GeoSmart Information

SuDSmart Plus

Sustainable Drainage Assessment

Site Address

Land to the rear of 6 Highfields
Brighton Road
Warninglid
Haywards Heath
RH17 5SY

Grid Reference

526680, 125348

Report Prepared for

Meredydd Haynes

Date

12/08/2025

Report Status

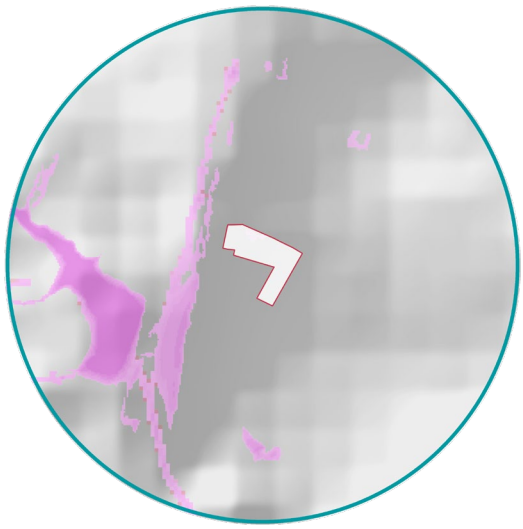
FINAL

Site Area

4576 m^2

Report Reference

86554R1



Infiltrate to ground

The proposed Sustainable Drainage Scheme (SuDS) strategy is comprised of rainwater harvesting butts and unlined permeable paving to attenuate surface water runoff during the 1 in 100 plus 45% climate change event.

A site investigation should be conducted to confirm the infiltration capacity of the ground in line with BRE 365 guidelines to confirm the infiltration rate and the groundwater level.

Foul water will discharge to the foul sewer adjacent to the west of the Site subject to confirmation from Southern Water.

Report Author

Cian Greatorex

Consultant

Report Checker

Annabel Elleray

Senior Project Consultant

Report Reviewer

Bob Sargent

Associate

GeoSmart Information Ltd
Suite 9-11, 1st Floor, Old Bank Buildings,
Bellstone, Shrewsbury, SY1 1HU
+44(0)1743 298 100
info@geosmartinfo.co.uk
www.geosmartinfo.co.uk

1 Executive summary

This report assesses the feasibility of a range of Sustainable Drainage Scheme (SuDS) options in support of the Site development process. A SuDS strategy is proposed to ensure surface water runoff can be managed effectively over the lifetime of the development.

SuDS suitability

Risk	Issue	Result
Runoff destination feasibility	Priority 1: rainwater collected for non-potable use	Yes
	Priority 2: infiltration to ground	High*
	Priority 3: discharge to an above ground surface water body	Low
	Priority 4: discharge to surface water sewer	Low
	Priority 5: discharge to combined sewer	Low
Flooding	What is the river (fluvial) flood risk at the Site?	Very Low
	What is the surface water (pluvial) flood risk at the Site?	Very Low**
	What is the groundwater flood risk at the Site?	Negligible
Pollution	Is the groundwater a protected resource?	No
	Is the surface water feature a protected resource?	N/A

*Although the Site has a Low to High potential for infiltration, the area proposed for development has a High potential for infiltration.

**Although the Site has a Very Low to High risk of surface water flooding, the area proposed for development is at Very Low risk.

Summary of existing and proposed development

The Site is currently a vacant parcel of land, as well as a section of residential garden. Development proposals comprise the construction of four residential dwellings at the Site, including a shared driveway, detached garages, hardstanding and landscaping. The existing access road will be retained.

National Standard 1: Runoff Destinations

Priority 1: collection for non-potable use

In line with DEFRA's national guidance, the potential for the collection of rainwater for non-potable use across the proposed development has been considered.

Rainwater harvesting butts are proposed at the base of the downpipes of each dwelling in order to provide rainwater re-use potential at the Site, as well as to provide biodiversity and amenity benefits. Captured water will be used to water vegetation and ensure their long-term viability as sustainable amenity features. Due to the limited storage capacity and requirement to retain captured rainwater for non-potable use, the volume of runoff which could be attenuated has not been considered within the report.

Priority 2: infiltration to ground

GeoSmart's SuDS Infiltration Potential (SD50) map indicates the Site has a Low to High potential for infiltration, primarily due to the variable permeability of the underlying geology (Cuckfield Stone Bed and Lower Grinstead Clay). However, the area proposed for development is underlain by permeable Cuckfield Stone Bed. Infiltration to ground is therefore likely to be feasible.

Priority 3: discharge to above ground surface water body

Ordnance Survey (OS) mapping indicates an unnamed pond is located c. 80 m north of the Site.. Discharging surface water runoff to this feature would require drainage pipework to cross a significant distance across third-party, urbanised land; therefore, discharge into this pond should not be considered.

Priority 4: discharge to surface water sewer

According to the asset location plan undertaken at the Site (Appendix C), there are no public surface water sewers located within the vicinity of the Site. As such, discharge to surface water sewer is not considered to be feasible.

Priority 5: discharge to combined sewer

According to the asset location plan undertaken at the Site (Appendix C), there are no public combined sewers located within the vicinity of the Site. As such, discharge to combined sewer is not considered to be feasible.

Runoff rate and attenuation requirements

Discharging via infiltration requires 41.91 m^3 of attenuation to be provided to ensure there is no flooding as a result of the development in all storm events up to and including the 1 in 100 year including a 45% allowance for climate change. This volume is subject to the results of infiltration testing and would ensure runoff is not increased above the greenfield scenario.

Proposed SuDS strategy

SuDS features comprised of rainwater harvesting butts and unlined permeable paving are proposed to attenuate a minimum of 41.91 m^3 of surface water runoff. The SuDS features would provide some water quality benefits (interception and filtration) prior to infiltrating to ground. Focused infiltration features should be sited at least 5m from building foundations and 2-3m from adjacent highways. If deemed necessary, permeable paving within this 5 m buffer area adjacent to building foundations may need to be lined.

The proposed SuDS strategy would ensure surface water runoff is stored on-Site in SuDS features for the 1 in 100 year event including a 45% allowance for climate change and will not cause flooding to the proposed development in accordance with DEFRA's national standards (2025).

Foul Drainage Strategy

Using the guidance included within Flows and Loads 4, a population of 22 P has been identified for the proposed development, which is equivalent to a flow of 3300 litres or 3.3 m^3 per day.

The proposed development should discharge to the foul sewer to the west of the Site following permission from Southern Water to connect.

SuDS & drainage network maintenance

The management and maintenance of the SuDS features, in line with the details and schedules outlined in Section 10 of this report, will be undertaken by contractors appointed by the owners and occupiers of the new residential buildings, where payments for the works will form part of the property deeds and / or rental agreements.

Recommendations / Next steps

A site investigation is required to confirm the infiltration capacity of the ground in line with BRE 365 guidelines to confirm the infiltration rate and the groundwater level.

Permission to connect the development to the foul sewer network should be obtained from Southern Water.

2 Proposed SuDS strategy

The most suitable SuDS options are outlined below and a SuDS strategy schematic is shown overleaf. Supporting information is provided in subsequent sections.

Table 1. Proposed SuDS type, features, discharge location and rate restriction

SuDS type	Source control (interception) and infiltration SuDS.
SuDS features	Rainwater harvesting butts and unlined permeable paving.
Discharge location	Infiltration.
Discharge rate	1x 10^{-5} m/s (the worst-case infiltration rate for 'slightly silty, slightly clayey sand' soil types, taken from Table 25.1 of the CIRIA SuDS manual (C753) (2015) – to be confirmed via infiltration testing).

Table 2. Proposed SuDS sizing (dimensions) and attenuation volumes

Rainwater Harvesting	A rainwater harvesting butt should be established for each proposed dwelling. In terms of attenuation storage within this SuDS scheme, the volume of run-off which could be attenuated by rainwater harvesting has not been considered within the Preliminary SuDS strategy.
Permeable paving	A 343 m^2 area of unlined permeable paving has been designated for focused infiltration and will accept runoff from the building roofs. This area will be underlain with a Type 3 aggregate material to a depth of 0.50 m, with a 30% porosity, and will provide the required c. 41.91 m^3 attenuation. The remaining 262 m^2 of the proposed hard standing will be underlain by unlined permeable paving and will be designated as an unfocused infiltration feature; this will reduce the total area of impermeable surfaces, closer mimicking greenfield conditions. As these areas will exclusively drain themselves and not to be used for attenuation, the attenuation volume that could result from them has not been considered.
Total Attenuation Provided	41.91 m^3
Total Attenuation Required	41.91 m^3

GeoSmart Information

Figure 1. Proposed SuDS scheme layout

- Focused permeable paving
- Unfocused permeable paving
- Rainwater harvesting butts
- Surface water drainage network
- Exceedance flow routes
- Site boundary
- Foul water drainage network

Surface water from the proposed dwellings will be conveyed into the rainwater harvesting butts. Overflows will be directed towards the focused permeable paving for infiltration into the ground.

The permeable paving surrounding the dwellings will be an unfocused infiltration feature, reducing the total area of impermeable surfaces and closer mimicking greenfield conditions. As these areas will exclusively drain themselves, the potential attenuation volume has not been considered.

Exceedance flows are directed towards non-essential, vacant areas on Site.

Foul water will be discharged to the public foul sewer adjacent to the west of the Site access road following permission from Southern Water to connect.

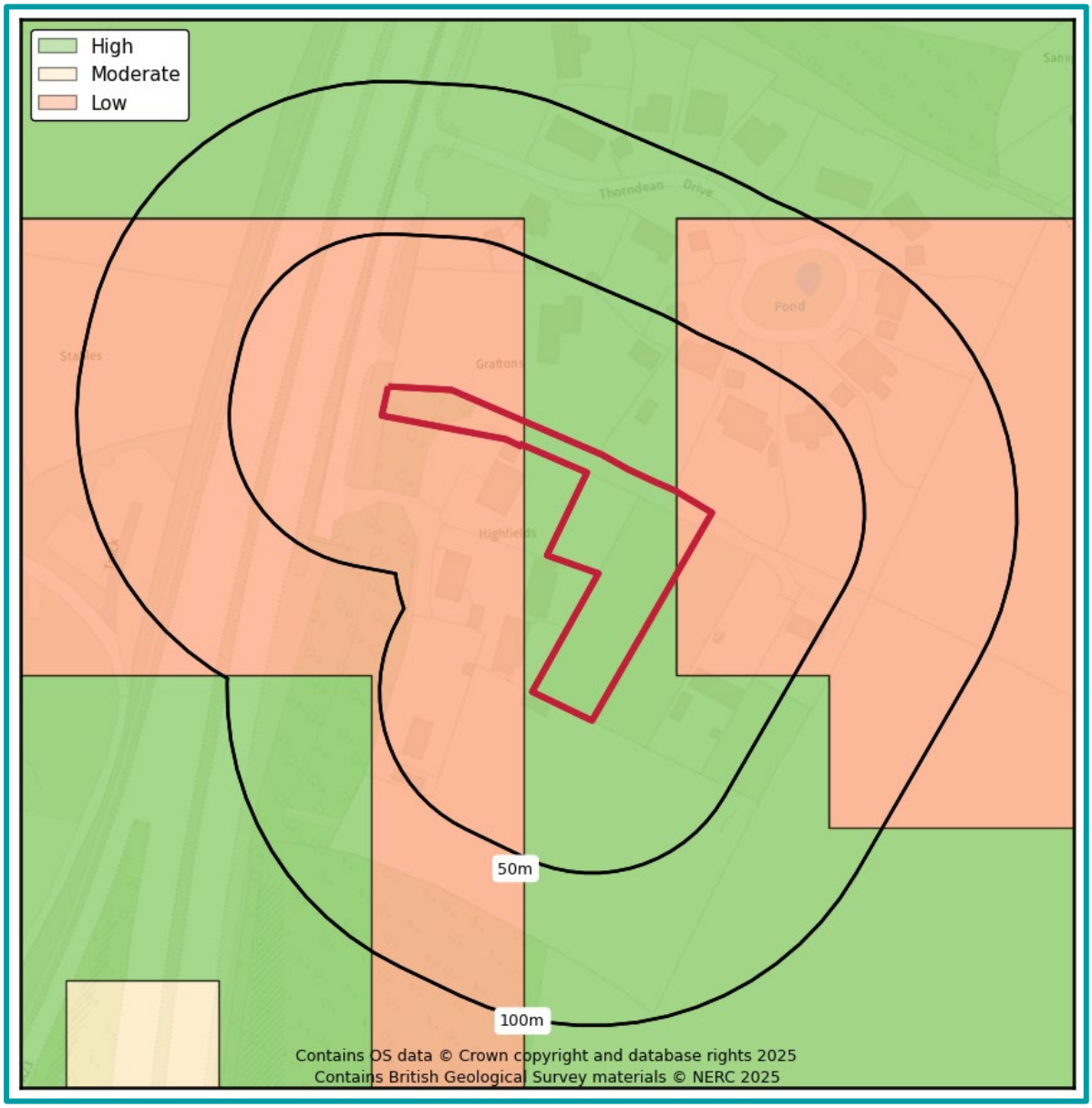
SuDSmart Plus
t. +44(0)1743 298 100
info@geosmartinfo.co.uk
www.geosmartinfo.co.uk

3 Site analysis

Site location

Figure 2. Aerial Imagery (Bluesky, 2025)

