## PLANNING APPLICATION CONSULTATION RESPONSE

## APPLICATION DETAILS

| | |
|---|---|
| Application Number | DM/22/2416 |
| Planning Officer | Joanne Fisher |
| Flood Risk and Drainage Officer | Natalie James |
| Response Date | 2022-08-09 |
| Site Location | Land At Grid Reference 526307 116801 The Street, Albourne |
| Development Description | Outline planning permission for the erection of up to 120 residential dwellings including 30% affordable housing, public open space and community facilities. All matters are reserved except for access. |
| **Recommendation** | **No objection subject to condition** |

## FLOOD RISK

Due to the scale of the development the development is supported by a flood risk assessment. The report identifies most of the site to be at low flood risk, with two areas of increased surface water flood risk.

The report states that all residential development shall be located outside of surface water flood extents.

The flood risk and drainage team advise that flood modelling is undertaken as part of the detailed design of the site to ensure flood risk for the lifetime of the development is considered. Development features including drainage assets such as attenuation basins should be located outside of all flood extents for the lifetime of the development.

## SEWERS ON SITE

The Southern Water public sewer map shows public sewers are located within the redline boundary of the site. These foul sewers are located to the east of the site and the proposed access route is located over one of these sewers.

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 is likely to now be considered a public sewer. Advise in relation to this situation can be found on the relevant water authority's website.

The flood risk and drainage team advise the applicant to discuss the design requirements of the access to ensure the foul sewer is appropriately protected.

## SURFACE WATER DRAINAGE

An outline drainage strategy has been submitted as part of the outline planning application. This drainage strategy is based on site constraints as known at the time of submission and the likely impermeable area based on the existing masterplan.

The drainage strategy proposes to utilise multiple drainage catchments and five attenuation basins before discharging to the watercourse on site at a single discharge point. The drainage strategy includes infiltration test results which show that infiltration is not possible on the site.

The principle of utilising attenuation and discharge to watercourse as a means of managing surface water drainage is acceptable at this stage.

Attenuation volumes and the allowable discharge rate have been calculated based on the existing development masterplan. The flood risk and drainage team advise that these will need to be reviewed and updated as part of the detailed drainage design.

We would advise that all shared drainage features, such as attenuation, should be located within areas of public realm (and not in private driveways etc) to ensure these features can be retained and managed for the lifetime of the development. We would also advise that the developer will need to show that all attenuation features are located outside modelled flood extents for the lifetime of the development.

Information into our general requirements for detailed surface water drainage design is included within the 'General Drainage Requirement Guidance' section. This level of information will be required to address the recommended drainage condition. However, the review of the modelled flood extents may need to be undertaken at an earlier stage to ensure the development layout considers this.

## FOUL WATER DRAINAGE

It is proposed that the development will discharge into the public foul sewer located on the site. Some areas of the site may require a foul pumping station to achieve the proposed connection.

The connection of foul drainage into a public foul sewer is considered acceptable in principle. The flood risk and drainage team would advise however that foul pumping stations should be located outside the modelled flood extents on site for the lifetime of the development.

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

## CONDITION RECOMMENDATION

***FOUL AND SURFACE WATER DRAINAGE***

The development hereby permitted shall not commence unless and until details of the proposed foul and surface water drainage and means of disposal have been submitted to and approved in writing by the local planning authority. No drainage feature should be located within modelled flood extents for the lifetime of the development unless approved in writing by the local planning authority. No building shall be occupied until all the approved drainage works have been carried out in accordance with the approved details. The details shall include a timetable for its implementation and a management and maintenance plan for the lifetime of the development which shall include arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime. Maintenance and management during the lifetime of the development should be in accordance with the approved details.

**Reason:** To ensure that the proposal is satisfactorily drained and to accord with the NPPF requirements, Policy CS13 of the Mid Sussex Local Plan, Policy DP41 of the Pre-Submission District Plan (2014 - 2031) and Policy **…'z'…** of the Neighbourhood Plan.

# GENERAL DRAINAGE REQUIREMENT GUIDANCE

Mid Sussex District Council's flood risk and drainage requirements are based on relevant national and local policies and guidance.

