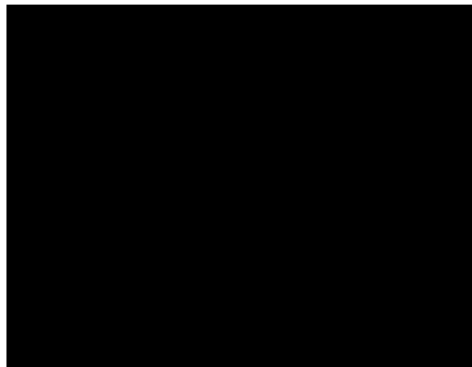




**CLYST HAYES,
BROOK LANE, FAYGATE,
WEST SUSSEX RH12 4SB**

**DRAINAGE STRATEGY &
MANAGEMENT & MAINTENANCE PLAN**

LANDIVAR ARCHITECTS





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Date: 09th July 2026

1.00 Introduction

- 1.01 vkhp consulting limited has been instructed to prepare a Drainage Strategy and Management & Maintenance Plan for a proposed residential redevelopment at Clyst Hayes, Brook Lane, Faygate.
- 1.02 The site is triangular on plan and is located at National Grid Reference TQ 20587 33496, occupies an approximate area of 0.213 hectares. The site is a greenfield site.
- 1.03 The Proposals are to construct 2 new residential dwellings.
- 1.04 Surface water run-off from the new development will be collected and addressed by means of sustainable urban drainage systems (SuDS),
- 1.05 Greenfield run-off rate estimation using uk suds by hr Wallingford indicates the Mean Annual Flow (Qbar) would be 1.2/s
- 1.06 The site is located in a sparsely populated area, on a relatively flat site, with gentle gradients fall north-eastwards towards a watercourse/ditch on the eastern boundary of the site.
- 1.07 The Environmental Agency maps indicate that the proposed development is located within Flood Zone 1, therefore there is no recognised risk of flooding to the site.

2.00 Existing Drainage

- 2.01 There are no Public Sewers in close proximity to the development.
- 2.02 There are existing drainage runs that serve the parking areas and waste from the existing Clyst Hayes dwelling. These discharge into the watercourse/ditch located on the eastern boundary of the site.
- 2.03 Existing surface water discharges to ground. There is a watercourse located to the north- east of the proposed development. This watercourse passes under the railway line and discharges into the Channells Brook.

- 2.04 The existing site is undeveloped with surface water discharging freely to ground.

3.00 Site Geology

- 3.01 A desk top study using Geology of Britain data indicated that the proposed development is found to be located on Upper Tunbridge Wells Sand-Sandstone and mudstone.
- 3.03 Infiltration into the Upper Tunbridge Wells Sand Formation is highly variable and often severely restricted by interbedded mudstone. While the sandstone layers within this Cretaceous Wealden geology can provide viable drainage channels, the presence of siltstones and clays significantly reduces permeability, frequently causing traditional shallow soakaways to fail testing.
- 3.04 Infiltration tests carried out on 18th May 2026 indicated that there was no significant infiltration over a 72-hour period. It has therefore been taken that there is not sufficient infiltration to use soakaways.

4.00 Development Drainage Proposals

Surface Water

- 4.01 For the consideration of the surface water drainage generated by this proposed development, the principal factor is the impermeable roofs area and hard paved areas.
- 4.02 Infiltration testing to BRE365 were carried out at the development and produced insufficient results for infiltration techniques.
- 4.03 A 10% allowance has been added for urban Creep to all calculations.
- 4.04 The driveways are proposed to be constructed using permeable paving. Causeway Flow calculations reference 696826-01 indicates that for the peak 1 in 100 year rainfall

event with a 45% allowance for climate change would require a sub-base depth of 477mm.