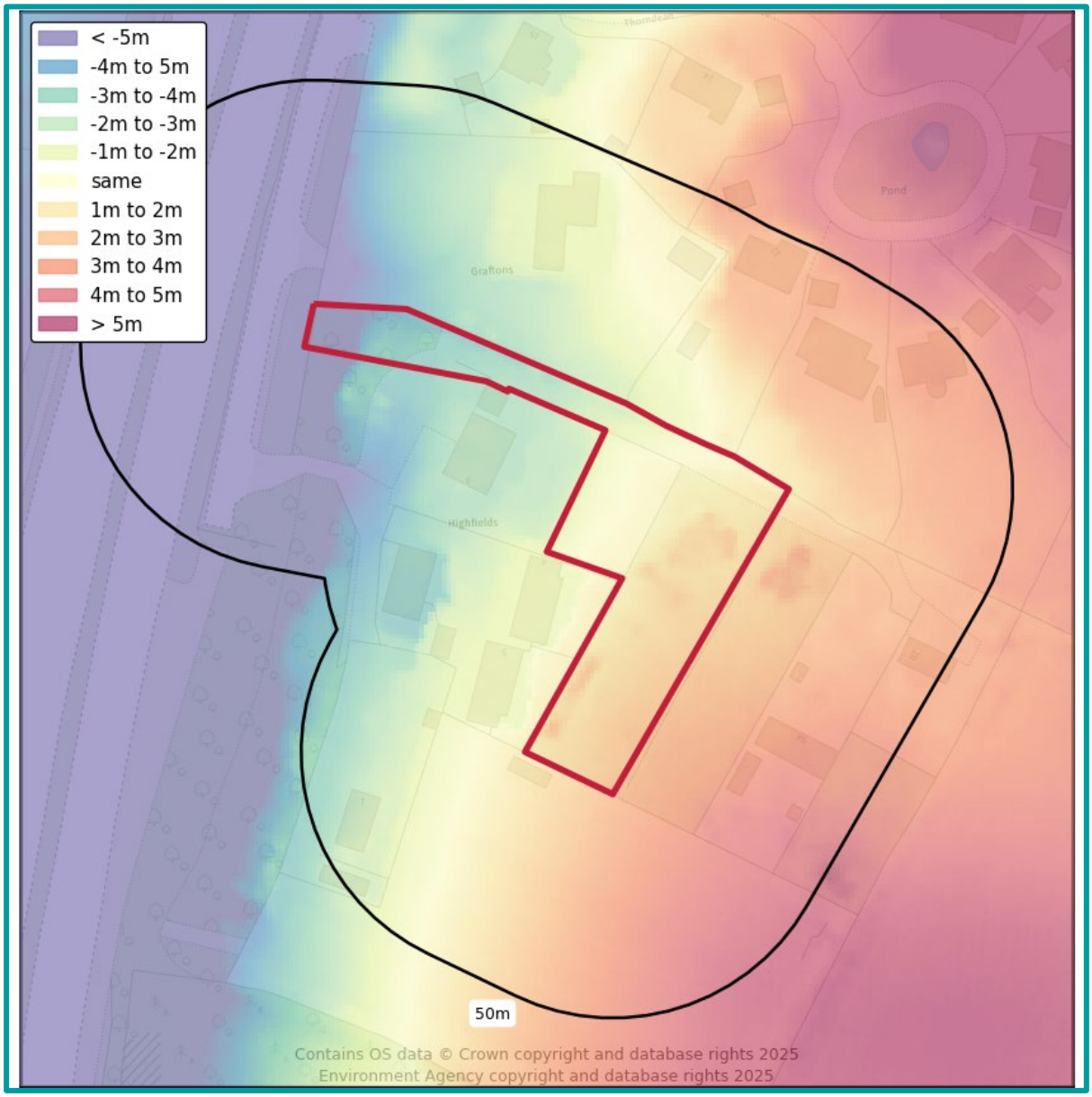
Figure 3. SuDS infiltration suitability (SD50) map (GeoSmart, 2025)



The GeoSmart SuDS Infiltration Suitability Map (SD50) screens the potential for infiltration drainage at the Site and indicates where further assessment is recommended. The map combines information on the thickness and permeability of the underlying material and the depth to the high groundwater table. It supports conceptual Site drainage design and the planning of further Site investigation.

There is a Low to High potential for infiltration SuDS across the Site. It is likely that some of the underlying geology at the Site has low permeability. However, an infiltration SuDS scheme should be possible at the Site within the areas with a High potential for infiltration. Groundwater levels in these areas are expected to be sufficiently deep, although a Site Investigation is recommended to confirm the infiltration capacity and the depth to groundwater. Various options can be considered for infiltration SuDS and these include infiltration trenches, soakaways, swales and permeable pavements.

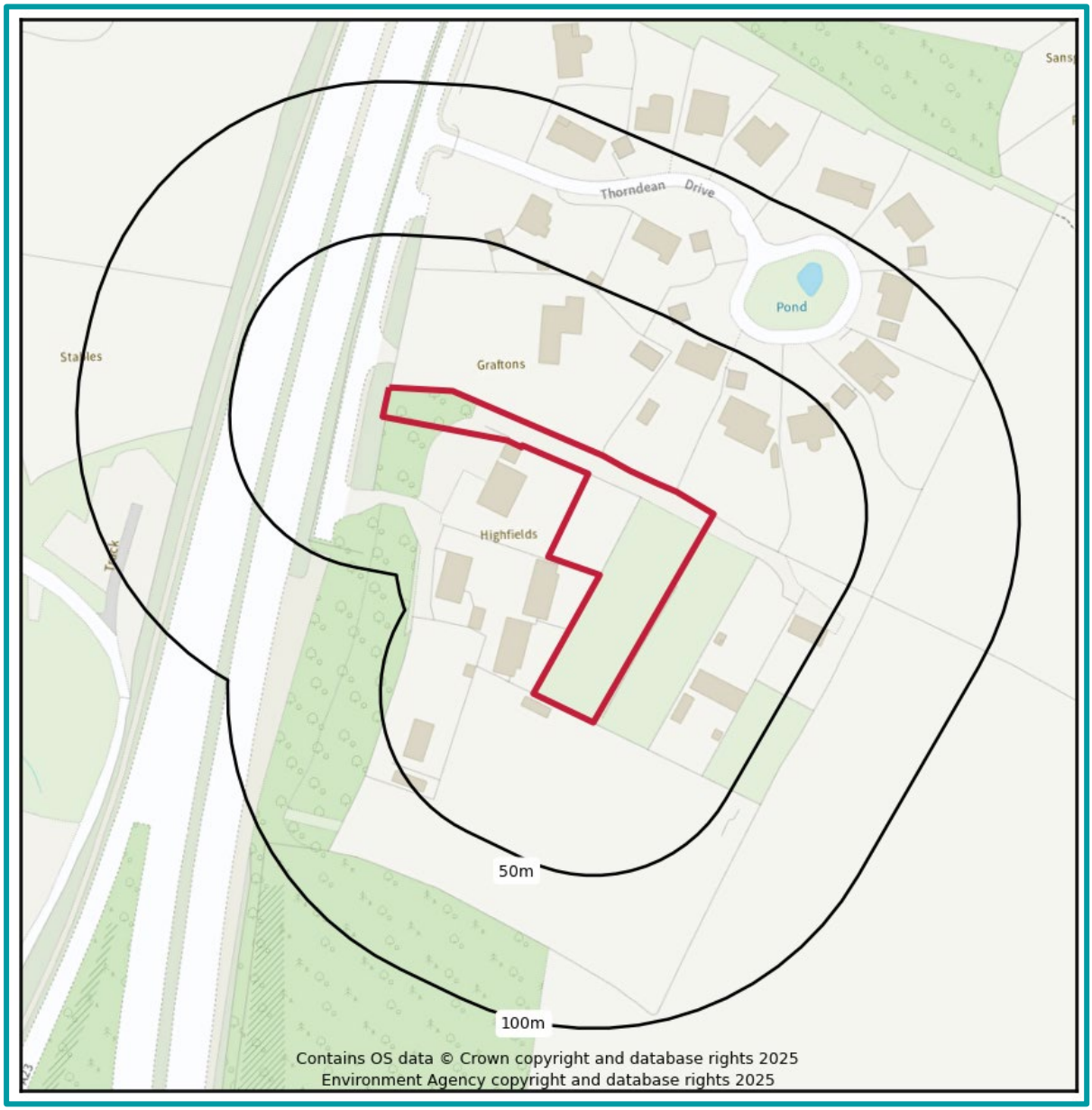
Figure 4. Site topography (GeoSmart, 2025)



An assessment of the topography at the Site has been undertaken using LiDAR DTM5 elevation data to identify the general slope and any localised depressions. The mapping shows a comparison between average ground levels on the Site with ground levels in the surrounding area. The mapping confirms the overall Site is generally falling in a westerly direction.

Further analysis could be undertaken by visiting the Site or by collecting additional topographic survey data to provide further confirmation of ground levels.

Figure 5. Source protection zone map (EA, 2025)

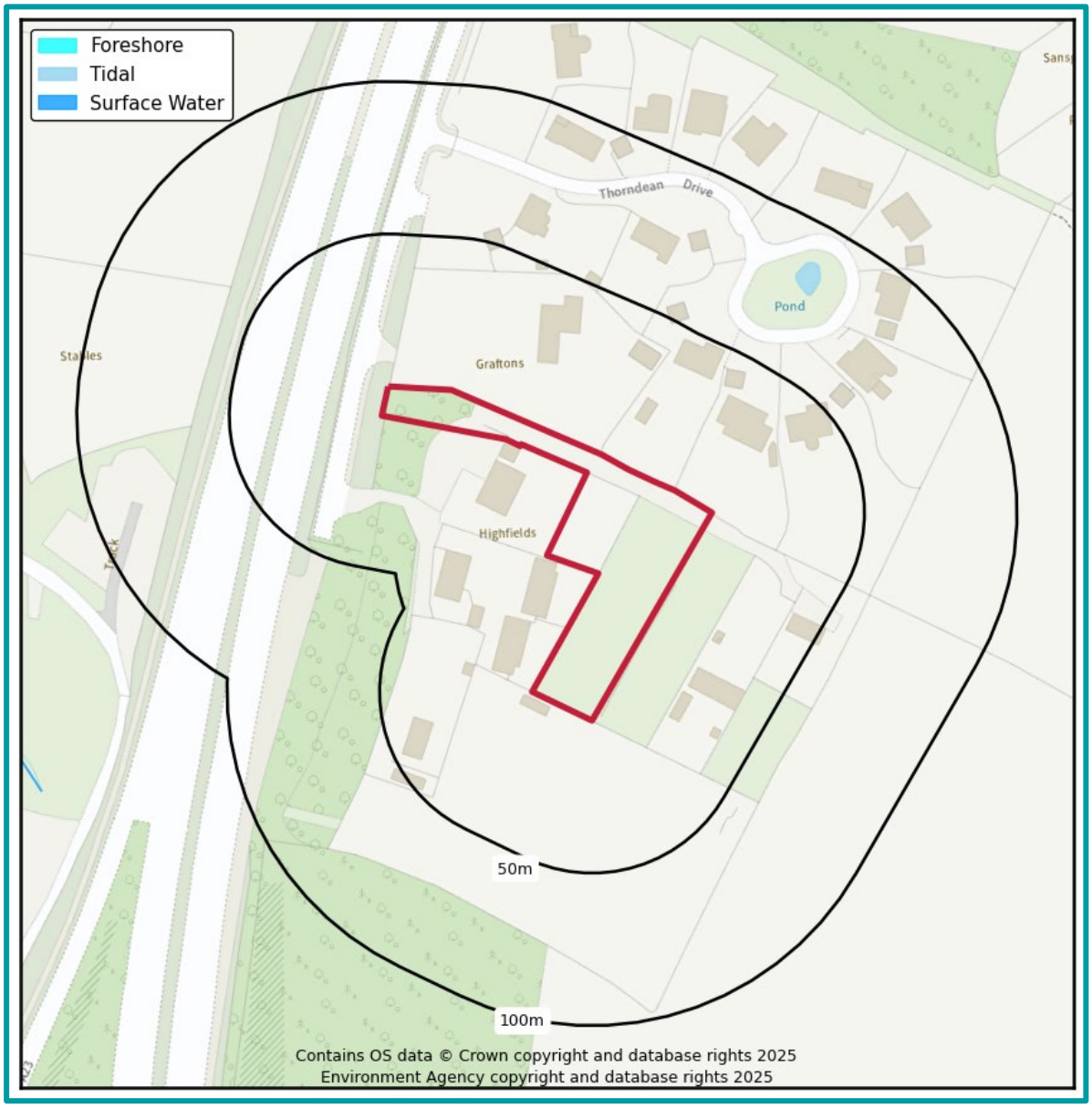


An assessment of the EA's groundwater Source Protection Zones (SPZs) has been undertaken within the vicinity of the Site and confirms the Site is not located within an SPZ.

Infiltration, if possible, is likely to be acceptable providing risk screening identifies suitable mitigation measures, if required, to prevent an impact on water quality from the proposed or historical land use and contaminated land.

If further analysis is required, this would involve a review of Site specific contaminated land data. If hazards are identified, it is recommended that the Local Authority and the Environment Agency are contacted to confirm the susceptibility of any SPZs within the wider area.

Figure 6. Surface water features map (EA, 2025)



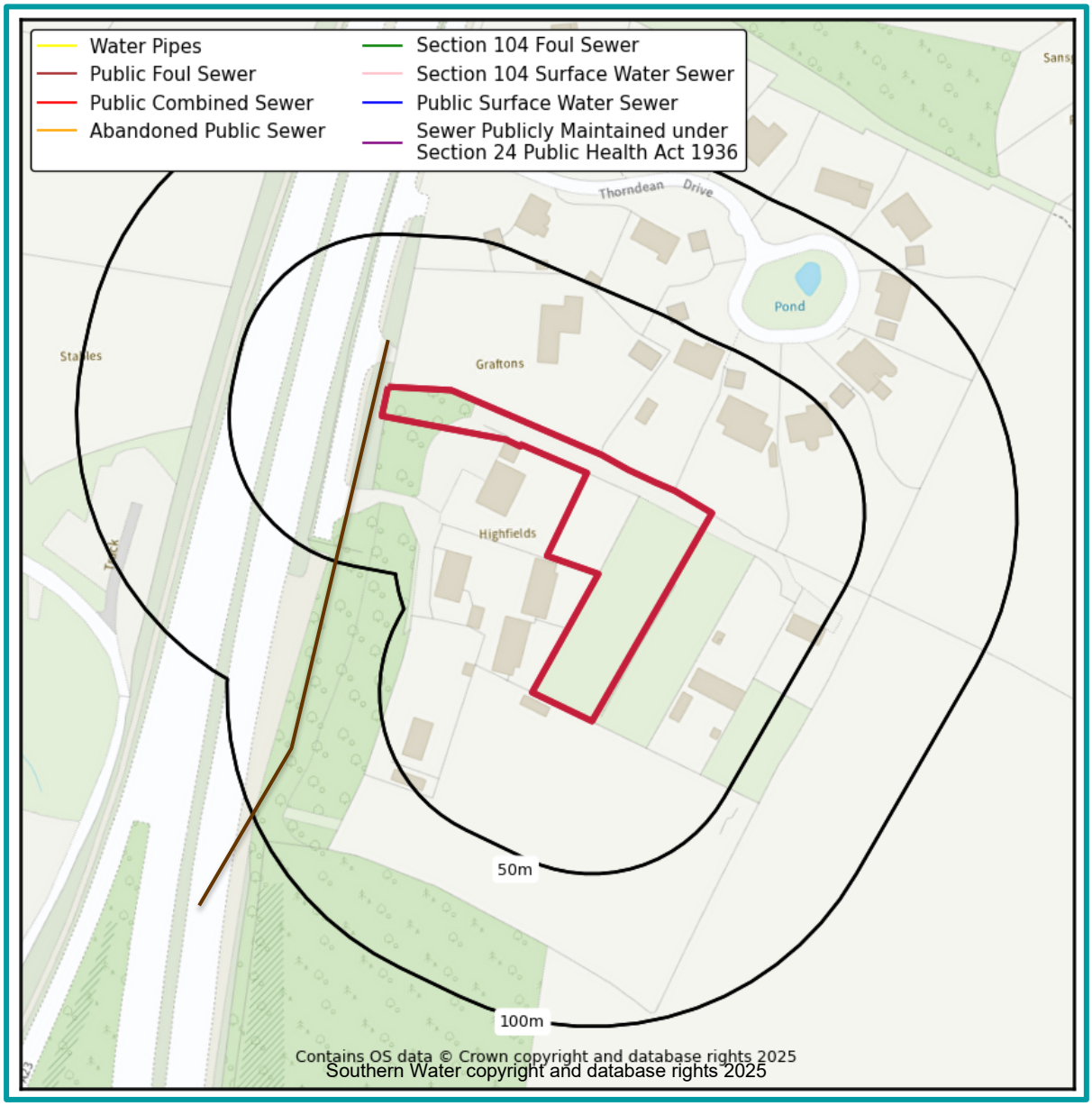
OS mapping indicates an unnamed pond is located c. 80 m north of the Site.