## SURFACE WATER DRAINAGE

Finalised detailed surface water drainage design is required to be submitted and approved prior to construction starting on site. The design should be based on the Environment Agency's latest climate change allowances and follow the latest West Sussex Lead Local Flood Authority Policy for the Management of Surface Water (https://www.westsussex.gov.uk/fire-emergencies-and-crime/dealing-with-extreme-weather/flooding/flood-risk-management/flood-reports-projects-and-policies/).

The use of pumped surface water drainage is not considered to be sustainable and therefore would not be considered an appropriate means of managing surface water as part of a development.

The locating of attenuation, detention, or infiltration devices (including permeable surfacing) within flood extents is not acceptable.

Table 1 overleaf sets out a list of information the detailed surface water drainage design should include. Developers are encouraged to complete the table and provide as a cover page to future drainage design submissions.

## FOUL WATER DRAINAGE

Finalised detailed foul water drainage design is required to be submitted and approved prior to construction starting on site. The use of public foul sewer connection should always be prioritised over non-mains drainage options.

The use of non-mains foul drainage should consider the latest Environment Agency's General Binding Rules (https://www.gov.uk/guidance/general-binding-rules-small-sewage-discharge-to-a-surface-water).

The Environment Agency have advised that any existing septic tank foul drainage systems that are found to not comply with the latest Binding Rules will need to be replaced or upgraded.

Table 2 overleaf sets out a list of information the detailed foul water drainage design should include. Developers are encouraged to complete the table and provide as a cover page to future drainage design submissions.

Table 1: Detailed drainage design requirements – surface water

| Requirement | Location of information within submitted design |
|---|---|
| ***For all designs*** | |
| Greenfield runoff rate details for the area to be drained (using FEH or a similar approved method) | |
| On-site infiltration test results | |
| Plans / details of areas to be drained based on finalised development plans | |
| Calculations showing the system has been designed to cater for the 1 in 100-year storm event, plus appropriate allowance for climate change | |
| Detailed drainage plans, including invert levels and pipe diameters, showing entire drainage system | |
| Maintenance and management plan[1] | |
| ***For soakaways*** | |
| Sizing calculations (to cater for 1 in 100-year plus climate change event) | |
| Half drain time (<24 hours) | |
| Construction details | |
| ***For discharge to watercourse*** | |
| Discharge rate (1 in 1 or QBar Greenfield rate for drained area)[2] | |
| Outfall location and construction details | |
| Attenuation sizing calculations (to cater for 1 in 100-year plus climate change event) | |
| ***For discharge to sewer*** | |
| Discharge rates (restricted to 1 in 1 or QBar Greenfield rate for drained area unless otherwise agreed with sewerage provider) | |
| Discharge location and manhole number | |
| Outline approval from sewerage provider in relation to connection, discharge rate and connection location[3] | |
| Attenuation sizing calculations (to cater for 1 in 100-year plus climate change event) | |

[1] The scale of this document should reflect the scale of the development and the complexity of the drainage system.
[2] If the 1 in 1 or QBar Greenfield runoff rate cannot be achieved, then evidence into why a higher discharge rate has been proposed should be provided. Due to improvements in drainage systems the 2l/s minimum will not be accepted without justification.
[3] Formal approval via S106 etc is not required.

Table 2: Detailed drainage design requirements – foul water

| Requirement | Location of information within submitted design |
|---|---|
| ***For all designs*** | |
| Plans showing entire drainage system, including invert levels, pipe diameters, falls and outfall/connection location | |
| Foul flow calculations and confirmation proposed system is sized appropriately | |
| ***For connection to main foul sewer*** | |
| Discharge location and manhole number | |
| Evidence of communication with Water Authority regarding connection[4] | |
| ***For non-mains system with drainage field*** | |
| Evidence of permeability (infiltration) test results specific to treated effluent drainage fields | |
| Evidence that either:<br>a) The system meets latest General Binding Rules<br>b) An Environmental Permit application is to be submitted | |
| ***For non-mains system with discharge to open water*** | |
| Evidence that either:<br>a) The system meets latest General Binding Rules<br>b) An Environmental Permit application is to be submitted | |
| Outfall location and construction details | |

[4] Formal approval via S106 etc is not required.