- 4.05 The impermeable roof area is intended to be drained with conventional roof guttering and downpipes, directed into an underground surface water drainage system via 100mm and 150mm diameter pipes at a gradient not less than a 1:100 to ensure self-cleansing velocities. To reduce the risk of contaminants and silt entering into a SUD's features, all water will pass through a silt trap prior to discharge.
- 4.06 Plot 1 & Plot 2 has a combined area of 250m² with the permeable access and parking area having an area of 430m². All surface water generated by the development is proposed to discharge into the sub-base of the parking areas. Causeway Flow calculations reference 696826-01 indicates that for the peak 1 in 100 year rainfall event with a 45% allowance for climate change would require a subbase of 4/40 or No fines Type 3 sub-base to a minimum dept of 477mm.
- 4.08 Surface water calculations have been provided for rainfall events up to and including the 1 in 100 year return period with an additional allowance of 45% for climate change and include a 10% allowance for urban creep. These indicate that there is no surface water flooding during the 1 in 100 year + 45% critical storm with peak discharge rates indicating no flooding.

Foul Water

- 4.09 There are no recorded foul water sewer in proximity to the development.
- 4.10 Foul water drainage from the proposed development will be treated in a Package Treatment Plants and discharge to the watercourse. These will be owned and maintained by the property owners.
- 4.11 The daily volume of discharge from each Package Treatment Plant based on British Waterways, Code of Practice, Flows and Loads is estimated to be approximately 0.9m³ or 0.01L/s per dwelling.

- 4.12. The discharge and installation of the Package Treatment Plant needs to comply with The Environment Agencies General Binding Rules. Should the discharge and installation of the Package Treatment Plant comply with the Environment Agencies General Binding Rules, then a licence to discharge is not required, as the gross discharge would not exceed the permitted 5m³ per day discharge allowance to a water course.
- 4.13 The wastewater discharge location of the treated effluent is approximately 13.45m from any residential dwelling and complies with the requirements of 1.54 of Part H of the Building Regulations,
- 4.13 Drawing 696826-100 Rev - details the proposed drainage layout for the development.
- 4.14 Sample Chambers are required after treatment and prior to the discharge location.

5.0 Protection during Construction Phase

- 5.01 Sequencing of the construction phase needs to consider the possible contamination of the permeable pavement. It is recommended that the permeable paving is constructed at the end of the construction phase.
- 5.02 The following measures will be employed on-site during construction:
- Stockpiles of materials to be located away from any watercourse or site drainage system. Protective coverings will help prevent runoff stripping the stockpile
 - Plant and wheel washing are to take place in designated locations
 - The use of oils and hydrocarbons on construction sites create an inherent risk of leakages and spillages, which could potentially lead to pollution incidents. Measures are to be taken to prevent oil and hydrocarbons becoming entrained in surface runoff, such as:
 - i) Appropriate maintenance of machinery and plant
 - ii) Drip trays
 - iii) Regular checking of machinery and plant for oil leaks
 - iv) Correct storage facilities

- v) Checking for signs of wear and tear on tanks
- vi) Care with specific procedures when refuelling
- vii) Designating areas for refuelling
- viii) Emergence spill kit located near a refuelling area
- ix) Regular emptying of bunds
- x) Tanks located in secure areas to stop vandals

6.00 Maintenance and Management

Maintenance Activity	Remedial Action	Inspection Frequency]	
Gullies and rainwater inlets	Clear out sediment or detritus found in the chambers. If sediment is found in the pipe network this should be cleared out with rodding equipment or professional jetting techniques	Pre completion	Monthly
		Post Completion-up to 1 year	Quarterly
		On- going	Annually
Silt Traps	Clear out sediment or detritus found in the chambers. If sediment is found in the pipe network this should be cleared out with rodding equipment or professional jetting techniques	Pre completion	Monthly
		Post Completion up to 1 year	Quarterly
		On going	Annually
Inspect Catch-pits & Chambers	Clear any sediment or detritus found in the chamber/s. If sediment has built up within the pipe network, this should be cleared with rodding equipment or professional jetting techniques.	Pre-completion	
Package Treatment Plant	Professional Servicing including: - 1. Mechanical Checks 2. Biological Health 3. Safety & Alarms 4. Effluent Quality	Annually	
	Desludging	Every 6 -12 months	



7.00 Exceedance Flows

- 7.01 The site falls gently in a north- easternly direction. Any exceedance flows would flow away from the proposed development, finally making its way to the watercourse/ditch and finally into the Channells Brook.
- 7.02 Drawing 696826-100 indicates the directions of any surface water exceedance.