Discharging surface water runoff to the pond would require drainage pipework to cross a significant distance across third-party, urbanised land. Therefore, discharge into this feature should not be considered.

According to DEFRA's Magic Map, the Site is not within 250m of a SSSI or SPA.

Further analysis could be undertaken by visiting the Site or by contacting the Local Council and the Environment Agency (EA) to confirm the presence, location and condition of any mapped or additional unmapped surface water features.

Figure 7. Sewer features map (OS & Southern Water, 2025)



GeoSmart has undertaken an assessment of the location of sewer features within the vicinity of the Site. According to the asset location plan undertaken at the Site (Appendix C), there are no public surface water sewer or combined sewers located within the vicinity of the Site. Therefore, discharging runoff to the public sewer network should not be considered.

A foul sewer is located adjacent to the west of the access road to the Site, which would be a suitable discharge location for foul water but is unlikely to be acceptable for the disposal of surface water runoff.

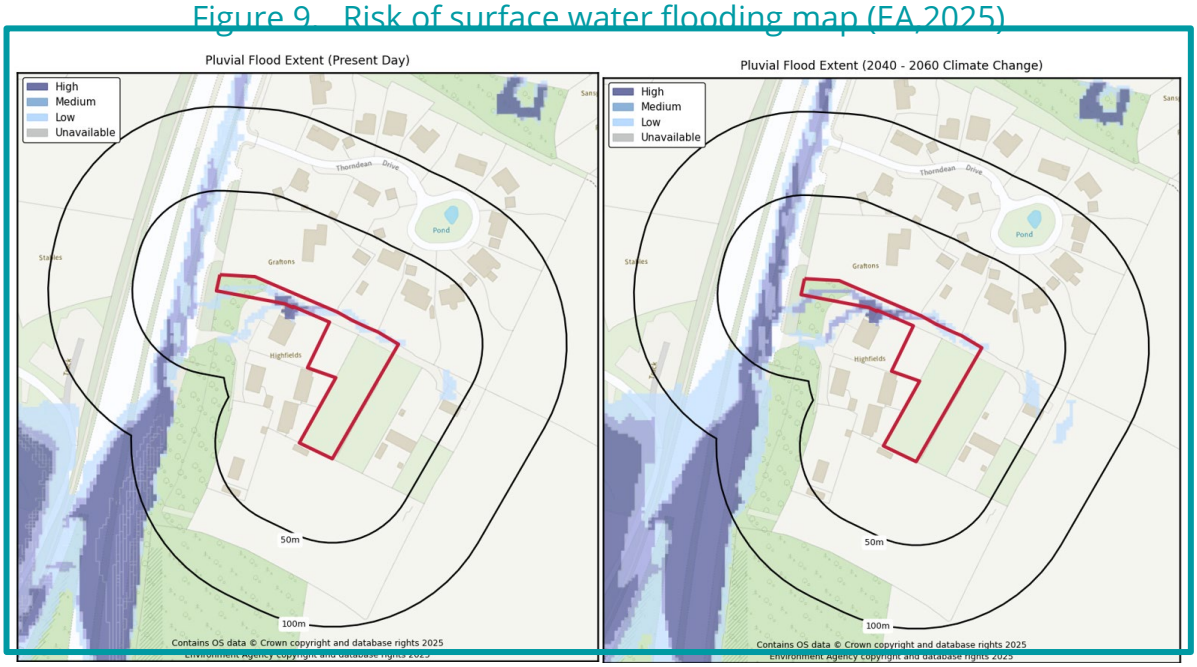
Further analysis of the connections and condition of the public surface water drainage system should be undertaken by carrying out a CCTV survey or by contacting the drainage provider or the Local Council to confirm the presence, location and condition of the sewer. Consultation with the drainage provider would also be required to determine that sufficient

capacity is available to accept the proposed discharge, and to gain permission to connect if required.

Figure 8. Risk of flooding from rivers & sea map (EA, 2025)

According to the EA's Risk of Flooding from Rivers and the Sea (RoFRS) map, the Site has a Very Low risk of flooding from fluvial or coastal flooding during both the present day and climate change (2036 to 2069) scenarios, with less than 0.1% annual probability of flooding. Therefore, the SuDS design is unlikely to be affected.

Figure 9 Risk of surface water flooding map (EA 2025)

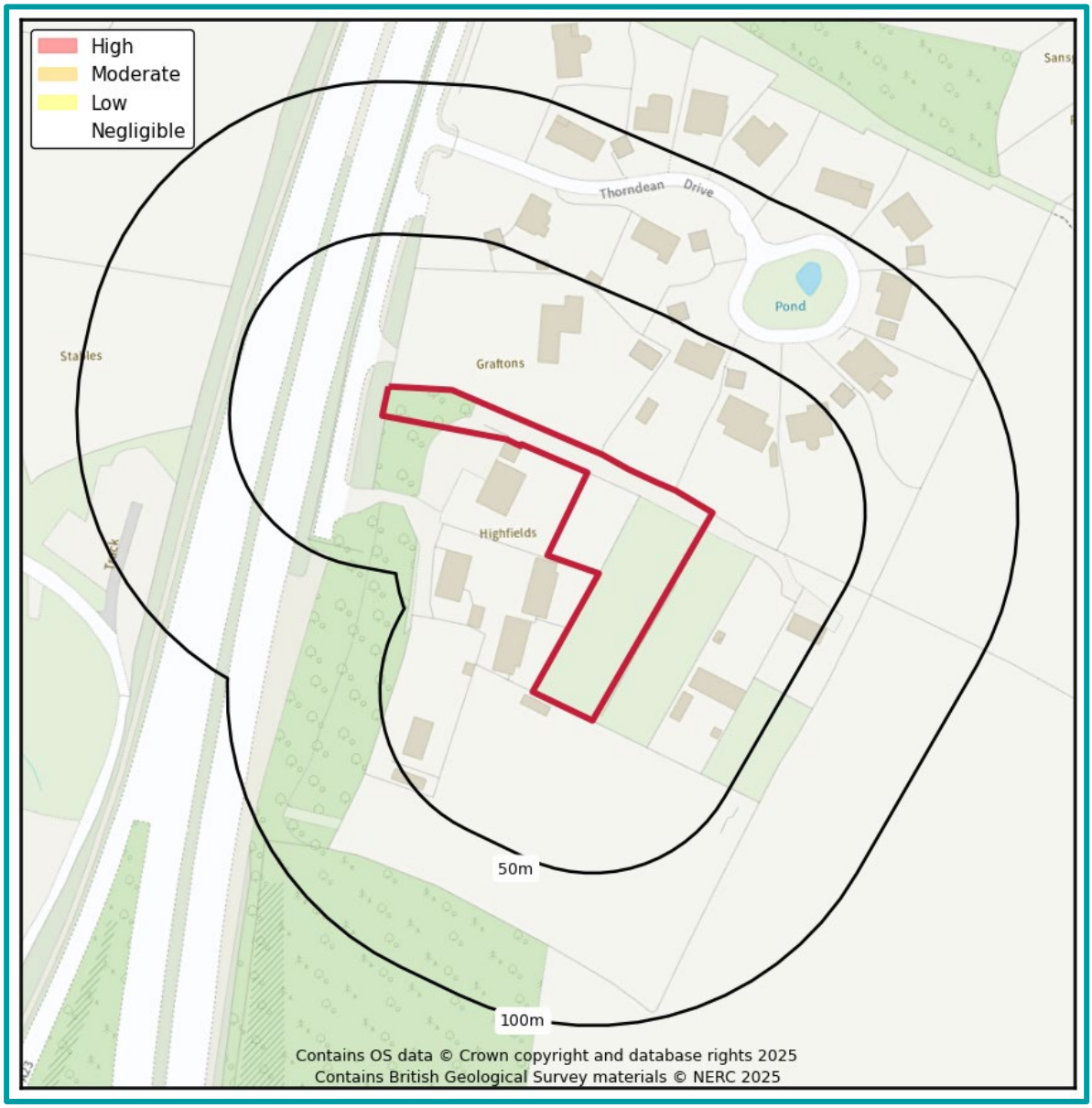


GeoSmart have undertaken an assessment of the risk of flooding from surface water (pluvial) sources within the vicinity of the Site using the EA's Risk of Flooding from Surface Water (RoFSW) mapping. The EA's mapping confirms the Site is considered to be at Very Low to High risk of surface water flooding during both the present day and climate change (2050s) scenarios.

The above map shows the extent of flooding during the >3.3% annual probability (AEP) (1 in 30 year – High risk), 3.3 – 1% AEP (1 in 100 year – Medium risk) and 1 – 0.1% AEP (1 in 1000 year – Low risk) events. This confirms there are areas where flooding could occur in 1 in 30 year, 1 in 100 year and 1 in 1000 year events. Flooding in these areas may constrain certain types of SuDS features being used. However, it should be noted that the area proposed for development is at Very Low risk of pluvial flooding.

Further analysis could be undertaken by visiting the Site or by contacting the Local Council and the Environment Agency to confirm the pluvial flood risk, flood depths and velocities where applicable.

Figure 10. Groundwater flood risk (GW5) map (GeoSmart, 2025)



GeoSmart have undertaken an assessment of the risk of flooding from groundwater within the vicinity of the Site. GeoSmart's Groundwater Flood Risk Screening (GW5) map confirms the Site has a Negligible risk of groundwater flooding during a 1% annual probability (1 in 100 year) event.

4 Site context

Site information

The purpose of this report is to assess the potential for disposing of surface water through a Sustainable Drainage System (SuDS) for the site of land to the rear of 6 Highfields, Brighton Road, Warninglid, Haywards Heath, RH17 5SY (the Site). The Site is located on the outskirts of Warninglid in a setting of mostly residential land use. The land falls to the west from 102.64 mAOD to 93.27 mAOD. This is based on EA elevation data obtained for the Site to a 1 m resolution with a vertical accuracy of ±150 mm. Site plans and drawings are provided in Appendix A.

Development

The Site is currently a vacant parcel of land, as well as a section of residential garden. Development proposals comprise the construction of four residential dwellings at the Site, including a shared driveway, detached garages, hardstanding and landscaping. The existing access road will be retained.

Geology, permeability and thickness

British Geological Survey (BGS) national superficial and bedrock geology mapping confirms the geological formations underlying the Site and each formation may have a range of permeability.

Table 3. Site Geology

Geology present on-Site		Potentially permeable?
Superficial geology (Figure 11)	No underlying superficial deposits	N/A
Bedrock geology (Figure 12)	Cuckfield Stone Bed (CKST) – calcareous sandstone (eastern 90% of the Site) Lower Grinstead Clay (LGRC) – mudstone (western 10% of the Site)	✓ ✖

The permeability of the underlying material at the Site shown within the BGS mapping is variable ranging from Low to High and confirmation of the infiltration capacity is recommended.

The BGS website was used to extract ground information from the nearest available borehole record to the Site (ref: TQ22NE18). This borehole is located approximately 390 m to the north of the Site at an elevation of 102.25 mAOD. It should be noted that this borehole is mapped on a different bedrock to the Site and therefore may not be a full representation of the geology underlying the Site. A summary of the strata encountered by the borehole is included within the table below.

Table 4. Summary of BGS borehole information

Strata encountered	BGS borehole TQ22NE18	
	Depth to base of stratum (m bgl)	Strata composition
Topsoil	0.15	With some rubble
Clay	1.70	Stiff, orange brown, light blue grey and slightly sandy with bands of orange, brown and weakly cemented sandstone
	2.10	Hard, dark grey, brown, mottled, light chocolate brown and slightly sandy
	2.80	Very stiff, orange brown, light blue grey, fissured and silty
	4.00	Very stiff to hard, dark brown, grey and slightly sandy with dark burgundy weakly cemented layers
Sand	>5.00 (base of borehole)	Very dense, light blue grey, very clayey and fine to medium

Infiltration SuDS are proposed directly into a bedrock aquifer.

The soil infiltration coefficient must be sufficient to accommodate the constraints on the dimensions of the soakaway and its emptying time.

Depth to groundwater

The SuDS system should be designed to operate in periods of extreme groundwater levels.

BGS borehole TQ22NE18 encountered groundwater at 3.90 m bgl in February 1988, rising to 3.85 m bgl after 20 minutes and 2.25 m bgl after 60 minutes. These groundwater levels are subject to seasonal variation and distance from the Site.

According to borehole data and GeoSmart's Groundwater Flood Risk (GW5) map, there is insufficient information available to confirm whether shallow groundwater is present beneath the Site.

The base of the infiltration system needs to be 1 m above the expected seasonal high-water table. Passage through unsaturated soil is important for improving the quality of infiltrating water before it reaches the water table.

