

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](#).

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, this includes areas of increased surface water flood risk.

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](#).

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.

Detailed drainage design technical summary

Table 1: Detailed drainage design summary – surface water

Requirement	Information	Location of information / drawing number
For all designs		
Greenfield runoff rate details for the area to be drained (using FEH or a similar approved method)	PLOT 1 Q1/QBAR = 0.1 Q30 Year = 0.1 Q100 Year = 0.2 PLOT 2 Q1/QBAR = 0.1 Q30 Year = 0.2 Q100 Year = 0.3	Table 4.1 & 4.2 Report: 251974/DC-IN-KBL/01 and Within APPENDIX E
On-site infiltration test results	Test Failed, no drainage after three hours	Within APPENDIX A Of Report: 251974-DC-IN-KBL-01
Plans / details of areas to be drained based on finalised development plans	Total Drained Area Plot 1: 142m ² Plot 2: 147m ²	APPENDIX C: Drawing 251974/500/02 Of Report: 251974-DC-IN-KBL-01
Calculations showing the system has been designed to cater for the 1 in 30 with climate change and 1 in 100 with climate change storm events Calculations should use a CV value of 1.0	SIZE OF BOTH PAVING 5m x 5m x 0.5m(sub-base) 0.2 Granular fill 0.3 Permavoid	APPENDIX D: MicroDrainage Calculations Of Report: 251974-DC-IN-KBL-01
Detailed drainage plans, including invert levels and pipe diameters, showing entire drainage system	Within Detailed Drawing	Within APPENDIX C Of Report: 251974-DC-IN-KBL-01
Maintenance and management plan ¹	Within Report	Section 6 of Report
For soakaways		
Sizing calculations (to cater for 6-hour, 1 in 100-year plus climate change event)	N/A	N/A
Half drain time (<24 hours)	N/A	N/A
Construction details	N/A	N/A
For discharge to watercourse		
Discharge rate (1 in 1 or QBar Greenfield rate for drained area) ²	N/A	N/A
Outfall location and construction details	N/A	N/A
Attenuation sizing calculations (to cater for 1 in 100-year plus climate change event ³)	N/A	N/A
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 rates (same for both plots) Q1/QBAR = 0.2 Q30 Year = 0.3 Q100 Year = 0.4 Q100+CC Year = 0.6	Within Section 4 of report: 251974-DC-IN-KBL
Discharge location and manhole number	Connecting directly into public sewer pipe between Manhole 9350 & 9250.	Drawing: 251974-500-01

Outline approval from sewerage provider in relation to connection, discharge rate and connection location ⁴	Evidence of communication with Thames Water regarding S106. Conditional Consent given on the 30 th of September	Within APPENDIX D Of Report: 251974-DC-IN-KBL-01
Attenuation sizing calculations (to cater for 1 in 100-year plus climate change event ⁵)	Surface water Attenuated via Permeable Paving and 20mm orifice.	Withing APPENDIX E Of Report: 251974-DC-IN-KBL-01

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 as part of the detailed design. Due to improvements in drainage systems the 2l/s minimum will not be accepted without justification.

³ If system does not attenuate up to the 1 in 100-year with climate change event, then evidence that the system shall not increase flood risk on or off site shall be required.

⁴ Formal approval via S106 etc is not required.

⁵ If system does not attenuate up to the 1 in 100-year with climate change event, then evidence that the system shall not increase flood risk on or off site shall be required.

Table 2: Detailed drainage design requirements – foul water

Requirement	Summary	Location of information / drawing number
<i>For all designs</i>		
Plans showing entire drainage system, including invert levels, pipe diameters, falls and outfall/connection location Drainage systems should be located within land under the control of the applicant	Within Detailed Drawing	Within APPENDIX C Of Report: 251974-DC-IN-KBL-01
Foul flow calculations and confirmation proposed system is sized appropriately	100mm diameter pipe work, Sufficient for one dwelling	Drawing: 251974-500-01
<i>For connection to main foul sewer</i>		
Discharge location and manhole number	Plot 2 will discharge its foul into Foul Manhole 8201	251974/500/01
Evidence of communication with Water Authority regarding connection ⁶	Evidence of communication with Thames Water regarding S106. Conditional Consent given on the 30 th of September	Within APPENDIX D Of Report: 251974-DC-IN-KBL-01
<i>For non-mains system with drainage field</i>		
Evidence of permeability (infiltration) test results specific to treated effluent drainage fields	N/A	N/A
Evidence that either: a) The system meets latest General Binding Rules, or b) An Environmental Permit application is to be submitted	N/A	N/A
<i>For non-mains system with discharge to open water</i>		
Evidence that either: a) The system meets latest General Binding Rules, or b) An Environmental Permit application is to be submitted	N/A	N/A
Outfall location and construction details	N/A	N/A

⁶ Formal approval via S106 etc is not required.