

Planning Application Consultation Response

Application Details

Application Number	DM/23/2866
Response Date	2024-01-05
Site Location	Land At Grid Reference 529801 123868, Cuckfield Bypass, Cuckfield
Development Description	Outline planning application (All matters reserved except for access) for the redevelopment of land to the east of Ansty to create a new Garden Community, comprising of the erection of up to 1,450 homes (including 30% affordable housing), up to 90 residential care units (C2 class), a primary school, a SEND school, health hub, sports facilities including all weather hockey pitches and tennis centre, allotments, retail, community and employment uses together with ancillary and associated development including new and enhanced pedestrian/cycle routes, open spaces, and landscaping
Recommendation¹	Further information required.

The flood risk and drainage team are aware this application has a sister application which relates to the proposed Parklands Reserve, located to the west of the A272/B2036. This consultation response does not consider this other application but focuses solely on application DM/23/2866.

The team are also aware that application DM/23/2866 is an outline application with all matters reserved except for access. Our comments with regards to flood risk and drainage take the outline nature of the application into consideration. However, the applicant has submitted a proposed masterplan for the development and our comments are based on the understanding that the masterplan layout is the preferred option to the developer.

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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.

Flood Risk

Responsibility for consultation responses for flood risk

The Environment Agency provide planning consultation responses for major planning applications. Their comments are focused on fluvial and tidal flooding represented by flood zones and their comments reflect this focus. The flood risk and drainage team acknowledge the planning consultation response provided by the Environment Agency, which looks only at flood zones and the Copyhold Gill.

It is the responsibility of the Lead Local Flood Authority (West Sussex County Council) to review and provide planning consultation for flood risk from ordinary watercourses and overland flows (surface water flood risk). Due to local agreements Mid Sussex District Council undertake flood risk reviews and provide planning consultations for planning applications located within Mid Sussex, with support provided by West Sussex County Council where appropriate.

This planning consultation represents both Mid Sussex District Council and the Lead Local Flood Authority and should be considered alongside the Environment Agency’s consultation response.

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

Outline

The site contains several watercourses identified by the Ordnance Survey’s Water Network dataset. This does not mean no other watercourses are located on the site and it is considered likely that additional watercourses/ ditches etc will be present on the site.

The site is largely located within Flood Zone 1; however, an area of Flood Zone 2 bisects the site, following the route of an identified watercourse on site.

Here, as with many sites within Mid Sussex, most of the flood risk posed to the site is identified within the Surface Water Flood Extents, with many areas of increased risk identified on site. Much

of the flood extents appear to be associated with watercourses, or the overland flow of water towards these.

In line with the latest Planning Practice Guidance for Flood Risk and Coastal Change flood risk from all sources must be considered in line with the approach utilised previously for flood zones.

Sequential Test

The application is supported by a flood risk assessment which includes a review of the suitability of the proposed development in terms of flood risk (chapter 5). However, this element of the report focuses solely on flood zones and does not consider the flood risk posed by surface water.

The Planning Practice Guidance provides information into how the sequential test should be undertaken for developments. Paragraph 023 states that development in current and future medium and high flood risk considering all sources including areas at risk of surface water flooding should be avoided as far as possible.

The flood risk and drainage team are of the opinion that the applicant has failed to meet the requirements of the Sequential Test. An updated test, based on current guidance, will be required at this outline stage of planning to ensure the proposed development is appropriate on this site.

The following sections and comments are provided based on the information submitted at this time and the understanding that the development would pass a Sequential Test.

Flood mitigations and development layout

The flood risk assessment submitted in support of this application has outlined four conditions the development must meet to be considered appropriate under the Planning Practice Guidance. The report briefly outlines how the development shall meet these four conditions.

All flood mitigation measures appear to be focused on the present day modelled flood extents for both flood zone and surface water. The Planning Practice Guidance sets out the design flood for both fluvial and surface water flooding as the 1:100-year plus climate change event.