Figure 11. Superficial Geology (BGS, 2025)

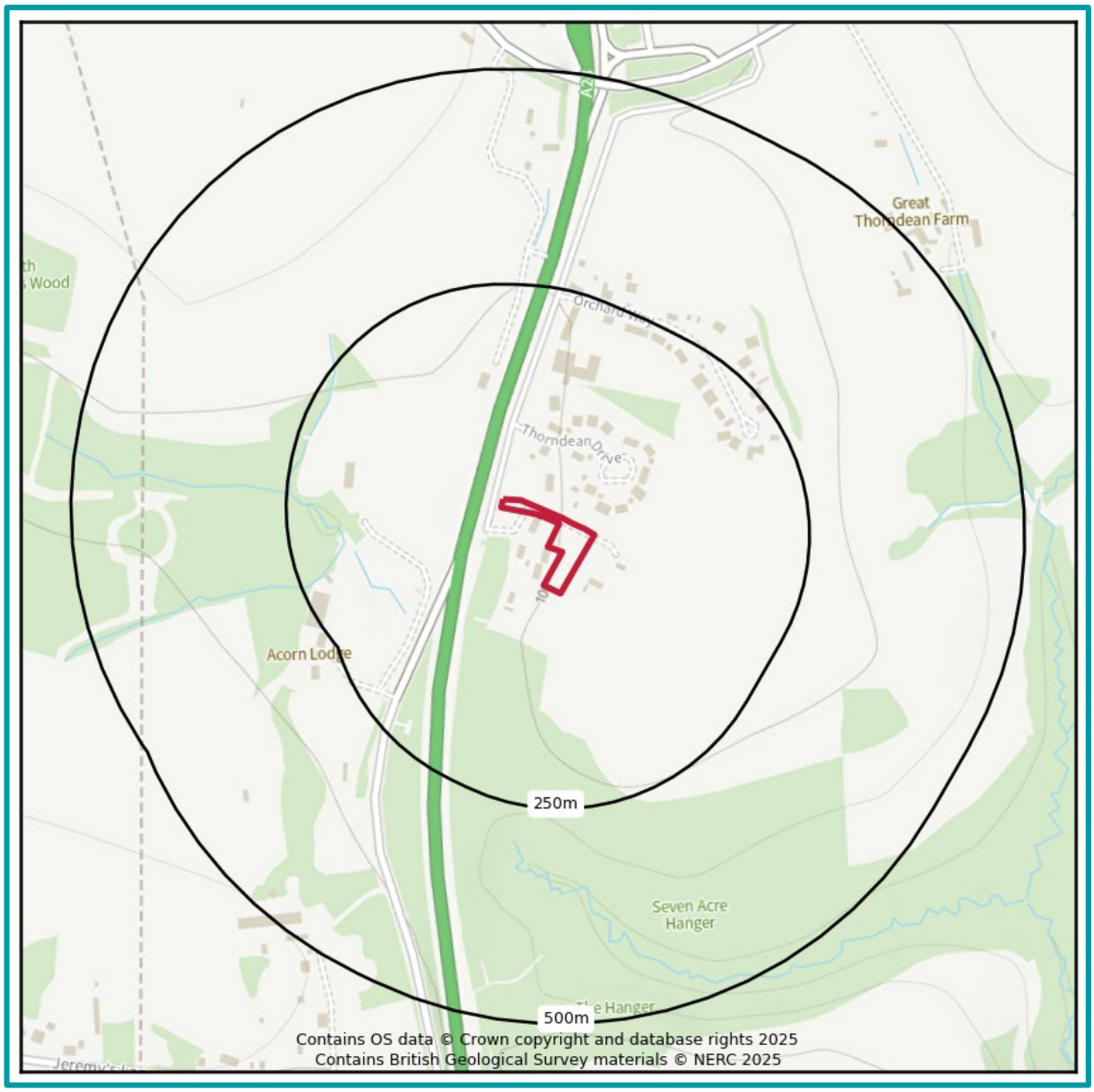
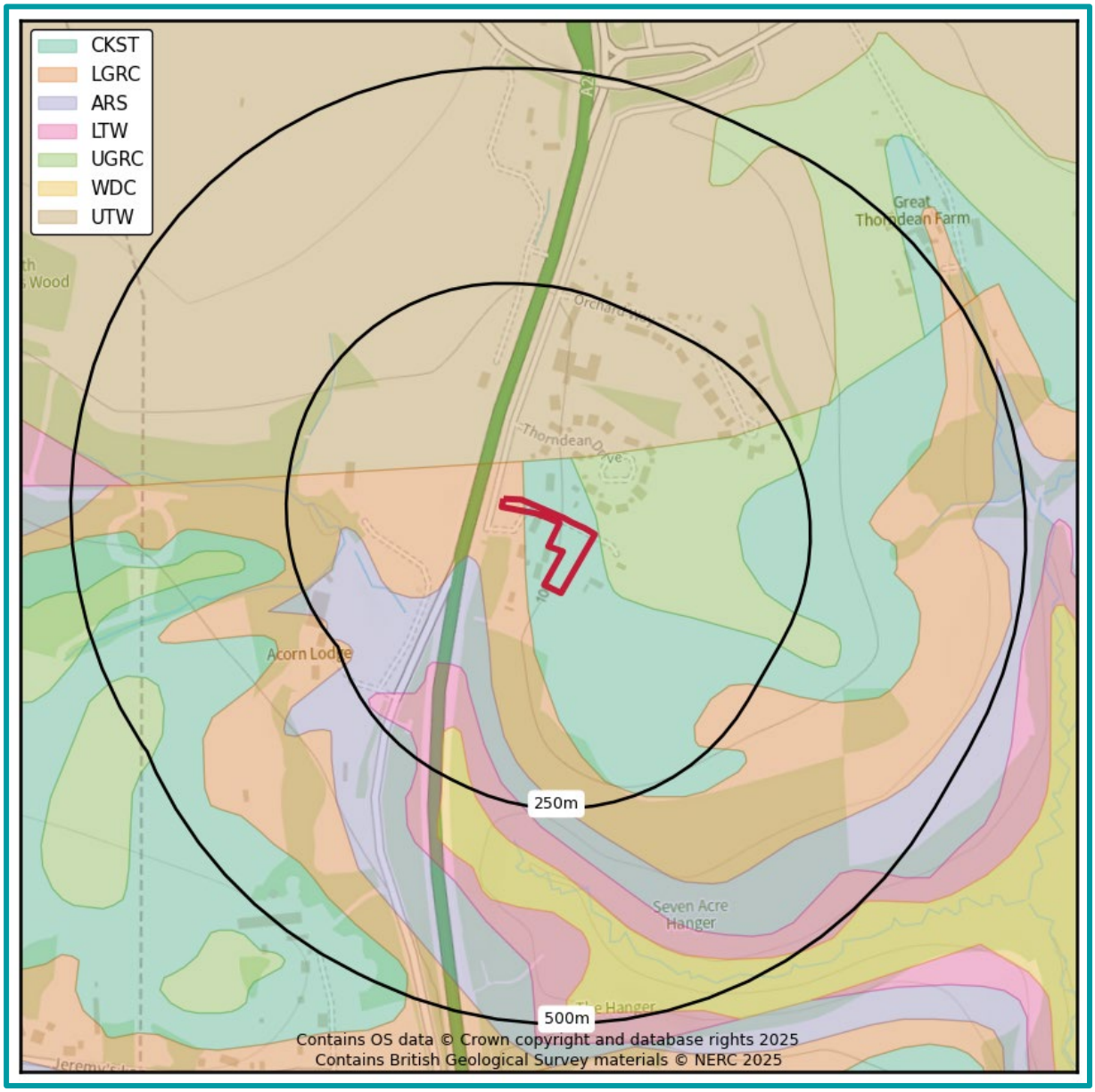


Figure 12. Bedrock Geology (BGS, 2025)



Ground conditions

Infiltration SuDS are proposed within permeable bedrock. Therefore, a detailed review of underlying ground conditions is recommended to ensure focused infiltration does not cause ground instability as a result of landslide or collapse associated with running sand.

Water quality

The Site does not lie within an SPZ. The infiltrated water quality should be of sufficient quality that it does not give rise to pollution of the underlying groundwater. Further consultation with the water company is unlikely to be required.

5 National & local policy context

National Guidance

DEFRA - National standards for sustainable drainage systems (SuDS) (2025)

Standard 1: runoff destinations

A 'SuDS approach' shall be adopted to address the management of surface water by the development and where it should be discharged. Runoff shall be treated as a resource and managed in a way that avoids negative impacts of the development on flood risk, the morphology and water quality of receiving waters and the associated ecology.

Runoff from the development shall be discharged to the following final destinations, to the maximum extent practicable, in accordance with the below hierarchy:

- priority 1: collected for non-potable use
- priority 2: infiltrated to ground
- priority 3: discharged to an above ground surface water body
- priority 4: discharged to a surface water sewer, or another piped surface water drainage system
- priority 5: discharged to a combined sewer

Note 1: priority 1 is the highest priority and priority 5 is the lowest.

Note 2: for the purposes of this standard, a combined sewer is a sewer intended to receive both foul sewage and surface runoff and does not include a sewer intended to receive only foul sewage, even if it has the capacity to accommodate additional flows or has an element of surface water in it already.

To utilise a lesser priority final destination, appropriate evidence shall be provided that demonstrates all higher priority final destinations have been utilised to the maximum extent practicable. Higher cost alone shall not be a reason to utilise lower priority final destinations.

Where more than one final destination is utilised, each final destination's ability to accept runoff shall be maximised in order of priority.

Standard 2: management of everyday rainfall (interception)

Apply a 'SuDS approach' so that at least the first 5mm of rainfall for the majority of rainfall events does not result in runoff from the site to surface waters or piped drainage systems.

Evidence shall be provided that the approach to managing runoff from 'everyday' rainfall has been developed alongside and in support of the management of runoff quality (standard 4) and the delivery of amenity and biodiversity benefits (standards 5 and 6).

Standard 3: management of extreme rainfall and flooding

A 'SuDS approach' shall be adopted to address the management of development runoff during extreme rainfall, including allowances for climate change and urban creep to:

- protect people and property on the development from flooding of the surface water drainage system
- mitigate any increased flood risk to people and property adjacent to or downstream of the development
- protect the receiving water body from morphological damage or minimise the impact on sewer capacity

When discharging to an infiltration feature, the system shall be appropriately sized to accommodate the design event based on ground conditions and contributing areas.

When discharging to an above ground surface water body, sewer or other piped drainage system, the surface water runoff (rate and volume) for the 1% annual exceedance probability (AEP) event shall be controlled to ensure the runoff from the development does not increase flood risk elsewhere.

When discharging to an above ground surface water body, sewer or other piped drainage system, the surface water runoff rate for the 50% AEP event shall be controlled to ensure development runoff from an event of this magnitude has no negative impact.

Any flooding from the surface water drainage system for events up to the 1% AEP event shall be managed within the development.

Any flooding from off-site sources for the 1% AEP event should be managed on site or safely routed through the site, ensuring any downstream risks are not increased compared to the pre-development scenario.

The risks (both on and off the development) associated with flooding from the surface water drainage system for exceedance events greater than the 1% AEP event shall be appropriately managed.

Standard 4: water quality

Apply a 'SuDS approach' that protects surface waters, groundwater and coastal waters by managing the quality of the surface water runoff to adequately address water quality risks from the development.

The proposed SuDS management train(s) shall be based on a robust water quality risk assessment, appropriate to the pollution hazard and sensitivity of receiving waters, reflecting industry recognised guidance or other quantitative assessment as agreed with the approving body and permitting requirements.

Standard 5: amenity

A 'SuDS approach' shall be adopted that maximises benefits for amenity through the creation of multi-functional places and landscapes.

Standard 6: biodiversity

A 'SuDS approach' shall be adopted to ensure the surface water drainage system maximises biodiversity benefits throughout the development lifecycle.

The surface water drainage system shall add biodiversity value by:

- creating diverse, self-sustaining, resilient local ecosystems which contribute to net gains in biodiversity
- supporting and promoting natural local habitat and species, for example, through local nature recovery strategies (LNRS)
- contributing to the delivery of local biodiversity strategies
- contributing to habitat connectivity

Standard 7: design of drainage for construction, operation, maintenance, decommissioning and structural integrity

A 'SuDS approach' shall be adopted to ensure that surface water drainage systems are designed so they can be easily and safely constructed, operated and maintained taking account of the need to minimise negative impacts on natural resources and the environment.

The designer shall provide a management and maintenance plan that supports the design objectives detailed in standards 1 to 6 and ensures the performance of the surface water drainage system with regards to runoff destinations, everyday and extreme rainfall, water quality, amenity and biodiversity is maintained throughout the lifetime of the development.

Surface water drainage design shall examine for the likelihood and consequences of potential failure scenarios that may occur during the operation phase and safely manage the associated risks.

The surface water drainage system shall be designed to ensure structural integrity of all components under anticipated loading conditions for the design life of the development so that it does not affect the structural integrity of any existing or proposed components within, or adjacent to, the development.

Ministry of Housing, Communities & Local Government – National Planning Practice Guidance: Flood risk assessments: climate change allowances (2022)

The Peak rainfall intensity allowances section provides advice on the increased rainfall effects on river levels and land and urban drainage systems. As of May 2022, the applicable climate change allowance is defined by specific Management Catchment for the 1 in 30 (≥ 3.3% AEP) and 1 in 100 (< 3.3 to 1% AEP) year event.

As the Site is located within the Adur and Ouse Management Catchment the following climate change allowances are applicable.

Table 5. Adur and Ouse Management Catchment peak rainfall allowances

Adur and Ouse Management Catchment	3.3% Annual exceedance rainfall event		1% Annual exceedance rainfall event	
	2050s	2070s	2050s	2070s
Central	20%	20%	20%	25%
Upper end	35%	40%	45%	45%

The drainage system should be designed to make sure there is no increase in the rate of runoff discharged from the Site for the upper end allowance.

Where on-Site flooding for the upper end allowance presents a significant flood hazard (for example, depths and velocities of surface water runoff cause a significant danger to people), you will need to take further mitigation measures to protect people and property (for example, raising finished floor levels). As a minimum, there should be no significant flood hazard to people from on-Site flooding for the central allowance.

Sub-national Drainage Policy

Water, People, Places - A guide for master planning sustainable drainage into developments - Prepared by the Lead Local Flood Authorities of the South East of England (AECOM, 2013)

Attenuation

Storing and slowly releasing runoff is one of the primary benefits SuDS offer. Rather than spilling off quickly into sewers or watercourses, increasing the risk of flooding and erosion, SuDS act as a sponge, soaking up excess water, storing it in plants, soils and constructed voids, before slowly releasing back into the surrounding environment through infiltration, plant up-take or controlled discharge. Areas with less permeable soils can incorporate SuDS features that are designed to hold and manage water on or near the surface for controlled discharge or re-use.

Water treatment

Pollution typically found in runoff including sediment, oils, metals, fertilizer, pesticides, and rubbish can be harmful to watercourses and coastal waters. The soils, gravels and vegetation present in many forms of SuDS act as filters, removing many pollutants before returning cleansed water to the natural environment.

Infiltration

SuDS can be used to first cleanse rainwater runoff then to promote infiltration into the ground to replenish groundwater, thereby letting water infiltrate which would have been

prevented from soaking into the ground by impermeable development areas. This also helps to prevent soils from drying out.

Water reuse

South East England is a water stressed region. Many SuDS features can be used locally to capture, treat and manage water for re-supply of cleansed water to buildings or landscapes. Rainwater harvesting can be installed at a range of scales, from individual property scale to site-wide scale, by storing treated runoff at the end of a SuDS treatment train. Re-using rainwater for non-potable purposes such as irrigation and toilet flushing will help reduce potable water demand and deliver Code for Sustainable Homes, BREEAM and other sustainability targets.

