exit a building during a design flood and to evacuate before an “extreme flood” (0.1% annual probability of flooding with allowance for climate change). Consideration should be made for all sources of flooding, and the effects of climate change for the lifetime of the development.

The PPG states that access and escape routes need to be designed to be functional for changing circumstances over the lifetime of the development. Specifically:

- Access routes should allow occupants to safely access and exit their dwellings in design flood conditions. Vehicular access to allow the emergency services to safely reach the development during design flood conditions will also normally be required in addition to the requirements of the building regulations.
- Wherever possible, safe access routes should be provided that are located above design flood levels and which avoid flow paths. Where this is not possible, limited depths of flooding may be acceptable, provided that the proposed access is designed with appropriate signage etc. to make it safe. The acceptable flood depth for safe access will vary depending on flood velocities and the risk of debris within the flood water. Even low levels of flooding can pose a risk to people in situ (because of, for example, the presence of unseen hazards and contaminants in floodwater, or the risk that people remaining may require medical attention).

Application specific comment

The Risk of Flooding from Surface Water mapping suggests the site is shown to be at very low to medium surface water flood risk (comparable to flood zone 1 and 3a) for the present day (2025) and to be at very low to high surface water flood risk (comparable to flood zone 1 and 3b) within the climate change range of 2040 – 2060.

The Flood Risk and Drainage Team objects to the proposed development on the grounds that insufficient evidence has been provided that safe access and egress can be provided. The applicant has not demonstrated how the development would be safely accessed during a design flood event (1 in 100-year flood plus climate change allowance, or 1:100+CC). Furthermore, no evidence has been submitted to confirm how safe evacuation could be achieved during an extreme flood event (1 in 1,000-year flood plus climate change allowance, or 1:1,000+CC) for the entire lifetime of the development.

As a result, the proposal fails to meet the requirements of the National Planning Policy Framework (NPPF) and associated technical guidance in relation safe access and egress.

For and on behalf of the Flood Risk and Drainage Team
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