The present day 1:1,000-year flood extents can, in some cases, be utilised as a proxy for the 1:100-year plus climate change extents. However, due to the scale of the proposed development we would advise that bespoke site-specific flood modelling should be undertaken to support the development layout on site. Due to the impact this modelling could have on the developable area on site we would expect this to be undertaken as part of the outline planning application.

We would also advise that the surface water flood modelling should reflect the nature of the flood risk posed to this site (largely controlled by watercourses) and utilise fluvial climate change allowances for the surface water flood modelling.

Planning Practice Guidance conditions

1. Remain safe in times of flooding.

The report states that development areas are in flood zone 1 and at negligible flood risk from surface water. It appears from Figure 12 of the report that development shall largely be located outside the modelled present day 1:1,000-year flood extents.

The report also states that a crossing over Copyhold Gill will be designed to ensure it is safe during times of flooding. The report fails to specify how crossings over other watercourses on the site shall remain safe in times of flood.

Due to the impact crossing heights can have on surrounding development layouts and proposed site levels it is important this is considered for all watercourse crossings at this early masterplan stage. This is to ensure that alterations to facilitate safe access/egress do not impact the proposed development description or likely masterplan layout.

2. No net loss of floodplain storage.

The report states that no development is proposed within a floodplain. However, the report again appears focused on the flood zone surrounding the Copyhold Gill and does not appear to consider the surface water flood extents.

Evidence that the impact development could have on floodplain storage, for all sources of flooding, has been considered and mitigated against will be required at this stage of planning. This is required at outline application stage due to the potential this could have on developable area on the site and the impact that could have on the development's masterplan.

3. No impediments to flood water flows.

The report states that an existing flow path is located in the north-west of the site and this shall be retained post development. It also states that a smaller flow path to the north of this north-west flow path is derived from site runoff and therefore will be managed by the site's drainage infrastructure. It is unclear from the report which flow path this comment refers to.

A site's surface water drainage system is designed to cater for runoff coming from hard surfaces and some runoff from undeveloped surfaces, such as green corridors shall remain as per existing. It is therefore important to understand which flow pathways the developer is proposing to bring into the site's drainage system.

The development masterplan shows several access roads and footpaths/ cycle links located within areas of increased flood risk and flood water flow pathways. No details of how these will be designed to not impede flows or increase flood risk to site users has been provided.

Further evidence that existing flood flows will not be impeded by any type of development is required at this stage of planning.

4. No increase in the volume and rate of surface water runoff

The report states that the proposed sustainable drainage strategy would ensure that runoff rates and volumes are not increased post development. Further comments in relation to the proposed drainage strategy are located later in this consultation response.

Surface Water Drainage

The applicant states the proposed drainage strategy considers both the non-statutory technical standards for SuDS and West Sussex County Council policy. The report does not provide any reference to Mid Sussex District Council local policy.

Greenfield runoff rates

The applicant has calculated the Greenfield runoff rates for the entire site for several return periods (reproduced in table below). The applicant has also acknowledged that West Sussex County Council policy requires discharge into a watercourse to be restricted to the Q1 runoff rate

Storm return period	Peak greenfield runoff rate (l/s)
Q1	460
Q2.3 (QBar)	541.2
Q30	1055.3
Q100	1342.2

Climate change allowances

The applicant has identified the current climate change allowances as set out by the Environment Agency and confirmed that a design lifespan of 100-year has been considered.

Proposed surface water drainage strategy

Infiltration testing

The applicant states that on-site infiltration testing has been undertaken on site to coincide with the proposed location of the attenuation basins. The infiltration test results in these locations failed and therefore infiltration drainage has not been considered as part of the outline drainage strategy. The infiltration test report has been included within the submitted information; however the infiltration test logs do not appear to have been made available.

The approach taken to development layout and drainage described within the report suggests a layout led drainage approach, and not a drainage led approach to development. National infiltration potential mapping shows large areas of the development site have high infiltration potential, but much of this area appears to have been discounted for drainage and infiltration testing limited to watercourse corridors.