Biodiversity and Habitat

SuDS can be designed to include a range of natural processes for managing and filtering surface water runoff. The inclusion of plants, trees, and other vegetation is often advantageous to slow and store water while providing filtration. These can be designed to support local biodiversity aims. SuDS treatment trains can be used to develop ecological corridors at the same time. They can also incorporate a range of vegetation species, ranging from wetland plantings to more common garden varieties. SuDS should be designed to complement and improve the ecology of the area, however consideration should be given to the effects of both species selection and maintenance requirements on the ability of existing habitats to continue functioning effectively.

Amenity

SuDS that integrate greenery or water features can improve the visual character of a development, and in doing so they can also increase property values. Access to green space, views of high quality public realm and street trees have all been shown to increase the resale value of properties. This is particularly the case in urban areas where these elements are not as common. Views of green space and water have been shown to increase commercial rents between 15 and 35%, while a view of a natural environment or high quality public realm can increase residential property values by as much as 15%.

Design for SuDS where space is limited?

SuDS are often associated with large green spaces, however, there are a range of SuDS features which can be easily designed into tight urban settings. Design forethought is required to build SuDS into multi-functional spaces and build up a network of SuDS that manage runoff close to its source to avoid the need for large storage areas. Space efficient SuDS include green roofs, bioretention gardens, permeable paving, rills, rainwater harvesting, hardscape storage, micro-wetlands, and bioretention tree pits.

Local Policy

General Drainage Requirement Guidance (Mid Sussex District Council Flood Risk & Drainage Team, 2023)

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.

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 connections 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.

6 Storage, volume and peak flow rate

Suggested minimum and aspirational storage requirements for an infiltration SuDS scheme for the development footprint are set out below, with more detail provided in subsequent sections. Storage volumes may be reduced (but not below the minimum level) if the design incorporates off-Site discharge.

Table 6. Storage requirements at the proposed development Site (Discharge runoff via infiltration)

Attenuation scenario	Attenuation required (m^3)	Explanation
1 in 100 year including 45% CC	41.91*	Attenuation required to ensure surface water runoff is attenuated in all storm events up to and including the 1 in 100 year event including a 40% allowance for climate change. Calculations are based on an assumed infiltration rate of $1x\ 10^{-5}$ m/s (the worst-case infiltration rate for 'slightly silty, slightly clayey sand' soil types, taken from Table 25.1 of the CIRIA SuDS manual (C753) (2015) – to be confirmed via infiltration testing).

*Subject to confirmation through infiltration testing.

Surface water runoff

An increase in impermeable area on-Site will result in greater rainfall runoff. Reduction in runoff will help mitigate flood risk both on and off-Site. Further information on the surface water runoff calculations is provided in Section 12 'Background Information'.

Only the area intended for development has been considered for the calculations. The access road in the north of the Site is not proposed to be modified and therefore will utilise the existing drainage arrangement.

Table 7. Change in impermeable area associated with the development

Total Site area	3109 m^2
Impermeable area (and as a percentage of the total area of the proposed development footprint of 2148 m^2)	
Pre-development	Post-development
0 m^2 (0%)	1067 m^2 (50%)
Impermeable land use: N/A Permeable land use: Grassy areas	New impermeable land use: 462 m^2 dwelling and garage roofs and 605 m^2 hardstanding New permeable land use: 1081 m^2 landscaped areas

Peak discharge rates

The table below presents peak discharge rates for a range of storm events used to assess the impact of the proposed development and select the maximum permitted discharge rate. Further information on the calculation and control of peak discharge rates is provided in Section 12 'Background Information'.

Table 8. Peak discharge rates associated with the development

Rainfall event	Greenfield runoff rates (l/s)	Existing runoff rates[1] (l/s)	Potential runoff rates without attenuation (l/s)	Potential minus existing (l/s)
QBAR	1.26	N/A	N/A	N/A
6 hour 1 in 1 year	1.07	1.07	2.03	0.96
6 hour 1 in 10 year	2.05	2.05	3.17	1.12
6 hour 1 in 30 year	2.83	2.83	4.03	1.20
6 hour 1 in 100 year	4.03	4.03	5.01	0.98
6 hour 1 in 100 year + 20% CC	N/A	N/A	6.01	1.98
6 hour 1 in 100 year + 45% CC	N/A	N/A	7.26	3.23

[1] Assumes 100% runoff from impermeable surfaces. Assumes Greenfield runoff from permeable surfaces calculated using the IoH124 method.

Relevant national, regional and local planning policy has been consulted in Section 5 to determine restrictions on runoff from previously developed and greenfield sites. In some cases, greenfield rates may be requested, but in practice it is difficult to restrict discharge rates at any one control point to less than 2 l/s, without increasing the risk of any potential blockages occurring in the drainage network.

Total discharge volumes

The table below presents discharge volumes for a range of storm events used to assess the impact of the proposed development and calculate the required storage volumes. Further information on the calculation of total discharge volumes is provided in Section 11 'Methodology and Limitations'.

Table 9. Total discharge volumes associated with the development

Rainfall event	Greenfield runoff volume (m^3)	Existing runoff volume[2] (m^3)	Potential runoff volume without attenuation (m^3)	Potential minus existing (m^3)
QBAR	29.82	N/A	N/A	N/A
6 hour 1 in 1 year	28.15	28.15	43.91	15.77
6 hour 1 in 10 year	44.94	44.94	68.50	23.56
6 hour 1 in 30 year	55.86	55.86	87.15	31.29
6 hour 1 in 100 year	69.34	69.34	108.18	38.84
6 hour 1 in 100 year + 20% CC	N/A	N/A	129.81	60.47
6 hour 1 in 100 year + 45% CC	N/A	N/A	156.85	87.52

[2] Assumes 100% runoff from impermeable surfaces. Assumes Greenfield runoff from permeable surfaces calculated using the IoH124 method.

7 Runoff destination

Options for the destination for the runoff generated on-Site have been assessed in line with the prioritisation set out in the Building Regulations Part H document (HM Government, published in 2010 and updated in 2015) and Defra's national standards for SuDS (2025).

Flow attenuation using infiltration SuDS (discharge to ground) is generally the preferred option. If discharge to ground is not available, runoff discharge to surface water is the other preferred method. Only if these two options are impractical should discharge to the sewer network be considered.

Discharge to ground

The Site has Low to High potential for infiltration, with the area proposed for development underlain by permeable bedrock (Cuckfield Stone Bed). There is insufficient information to confirm whether a shallow groundwater table is present beneath the Site.

There are no known issues identified relating to Site contamination or the presence of a SPZ.

A site investigation comprising trial pits is recommended to confirm the depth to groundwater and allow infiltration tests to be undertaken to confirm the feasibility of an infiltration SuDS scheme.

Discharge to surface watercourse

Ordnance Survey (OS) mapping indicates that there are no viable surface water features within 100 m of the Site. Therefore, discharge to surface water feature is not feasible.

Discharge to sewer

GeoSmart has undertaken an assessment of the location of sewer features within the vicinity of the Site. According to the asset location plan undertaken at the Site (Appendix C), there are no public surface water sewer or combined sewers located within the vicinity of the Site. Therefore, discharging runoff to the public sewer network is not feasible.

Foul Drainage Strategy

Similar to surface water drainage, foul water discharge must also demonstrate compliance with a drainage hierarchy. The National Planning Practice Guidance and Building Regulations Approved Document H provide a hierarchy of drainage options that must be considered and discounted in the following order:

- Connection to the public sewer;
- Package sewage treatment plant (which can be offered to the Sewerage Undertaker for adoption);
- Septic tank;
- If none of the above are feasible, a cesspool.

According to Flows and Loads 4, a system for a single house with up to and including four bedrooms shall be designed for a minimum population (P) of six people. The proposed development consists of four four-bedroom dwellings, resulting in a 24 P. A reduction factor of 0.9 can be applied to developments with between 13 and 25 P to account for the balancing effects on daily flow, which results in a final population of 22 P.

Assuming a daily flow of 150 litres per person per day, an equivalent flow of 3300 litres or 3.3 m^3 per day has been calculated.

The proposed development should discharge foul water to the foul sewer to the west of the Site, following permission from Southern Water to connect.

8 Water quality

A key requirement of any SuDS system is that it protects the receiving water body from the risk of pollution. This can be effectively managed by an appropriate "train" or sequence of SuDS components that are connected in series. The frequent and short duration rainfall events are those that are most loaded with potential contaminants (silts, fines, heavy metals and various organic and inorganic contaminants). Therefore, the first 5-10 mm of rainfall (first flush) should be adequately treated with SuDS.

The minimum number of treatment stages will depend on the sensitivity of the receiving water body and the potential hazard associated with the proposed development SuDS Manual (CIRIA, 2015). The proposed development is a combination of Very Low (residential roof water) to Low hazard (runoff from car parking and access road). The Site does not lie within an SPZ and therefore additional treatment stages are not required.

Table 10. Level of hazard

Hazard	Source of hazard
Very Low	Residential roof drainage
Low	Residential, amenity uses including low usage car parking spaces and roads, other roof drainage.
Medium	Commercial, industrial uses including car parking spaces and roads (excluding low usage roads, trunk roads and motorways).
High	Areas used for handling and storage of chemicals and fuels, handling of storage and waste (incl. scrap-yards).

The recommended minimum number treatment stages suggested for the different runoff waters identified for the proposed development is highlighted in the table below.

Table 11. Minimum number of treatment stages for runoff

		Sensitivity of the receiving water body		
		Low	Medium	High
Hazard	Low	1	1	1
	Med	2	2	2
	High	3	3	3

9 Proposed SuDS strategy

Sustainable drainage systems

DEFRA's national standards for SuDS require the below ground drainage systems to have the capacity to accommodate at least the 1 in 30 year event and to manage the 1 in 100 year event without flooding of on-site buildings and substations. All runoff should be managed on-Site though for the 1 in 100 year event, accounting for the maximum impacts of climate change to ensure flood risk is not increased to third-parties.

It is assumed that drainage from areas outside the development footprint, such as the access road, will continue to use the existing drainage arrangements. These areas have therefore not been included within the proposed SuDS strategy.

A surface water drainage strategy (summarised in Section 2 of this report) includes the following SuDS features to intercept, attenuate and treat surface water runoff.

SuDS Strategy:

Ground conditions at the Site are conducive to infiltration. Surface water runoff will be managed within SuDS features and infiltrated to ground.

Table 12. Proposed SuDS type, features, discharge location and rate restriction

SuDS type	Source control (interception) and infiltration SuDS.
SuDS features	Rainwater harvesting butts and unlined permeable paving.
Discharge location	Infiltration.
Discharge rate	1x 10^{-5} m/s (the worst-case infiltration rate for 'slightly silty, slightly clayey sand' soil types, taken from Table 25.1 of the CIRIA SuDS manual (C753) (2015) – to be confirmed via infiltration testing).

Table 13. Proposed SuDS sizing (dimensions) and attenuation volumes

Rainwater Harvesting	A rainwater harvesting butt should be established for each proposed dwelling. In terms of attenuation storage within this SuDS scheme, the volume of run-off which could be attenuated by rainwater harvesting has not been considered within the Preliminary SuDS strategy.
Permeable paving	A 343 m^2 area of unlined permeable paving has been designated for focused infiltration and will accept runoff from the building roofs. This area will be underlain with a Type 3 aggregate material to a depth of 0.50 m, with a 30% porosity, and will provide the required c. 41.91 m^3 attenuation.

	The remaining 262 m^2 of the proposed hard standing will be underlain by unlined permeable paving and will be designated as an unfocused infiltration feature; this will reduce the total area of impermeable surfaces, closer mimicking greenfield conditions. As these areas will exclusively drain themselves and not to be used for attenuation, the attenuation volume that could result from them has not been considered.
Total Attenuation Provided	41.91 m^3
Total Attenuation Required	41.91 m^3

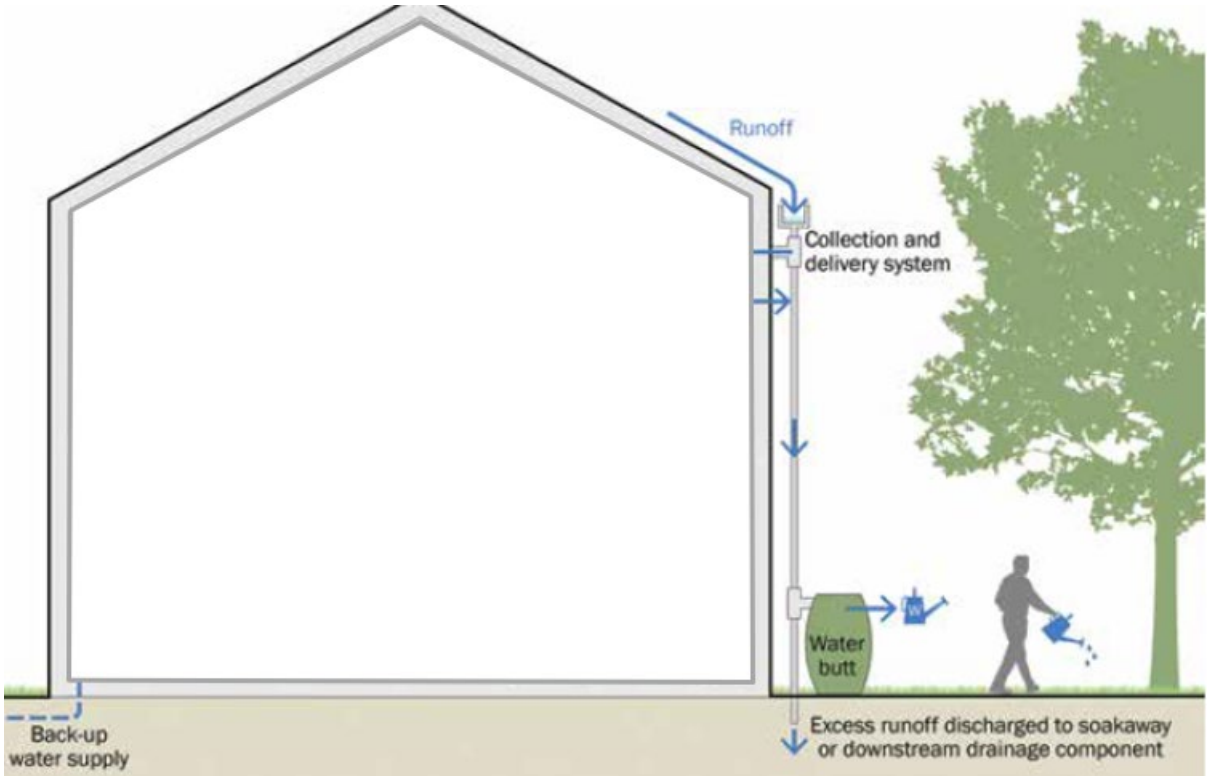
Rainwater harvesting

Rainwater harvesting butts are proposed for each dwelling. The run-off from the proposed development roof should be led into rainwater harvesting butts via rainwater downpipes and guttering to catch run-off. Overflow from the butts should be discharged into the storage system provided by the permeable paving.

Due to the relatively insignificant amounts of attenuation provided by rainwater harvesting tanks in this instance and the requirement to retain water for non-potable uses such as garden maintenance, the volume of run-off which could be attenuated by rainwater harvesting has not been considered within the report.

As there is an issue with the storage capability of rainwater harvesting tanks, this method should have a fixed attenuation volume and a controlled outlet to discharge into the proposed SuDS feature. An overflow system will be required for implementation on the Site due to exceedance events (where the pumps fail or there is a blockage within the system / or the number of residents and subsequent water usage is reduced).

Roof run-off is generally less polluted than run-off from road surfaces but can still generate pollutants such as sediments. Pollutants would be captured by the collection and filtration system and, by reducing the volume of run-off generated from the Site. Primary screening devices are used to prevent leaves and other debris from entering the butt and first flush devices can be designed to divert the first part of the rainfall away from the main storage tank and can pick up most of the dirt, debris and contaminates that collect on a residential roof.



Modified from Figure 11.3 of the CIRIA SuDS Manual (C753) (2015)

Permeable paving

Unlined permeable paving is proposed for all hardstanding areas to intercept runoff. Suitable aggregate materials (angular gravels with suitable grading as per CIRIA, 2015) will improve water quality due to their filtration capacity and usually work to a 30% porosity. A geotextile layer will be required for paving underlain by aggregate material to intercept silt/particles. Permeable pavements are multi-layered surfacing systems. The surface layer is constructed out of permeable material allowing infiltration of water through gaps along its surface. A geomembrane isolates stored water from the surrounding soil, especially in contaminated areas and a geotextile layer prevents clogging and damage to the geo-cellular modules.

The geotextile layer works to intercept silt/particles flowing through the system via direct rainfall, or through vehicle use deposited onto the car park area and into the permeable paving. The majority of silt would be trapped within the top 30mm of the joining material between the paving blocks. Rainfall flowing into the permeable paving directly from the development roof/rainwater butts would not contain enough volumes of silt and or particles to cause blockage so will be fed directly into underlying porous substrate via rainwater pipes. Downpipes from the development roofs/rainwater butts should extend through the paving for c.5 meters to divert roof run-off away from building foundations. Paving could also implement an impermeable liner close to the building or creating a separate compartment within the permeable sub-base close to the building to further divert attenuated water away from building foundations.

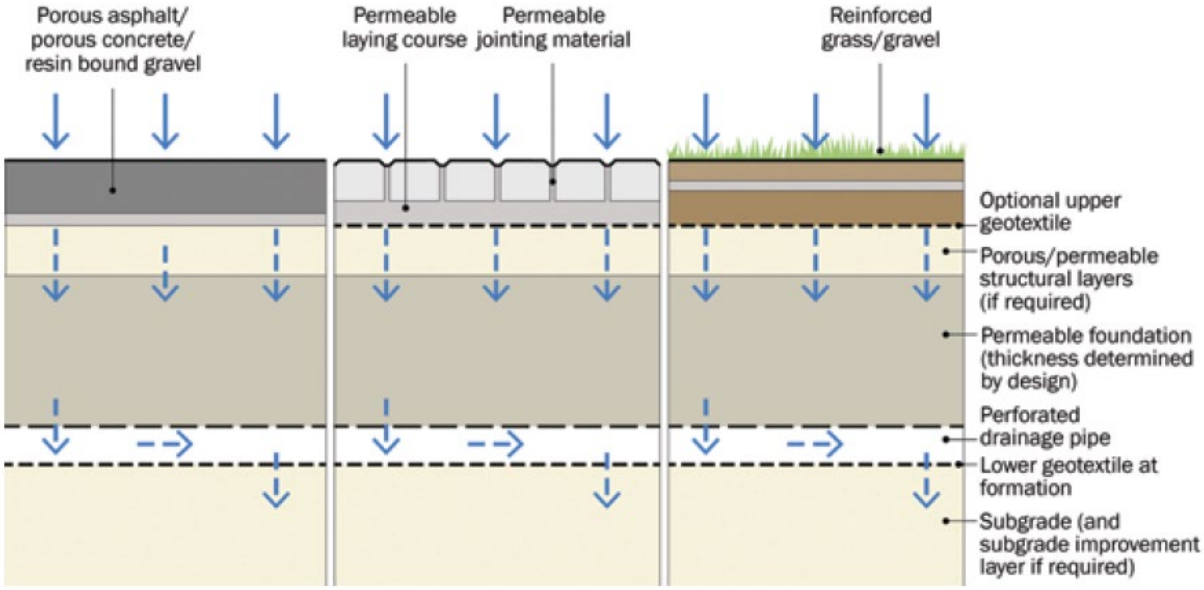


Figure 20.13 of the CIRIA SuDS Manual (C753) (2015)

Exceedance flows

Exceedance flow routes are included within the proposed SuDS drainage layout. Where possible, exceedance flows should be directed away from buildings and into non-essential areas of the Site such as landscaping. The SuDS system recommended for the Site should provide enough storage that this method would only be utilised during a worst case scenario.

10 SuDS maintenance

Regular maintenance is essential to ensure effective operation of the SuDS features over the intended lifespan of the proposed development. The SuDS Manual (C753) (CIRIA, 2015) provides a maintenance schedule for SuDS with details of the necessary required actions as shown in the Table below.

Table 14. SuDS operation and recommended maintenance requirements

Asset type	Maintenance schedule (and frequency)
Permeable pavements	Regular maintenance: • Brushing and vacuuming (three times per year). • Trimming any roots and surrounding grass and weeds that may be causing blockages (annually or as required). Monitoring: • Initial inspection (monthly). • Inspect for poor performance and inspection chambers (annually).
Underground drainage pipe network	Regular maintenance: • Remove sediment and debris from pre-treatment devices and floor of inspection tube or chamber (annually). • Cleaning of gutters and any filters on downpipes (annually). • Trimming any roots that may be causing blockages (annually or as required). Monitoring: • Inspect silt traps and note rate of sediment accumulation (monthly in the first year and then annually).
Rainwater harvesting	Regular maintenance: • Inspection of tank for debris and sediment build up (annually and following poor performance). • Inspection of inlets, outlets, overflow areas, pumps and filters (annually and following poor performance). • Cleaning of tank, inlets, outlets, gutters, roof drain filters and withdrawal devices (annually or as required). Remedial actions: • Repair or overflow erosion damage or damage to tank and associated components (as required)

Client checklist

A drainage strategy has been recommended as suitable on the basis of the information provided. Prior to installation of the Site drainage system it is recommended that the client carries out the following checks to confirm the development proposals. GeoSmart would be able to support with any updates required to the drainage scheme, please contact us and we would be happy to provide you with a proposal to undertake the work.

Table 15. Potential SuDS limitations

Limitations to infiltration SuDS	Do these conditions arise at the Site?
Is the surface runoff greater than the rate at which water can infiltrate into the ground?	
Is there an unacceptable risk of ground instability?	
Is there an unacceptable risk of mobilising contaminants?	
Is there an unacceptable risk of pollution to groundwater?	
Is there an unacceptable risk of groundwater flooding?	
Is the infiltration system going to create a high risk of groundwater leakage to the combined sewer?	

Table 16. SuDS design considerations

Confirm that potential flooding on-Site in excess of the design storm event and exceedance flow routes have been considered.	
Review options for the control of discharge rates (e.g. hydrobrake).	
Confirm the owners/adopters of the drainage system. Consider management options for multiple owners.	
Is there an unacceptable risk of pollution to groundwater?	
Review access and way leave requirements.	
Review maintenance requirements.	

Health and safety considerations for SuDS

GeoSmart reports may include outline strategies or designs to support with development plans. Any drawings or advice provided do not comprise any form of detailed design. Implementation of any conceptual scheme options may constitute 'Construction Work' as defined by CDM Regulations (2015).

The CDM Regulations place specific Health and Safety duties on those commissioning, planning and undertaking construction works. If you are uncertain what this means you should seek the advice of your architect, builder or other competent professional.

GeoSmart does not provide health and safety advisory services but we are required to advise you of your general responsibilities under CDM (visit http://geosmartinfo.co.uk/knowledge-hub/cdm-2015/ for more information).

Please remember that detailed design work should be undertaken by a competent professional who might be your engineer, architect, builder or another competent party.

11 Methodology and limitations of study

This report assesses the feasibility of infiltration SuDS and alternative drainage strategies in support of the Site development process. From April 6th 2015 SuDS are regulated by Local Planning Authorities and will be required under law for major developments in all cases unless demonstrated to be inappropriate. What is considered appropriate in terms of costs and benefits by the Planning Authority will vary depending on local planning policy, and Site setting. The Lead Local Flood Authority will require information as a statutory consultee on major planning applications with surface water drainage implications. The National Planning Policy Framework requires that new developments in areas at risk of flooding should give priority to the use of SuDS and demonstrate that the proposed development does not increase flood risk downstream to third parties.

How was the suitability of SuDS estimated for the Site?

There are a range of SuDS options available to provide effective surface water management that intercept and store excess runoff. When considering these options, the destination of the runoff should be assessed using the order of preference outlined in the Building Regulations Part H document (HM Government, 2010) and Defra's National Standards for SuDS (2025):

1. Discharge to the ground;
2. Discharge to a surface water body;
3. Discharge to a surface water sewer;
4. Discharge to a local highway drain; and
5. Discharge to a combined sewer.

Data sets relating to each of the potential discharge options have been analysed to assess the feasibility of each option according to the hierarchy set out above. Hydrogeological characteristics for the Site are assessed in conjunction with the occurrence of SPZ's to assess infiltration suitability. The Site has been screened to determine whether flood risk from groundwater, surface water, fluvial or coastal sources may constrain SuDS. The distance to surface water bodies and sewers has been reviewed gauge whether these provide alternative options.

GeoSmart SuDS Infiltration Suitability Map (SD50)

The GeoSmart SuDS Infiltration Suitability Map (SD50) screens the suitability for infiltration drainage in different parts of the Site and indicates where further assessment is recommended. In producing the SuDS Infiltration Suitability Map (SD50), GeoSmart used data from the British Geological Survey on groundwater levels, geology and permeability to screen

for areas where infiltration SuDS may be suitable. The map classifies areas into 3 categories of High, Medium and Low suitability for infiltration SuDS. This can then be used in conjunction with additional data on Site constraints to give recommendations for SuDS design and further investigation.

The primary constraint on infiltration potential is the minimum permeability of the underlying material and in some cases the range in permeability may be considerable, ranging down to low. The map classifies these areas as moderate infiltration suitability requiring further investigation. In cases where the thickness of the receiving permeable horizon is less than 1.5 meters then additional Site investigation is recommended. If the Site is at risk of groundwater flooding for up to the 1% annual occurrence the map classifies these areas as moderate infiltration suitability requiring further investigation.

The GeoSmart SuDS Infiltration Suitability Map (SD50) is a national screening tool for infiltration SuDS techniques but a Site specific assessment should be used before final detailed design is undertaken. Further information on the GeoSmart SuDS Infiltration Suitability Map (SD50) is available at geosmartinfo.co.uk

How is the suitability to discharge to sewers and watercourses calculated?

The suitability to discharge to discharge to sewers and watercourses has been calculated using the distance from the Site to both. For example, where the Site is within 50 m of a surface water body. Discharge to surface water is potentially appropriate subject to land access arrangements and a feasibility assessment. Where the Site is within 50 m of a sewer, discharge to sewer is potentially appropriate subject to land access arrangements and a feasibility assessment. The utility company should be contacted to agree connection feasibility and sewer capacity.

Further information relating to sewers available in the area can be found in Appendix C.

What is a Source Protection Zone?

The Environment Agency have defined Source Protection Zones (SPZs) for 2000 groundwater sources such as wells, boreholes and springs used for public drinking water supply. These zones show the risk of contamination from any activities that might cause pollution in the area. The closer the activity, the greater the risk. The maps show three main zones (inner, outer and total catchment) and a fourth zone of special interest, which is occasionally applied. The zones are used to set up pollution prevention measures in areas which are at a higher risk. The shape and size of a zone depends on the condition of the ground, how the groundwater is removed, and other environmental factors. Inner zone (Zone 1) is defined as the 50 day travel time from any point below the water table to the source (minimum radius of 50 metres). Outer zone (Zone 2) is defined by a 400 day travel time. Total catchment (Zone 3) is defined as the area around a source within which all groundwater recharge is presumed to be discharged at the source.

How was surface water runoff estimated from the Site?

In accordance with The SuDS Manual (C753) (CIRIA, 2015), the Greenfield runoff from the Site has been calculated using the IoH124 method and is assumed representative of the runoff generated on the undeveloped surfaces that are affected by the proposed development. The method used for calculating the runoff complies with the NPPF (MHCLG, 2023). For the impermeable surfaces, it has been assumed that 100% runoff will occur (calculations provided in Appendix B). Rainfall data is derived from the Flood Estimation Handbook (FEH), developed by NERC (2009). Only areas affected by the proposed development are considered in the flow and volume calculations. Permeable areas that remain unchanged are not included in the calculations as it is assumed these will not be actively drained and attenuated.

What is the peak discharge rate?

An estimation of peak runoff flow rate and volume is required to calculate infiltration, storage and discharge requirements. The peak discharge rate is the maximum flow rate at which surface water runoff leaves the Site during a particular storm event, without considering the impact of any mitigation such as storage, infiltration or flow control. Proposed discharge rates (with mitigation) should be no greater than existing rates for all corresponding storm events. If all drainage is to infiltration there will be no discharge off-Site. Discharging all flow from Site at the existing 1 in 100 event would increase flood risk during smaller events. Flow restriction is generally required to limit the final discharge from Site during all events as a basic minimum to the green field QBAR rate. A more complex flow restriction which varies the final discharge rate from the Site depending on the storm event will reduce the volume of storage required on-Site. Drainage to infiltration SuDS is subtracted from the total discharge off-Site to achieve a beneficial net affect.

What is the total discharge volume?

The total discharge volume is calculated on the basis of the surface water runoff that has the potential to leave the Site as a result of the assumed 6 hour duration design storm event. The runoff is related to the underlying soil conditions, impermeable cover, rainfall intensity and duration of the storm event. The total volume generated by the current Site is compared to the potential total volume from the developed Site (not taking into consideration any mitigation). The difference provides the minimum total volume that will need to be stored and infiltrated on-Site or released at a controlled rate. Guidance indicates that the total discharge volume should never exceed the runoff volume from the development Site prior to redevelopment for that event and should be as close as is reasonably practicable to the Greenfield runoff volume.