Evidence that consideration into the use of infiltration drainage in areas away from watercourse corridors will need to be provided at this outline planning stage. Given the outline application looks to fix only the access to the development alterations to the proposed masterplan to facilitate more sustainable drainage would not be considered unreasonable at this stage.

Outline drainage approach

The applicant states that the site has been split into multiple drainage catchments and an estimated impermeable area allocated to each, based on the developments masterplan. Peak Q1 runoff rates have been determined based on the overall site's runoff rate and the impermeable percentage of

each catchment. For all catchments the general approach to drainage is the same with surface water collected via swales and attenuated within basins before discharging into watercourses at the calculated Q1 runoff rate.

The report states that based on drainage simulations of the outline drainage design the scheme can cater for the 1:30-year plus 40% climate change storm event, with all discharge attenuated and discharged at the Q1 runoff rate. The report goes on to state that flooding on many of the features is expected during the 1:100-year plus 45% climate change storm event and uncontrolled discharge from the attenuation features into the watercourses is proposed. The report states that the volume of water discharging of the site from the combined controlled and exceedance flows is below the QBar greenfield volume for the entire site and therefore still provides a betterment over the existing.

The National Planning Policy Framework requires development to manage surface water drainage up to and including the 1:100-year plus climate change event. Surface water can be stored in exceedance areas onsite for events between the 1:30+CC and 1:100+CC event. The proposed free discharge off the site for events between the 1:30+CC and 1:100+CC events is unacceptable and does not meet with national or local policy. The report's statement regarding the volume of water from the combined controlled and exceedance flows volumes being less than the Greenfield volume does not consider the volume of surface water runoff coming from the undeveloped / undrained areas of the site.

Further information will be required at this stage of planning to show that a surface water drainage scheme can be designed for the site which meets with national and local policy, including the need to control runoff off the site for all events up to and including the 1:100-year plus climate change event. The parameters in the calculations should be updated to include Cv value of 1 and use of FEH2022.

Outline drainage plan

The submitted outline drainage plan appears to show basins and swales in very close proximity to watercourses and surface water flood extents. All drainage features, except for outfalls and their associated piped connections, must be located outside of all modelled flood extents, including an allowance for climate change. Further details are required for the surface water pump proposed in the south of the site.

A full impact assessment of 24-hour failure and emergency procedures required for the pump being used in the south of the site is required. Further information will be required about why the application cannot be drained via gravity and a pump is required. Only the area that must be pumped should be pumped.

Foul Water Drainage

The flood risk and drainage team acknowledge that foul water drainage could be managed at a later stage in the planning process.

Information into our general requirements for detailed foul water drainage design is included within our 'General Drainage Information Guide'.

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.

Summary of Further Information Required

Areas where further information is required have been highlighted within the peach-coloured boxes throughout this consultation response. However, in summary the following information is required:

- An updated sequential test, based on current guidance, to ensure the proposed development is appropriate on this site.
- Bespoke site-specific flood modelling, which considered all watercourses/ ditches and overland flow routes should be undertaken to support the development layout on site.
- Evidence that watercourse crossing heights for all watercourse crossings have been considered at this early masterplan stage.
- Evidence that the impact development could have on floodplain storage, for all sources of flooding, has been considered and mitigated against.
- Further evidence that existing flood flows will not be impeded by any type of development, including footpaths/ cycle links.
- Evidence of consideration into the use of infiltration drainage in areas away from watercourse corridors will need to be provided at this outline planning stage.
- Further information will be required at this stage of planning to show that a surface water drainage scheme can be designed for the site which meets with national and local policy, including the need to control runoff off the site for all events up to and including the 1:100-year plus climate change event.
- Further details regarding the use of the pump and emergency procedures following 24 hour failure are required.

Receipt of the requested additional information does not mean further information will not be requested, nor does it guarantee that the Flood Risk and Drainage Team will not object to the development. Neither does it prevent the team from recommending flood risk or drainage conditions.

For and on behalf of the Flood Risk and Drainage Team
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