12 Background SuDS information

SuDS control surface water runoff close to where it falls. SuDS are designed to replicate, as closely as possible, the natural drainage from the Site before development to ensure that the flood risk downstream does not increase as a result of the Site being developed, and that the Site will have satisfactory drainage under current and likely future climatic conditions. SuDS provide opportunities to reduce the causes and impacts of flooding; remove pollutants from urban runoff at source; and combine water management with green space with benefits for amenity, recreation and wildlife. Government planning policy and planning decisions now include a presumption in favour of SuDS being used for all development Sites, unless they can be shown to be inappropriate.

For general information on SuDS see our website: http://geosmartinfo.co.uk/

Infiltration SuDS

Government policy for England is to introduce sustainable drainage systems (SuDS) via conditions in planning approvals. Guidance indicates that capturing rainfall runoff on-Site and infiltrating it into the ground (infiltration SuDS) is the preferred method for managing surface water without increasing flood risk downstream.

The greatest benefit to general flood risk is if all runoff is infiltrated on-Site, however, this may not be feasible due to physical and economic constraints in which case infiltration may be considered as a part of an integrated drainage solution. The final design capacity for an infiltration SuDS system depends on the Site constraints and the requirements of the individual Planning Authority and the Lead Local Flood Authority.

The capacity of the ground to receive infiltration depends on the nature, thickness and permeability of the underlying material and the depth to the high groundwater table. The final proportion of the Site drained by infiltration will depend on topography, outfall levels and a suitable drainage gradient. It is important to note that, even if the whole Site cannot be drained by infiltration, the use of partial infiltration is encouraged, with the remainder of runoff discharged via other SuDS systems.

Types of infiltration SuDS

Infiltration components include infiltration trenches, soakaways, swales and infiltration basins without outlets, rain gardens and permeable pavements. These are used to capture surface water runoff and allow it to infiltrate (soak) and filter through to the subsoil layer, before returning it to the water table below.

An infiltration trench is usually filled with permeable granular material and is designed to promote infiltration of surface water to the ground. An infiltration basin is a dry basin or depression designed to promote infiltration of surface water runoff into the ground. Soakaways are the most common type of infiltration device in the UK where drainage is often connected to over-sized square or rectangular, rubble-filled voids sited beneath lawns.

According to the guidance in Building Research Establishment (BRE) Digest 365 (2016) a soakaway must be able to discharge 50% of the runoff generated during a 1 in 10 year storm event within 24 hours in readiness for subsequent storm flow. This is the basic threshold criteria for a soakaway design and the internal surface area of the proposed soakaway design options should be calculated on this basis by taking into account the soil infiltration rate for the Site.

Developers need to ensure their design takes account of the construction, operation and maintenance requirements of both surface and subsurface components, allowing for any machinery access required.

SuDS maintenance and adoption

Regular maintenance is essential to ensure effective operation of the soakaway(s) over the intended lifespan of the proposed development. A maintenance schedule for SuDs is required. Sewerage undertakers or Local Authorities may adopt SuDS and will require maintenance issues to be dealt with in accordance with their Management Plan. If the SuDS will not be adopted other provision is required with associated financial implications. Maintenance is a long-term obligation requiring the upkeep of all elements of the SuDS, including mechanical components (e.g. pumps), as well as inspections, regular maintenance and repair.

Additional background SuDS information can be found on our website: http://geosmartinfo.co.uk/

13 Further information

The following table includes a list of additional products by GeoSmart:

Additional GeoSmart Products			
	Additional assessment: FloodSmart Report		The FloodSmart Report range provides clear and pragmatic advice regarding the nature and potential significance of flood hazards which may be present at a Site. Our consultants assess available data to determine the level of risk based on professional judgement and years of experience. Please contact info@geosmartinfo.co.uk for further information.
	Additional assessment: EnviroSmart Report		Provides a robust desk-based assessment of potential contaminated land issues, taking into account the regulatory perspective. Our EnviroSmart reports are designed to be the most cost effective solution for planning conditions. Each report is individually prepared by a highly experienced consultant conversant with Local Authority requirements. Ideal for pre-planning or for addressing planning conditions for small developments. Can also be used for land transactions. Please contact info@geosmartinfo.co.uk for further information.

14 References and glossary

AECOM (2013). Water, People, Places - A guide for master planning sustainable drainage into developments. Accessed from: https://www.westsussex.gov.uk/fire-emergencies-and-crime/dealing-with-extreme-weather/flooding/flood-risk-management/sustainable-drainage-systems/ on 12/08/2025.

British Geological Survey (BGS). (2025). GeoIndex Onshore. Based on British Geological Survey materials © NERC 2025. Accessed from: https://mapapps2.bgs.ac.uk/geoindex/home.html on 12/08/2025.

British Water (2013). Flows and Loads - 4.

Building Research Establishment (BRE) (2016). Digest 365, Soakaway design.

CEH (2025) Online FEH web service Depth/duration/frequency modelling using the FEH 2022 models. Accessed from: https://fehweb.ceh.ac.uk/ on 12/08/2025.

CIRIA (2015) The SuDS manual (C753).

Department for Environment, Food and Rural Affairs [DEFRA] (2025). National standards for sustainable drainage systems (SuDS).

Environment Agency [EA] (2025). MagicMap. Accessed from: http://magic.defra.gov.uk/MagicMap.html on 12/08/2025.

GeoSmart (2025) GeoSmart GW5 Version 2.4.

HM Government (2010). The building regulations 2010 Part H drainage and waste disposal (2015 edition).

LASOO (2015) Practice Guidance, Local Authority SuDS Officer Organisation.

Ministry of Housing, Communities & Local Government. (2024). National Planning Policy Framework (NPPF).

Ministry of Housing, Communities & Local Government. (2022). National Planning Policy Guidance (NPPG).

Mid Sussex District Council Flood Risk & Drainage Team (2023). General Drainage Requirement Guidance. Accessed from: https://www.midsussex.gov.uk/planning-building/flood-risk-and-drainage-for-planning/ on 12/08/2025.

Southern Water (2025). (Land to the rear of 6 Highfields, Brighton Road, Warninglid, Haywards Heath, RH17 5SY) Asset Location Plan. Ref: 1845251 - 1

GeoSmart Information

Glossary

General terms

Attenuation	Reduction of peak flow and increased duration of a flow event.
Combined sewer	A sewer designed to carry foul sewage and surface water in the same pipe.
Detention basin	A vegetated depression, normally is dry except after storm events, constructed to store water temporarily to attenuate flows. May allow infiltration of water to the ground.
Evapotranspiration	The process by which the Earth's surface or soil loses moisture by evaporation of water and by uptake and then transpiration from plants.
FEH	Flood Estimation Handbook, produced by Centre for Ecology and Hydrology, Wallingford (formerly the Institute of Hydrology).
Filter drain or trench	A linear drain consisting of a trench filled with a permeable material, often with a perforated pipe in the base of the trench to assist drainage, to store and conduct water, but may also be designed to permit infiltration.
First flush	The initial runoff from a site or catchment following the start of a rainfall event. As runoff travels over a catchment it will collect or dissolve pollutants, and the "first flush" portion of the flow may be the most contaminated as a result. This is especially the case for intense storms and in small or more uniform catchments. In larger or more complex catchments pollution.
Flood plain	Land adjacent to a watercourse that would be subject to repeated flooding under natural conditions (see Environment Agency's Policy and practice for the protection of flood plains for a fuller definition).
Greenfield runoff	This is the surface water runoff regime from a site before development, or the existing site conditions for brownfield redevelopment sites.
Impermeable surface	An artificial non-porous surface that generates a surface water runoff after rainfall.
Permeability	A measure of the ease with which a fluid can flow through a porous medium. It depends on the physical properties of the medium, for example grain size, porosity and pore shape.

Runoff	Water flow over the ground surface to the drainage system. This occurs if the ground is impermeable, is saturated or if rainfall is particularly intense.
Sewerage undertaker	This is a collective term relating to the statutory undertaking of water companies that are responsible for sewerage and sewage disposal including surface water from roofs and yards of premises.
Soakaway	A subsurface structure into which surface water is conveyed to allow infiltration into the ground.
Treatment	Improving the quality of water by physical, chemical and/or biological means.

The terms included in this glossary have been taken from CIRIA (2015) guidance.

Data Sources

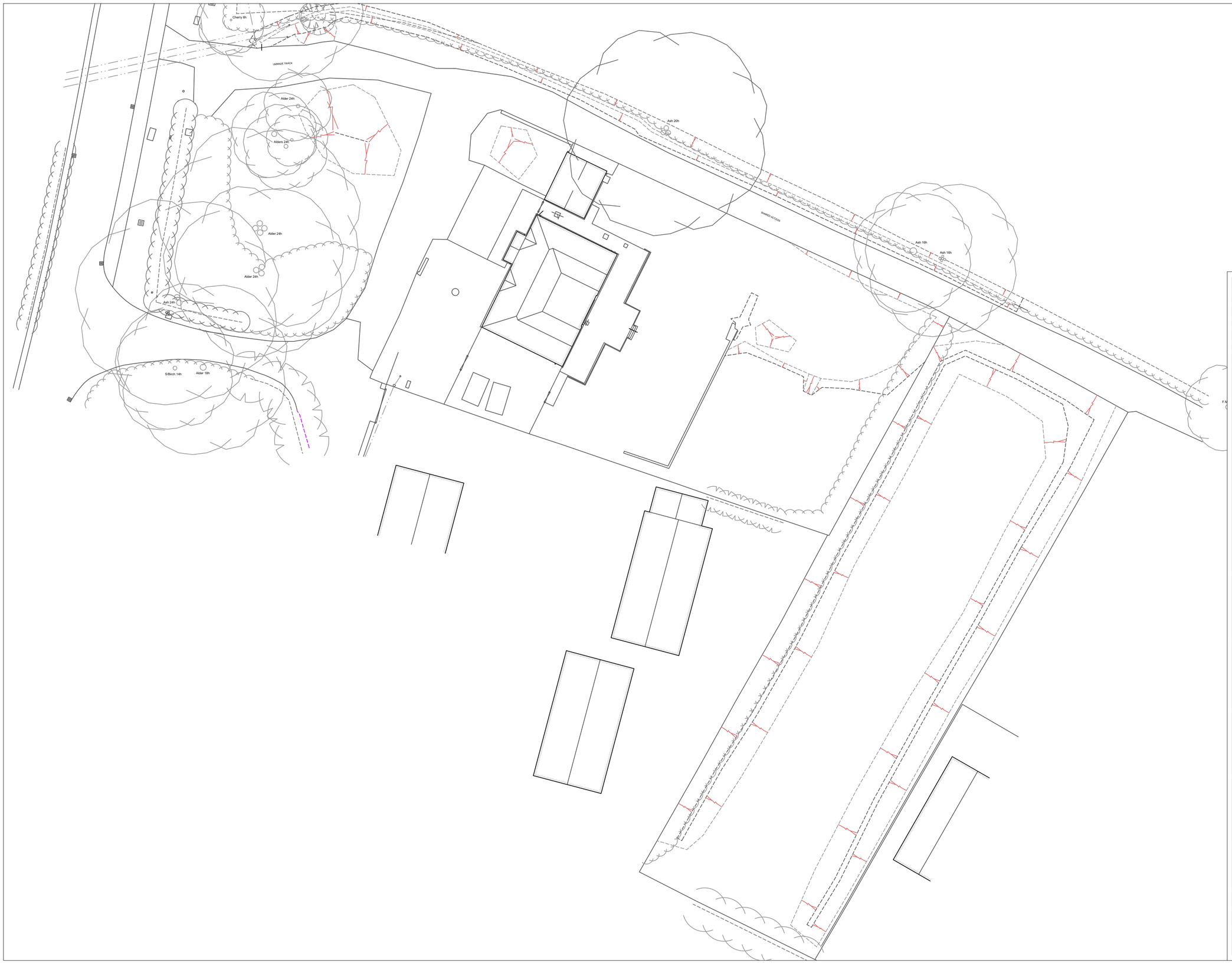
Aerial Photography	Contains Ordnance Survey data © Crown copyright and database right 2025 BlueSky copyright and database rights 2025
Bedrock & Superficial Geology	Contains British Geological Survey materials © NERC 2025 Ordnance Survey data © Crown copyright and database right 2025
Flood Risk (RoFRS/Pluvial/Surface Water Features/SPZ)	Environment Agency copyright and database rights 2025 Ordnance Survey data © Crown copyright and database right 2025
Flood Risk (Groundwater) and SuDS infiltration suitability (SD50)	GeoSmart, BGS & OS GW5 (v2.4) Map (GeoSmart, 2025) Contains British Geological Survey materials © NERC 2025 Ordnance Survey data © Crown copyright and database right 2025
Sewer Location	Contains Ordnance Survey data © Crown copyright and database right 2025 Contains Southern Water search data 2025
Topographic Data	OS LiDAR/EA Contains Ordnance Survey data © Crown copyright and database right 2025 Environment Agency copyright and database rights 2025

15 Appendices

GeoSmart Information

Appendix A

Site plans



Rev	Description	Date

- These drawings have been prepared for the purpose of obtaining planning approval only.
- All dimensions must be checked on site by the client and/or building contractor.
- The client is responsible for all matters relating to Party Wall Act 1996 and Right to Light.
- Where existing drain runs are shown these are assumed only.
- The client is responsible for checking that boundaries are correct and proposals do not conflict with any restrictive covenants which may be in title deeds.
- All works to be executed to the satisfaction of the Local Authority and to comply with all current Building Regulations , Planning Requirements, British Standards and Codes of Practice.

LPS Architecture
Phone: 01206 323603 Email: info@lpsgroup.co.uk

PROJECT
New Build Dwellings

ADDRESS
Land to the Rear of 6 Highfields, Brighton Road, Warninglid

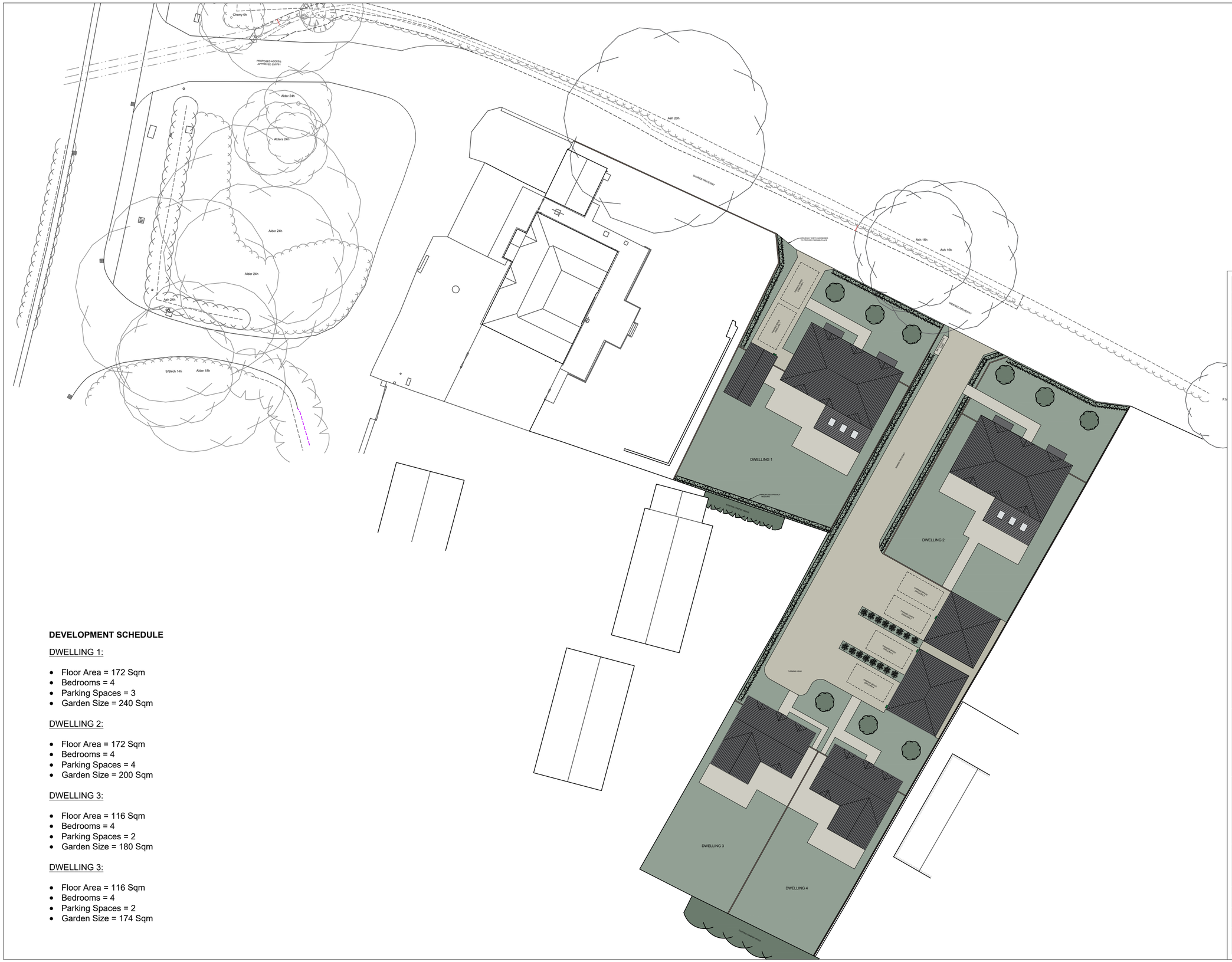
TITLE
Existing Site Plan

CLIENT
Haynes

DRAWN BY	CHECKED BY	DATE
TY	JY	09/01/2025

SCALE	PROJECT NUMBER
A1 @ NTS	LPS 1291

DRAWING NUMBER	REV
1.0	00



DEVELOPMENT SCHEDULE

DWELLING 1:

- Floor Area = 172 Sqm
- Bedrooms = 4
- Parking Spaces = 3
- Garden Size = 240 Sqm

DWELLING 2:

- Floor Area = 172 Sqm
- Bedrooms = 4
- Parking Spaces = 4
- Garden Size = 200 Sqm

DWELLING 3:

- Floor Area = 116 Sqm
- Bedrooms = 4
- Parking Spaces = 2
- Garden Size = 180 Sqm

DWELLING 3:

- Floor Area = 116 Sqm
- Bedrooms = 4
- Parking Spaces = 2
- Garden Size = 174 Sqm

Rev	Description	Date

- These drawings have been prepared for the purpose of obtaining planning approval only.
- All dimensions must be checked on site by the client and/or building contractor.
- The client is responsible for all matters relating to Party Wall Act 1996 and Right to Light.
- Where existing drain runs are shown these are assumed only.
- The client is responsible for checking that boundaries are correct and proposals do not conflict with any restrictive covenants which may be in title deeds.
- All works to be executed to the satisfaction of the Local Authority and to comply with all current Building Regulations , Planning Requirements, British Standards and Codes of Practice.

LPS Architecture
Phone: 01206 323603 Email: info@lpsgroup.co.uk

PROJECT
New Build Dwellings

ADDRESS
Land to the Rear of 6 Highfields, Brighton Road, Warninglid

TITLE
Proposed Site Plan

CLIENT
Haynes

DRAWN BY	CHECKED BY	DATE
TY	JY	10/06/2025

SCALE	PROJECT NUMBER
A1 @ NTS	LPS 1291

DRAWING NUMBER	REV
1.1	A

1:1250

0 25m 50m 75m 100m

N

Rev	Description	Date

These drawings have been prepared for the purpose of obtaining planning approval only

FOR PLANNING PERMISSION ONLY

LPS Architecture
Phone: 01206 323603 Email: info@lpsgroup.co.uk

PROJECT
New Build Dwellings

ADDRESS
Land to the Rear of 6 Highfields, Brighton Road, Warninglid

TITLE
Location Plan

CLIENT
Haynes

DRAWN BY	CHECKED BY	DATE
JTY		24/07/2025

SCALE	PROJECT NUMBER
A3 @ 1:1250 & 1:500	LPS 1291

DRAWING NUMBER	REV
1.3	00

GeoSmart Information

Appendix B

Rainfall runoff calculations

Design Settings

Rainfall Methodology	FEH-22	Minimum Velocity (m/s)	1.00
Return Period (years)	2	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	0.200
CV	0.750	Preferred Cover Depth (m)	1.200
Time of Entry (mins)	5.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	✓
Maximum Rainfall (mm/hr)	50.0		

Nodes

Name	Area (ha)	Cover Level (m)	Depth (m)
Dwelling	0.081	10.000	0.650

Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Starting Level (m)	
Rainfall Events	Singular	Skip Steady State	x	Check Discharge Rate(s)	x
Summer CV	0.750	Drain Down Time (mins)	240	Check Discharge Volume	x
Winter CV	0.840	Additional Storage (m³/ha)	20.0		

Storm Durations

15	30	60	120	180	240	360	480	600	720	960	1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0
30	0	0	0
100	0	0	0
100	45	0	0

Node Dwelling Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.03600	Invert Level (m)	9.350	Slope (1:X)	300.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	164	Depth (m)	0.500
Safety Factor	2.0	Width (m)	8.000	Inf Depth (m)	
Porosity	0.30	Length (m)	43.000		

Results for 2 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	Dwelling	88	9.481	0.131	4.3	6.5224	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
120 minute winter	Dwelling	Infiltration	1.6

Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	Dwelling	108	9.602	0.252	9.8	19.2300	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
120 minute winter	Dwelling	Infiltration	1.7

Results for 100 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	Dwelling	116	9.665	0.315	12.3	25.8925	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
120 minute winter	Dwelling	Infiltration	1.7

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	Dwelling	176	9.817	0.467	13.2	41.9071	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
180 minute winter	Dwelling	Infiltration	1.7

Input parameters for run-off calculations		
Country	England	
Total site area	3109	m^2
Area proposed for development	2148	m^2
Current permeable ground cover	2148	m^2
Current impermeable ground cover	0	m^2
Proposed permeable ground cover	1081	m^2
Proposed impermeable ground cover	1067	m^2
Urban Creep Allowance	0%	
Final impermeable ground cover	1067	m^2
SPR	0.47	
SAAR	829	mm
Region	7	
Climate change factor	45%	
Discharge Rate (l/s)	2.0	
Run-off coefficient	100%	

Current impermeable area as % of total	0%
Proposed impermeable area as % of total	50%
Change in permeable area (m2)	-1067
Change in impermeable area (m2)	1067
Change in impermeable area as % of total	50%

Rainfall event	Greenfield run-off rates (l/s)	Existing run-off rates(l/s)	Potential run-off rates without attenuation (l/s)	Potential minus exisiting (l/s)
QBAR	1.26	N/A	N/A	N/A
6 hour 1 in 1 year	1.07	1.07	2.03	0.96
6 hour 1 in 10 year	2.05	2.05	3.17	1.12
6 hour 1 in 30 year	2.83	2.83	4.03	1.20
6 hour 1 in 100 year	4.03	4.03	5.01	0.98
6 hour 1 in 100 year + 20% CC	N/A	N/A	6.01	1.98
6 hour 1 in 100 year + 45% CC	N/A	N/A	7.26	3.23

Rainfall event	Greenfield run-off volume (m^3)	Existing run-off volume (m^3)	Potential run-off volume without attenuation (m^3)	Potential minus existing (m^3)
QBAR	29.82	N/A	N/A	N/A
6 hour 1 in 1 year	28.15	28.15	43.91	15.77
6 hour 1 in 10 year	44.94	44.94	68.50	23.56
6 hour 1 in 30 year	55.86	55.86	87.15	31.29
6 hour 1 in 100 year	69.34	69.34	108.18	38.84
6 hour 1 in 100 year + 20% CC	N/A	N/A	129.81	60.47
6 hour 1 in 100 year + 45% CC	N/A	N/A	156.85	87.52

Return Period	Runoff rate restriction (l/s)	Critical Storm Duration (hr)	Attenuation Volume Required (m^3)	Volume required above previous return period
1 in 30 year	2.00	2	30.00	N/A
6 hour 1 in 100 year	2.00	2	41.24	11.25
6 hour 1 in 100 year + 45% CC	2.00	3	67.81	26.57

GeoSmart Information

Appendix C

Southern Water Asset Location Plan

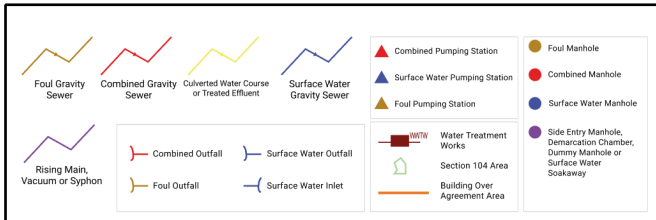
Date: 07/08/25 | Scale: 1:1250 | Map Centre: 526650,125318 | Data updated: 23/07/25 | Our Ref: 1845251 - 1

Wastewater Plan A4
Powered by digdat

The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site. This plan is produced by Southern Water Services Ltd (c) Crown copyright and database rights 2025 Ordnance Survey AC0000808122 .This map is to be used for the purposes of viewing the location of Southern Water plant only. Any other uses of the map data or further copies is not permitted.

WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.



davidsouth@geosmartinfo.co.uk

86554

WATER for LIFE
from Southern Water

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert
5203	F	91.53	89.69	-
5301	F	92.80	91.40	-
6301	F	94.37	0.00	-

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert

Disclaimer

This report has been prepared by GeoSmart in its professional capacity as soil, groundwater, flood risk and drainage specialists, with reasonable skill, care and diligence within the agreed scope and terms of contract and taking account of the manpower and resources devoted to it by agreement with its client and is provided by GeoSmart solely for the internal use of its client.

The advice and opinions in this report should be read and relied on only in the context of the report as a whole, taking account of the terms of reference agreed with the client. The findings are based on the information made available to GeoSmart at the date of the report (and will have been assumed to be correct) and on current UK standards, codes, technology and practices as at that time. They do not purport to include any manner of legal advice or opinion. New information or changes in conditions and regulatory requirements may occur in future, which will change the conclusions presented here.

This report is confidential to the client. The client may submit the report to regulatory bodies, where appropriate. Should the client wish to release this report to any other third party for that party's reliance, GeoSmart may, by prior written agreement, agree to such release, provided that it is acknowledged that GeoSmart accepts no responsibility of any nature to any third party to whom this report or any part thereof is made known. GeoSmart accepts no responsibility for any loss or damage incurred as a result, and the third party does not acquire any rights whatsoever, contractual or otherwise, against GeoSmart except as expressly agreed with GeoSmart in writing.

For full T&Cs see http://geosmartinfo.co.uk/terms-conditions

Further information

Information on confidence levels and ways to improve this report can be provided for any location on written request to info@geosmart.co.uk or via our website. Updates to our model are ongoing and additional information is being collated from several sources to improve the database and allow increased confidence in the findings. Further information on groundwater levels and flooding are being incorporated in the model to enable improved accuracy to be achieved in future versions of the map. Please contact us if you would like to join our User Group and help with feedback on infiltration SuDS and mapping suggestion.

Important consumer protection information

This search has been produced by GeoSmart Information Limited, Suite 9-11, 1st Floor, Old Bank Buildings, Bellstone, Shrewsbury, SY1 1HU.

Tel: 01743 298 100

Email: info@geosmartinfo.co.uk

GeoSmart Information Limited is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered search firms maintain compliance with the Code.

The Search Code:

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom.
- sets out minimum standards which firms compiling and selling search reports have to meet.
- promotes the best practice and quality standards within the industry for the benefit of consumers and property professionals.
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.
- By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

The Code's core principles

Firms which subscribe to the Search Code will:

- display the Search Code logo prominently on their search reports.
- act with integrity and carry out work with due skill, care and diligence.
- at all times maintain adequate and appropriate insurance to protect consumers.
- conduct business in an honest, fair and professional manner.
- handle complaints speedily and fairly.
- ensure that products and services comply with industry registration rules and standards and relevant laws.
- monitor their compliance with the Code.

GeoSmart Information

Complaints

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award up to £5,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience as a result of your search provider failing to keep to the Code.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.

TPOs contact details:

The Property Ombudsman scheme

Milford House

43-55 Milford Street

Salisbury

Wiltshire SP1 2BP

Tel: 01722 333306

Fax: 01722 332296

Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk.

Please ask your search provider if you would like a copy of the search code

Complaints procedure

GeoSmart Information Limited is registered with the Property Codes Compliance Board as a subscriber to the Search Code. A key commitment under the Code is that firms will handle any complaints both speedily and fairly. If you want to make a complaint, we will:

- Acknowledge it within 5 working days of receipt.
- Normally deal with it fully and provide a final response, in writing, within 20 working days of receipt.
- Keep you informed by letter, telephone or e-mail, as you prefer, if we need more time.
- Provide a final response, in writing, at the latest within 40 working days of receipt.
- Liaise, at your request, with anyone acting formally on your behalf.

If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman scheme (TPOs): Tel: 01722 333306, E-mail: admin@tpos.co.uk.

We will co-operate fully with the Ombudsman during an investigation and comply with his final decision. Complaints should be sent to:

Liz Lloyd

Finance Manager

GeoSmart Information Limited

Suite 9-11, 1st Floor,

Old Bank Buildings,

Bellstone, Shrewsbury, SY1 1HU

Tel: 01743 298 100

support@geosmartinfo.co.uk

16 Terms and conditions, CDM regulations and data limitations

Terms and conditions can be found on our website:

http://geosmartinfo.co.uk/terms-conditions/

CDM regulations can be found on our website:

http://geosmartinfo.co.uk/knowledge-hub/cdm-2015/

Data use and limitations can be found on our website:

http://geosmartinfo.co.uk/data-limitations/