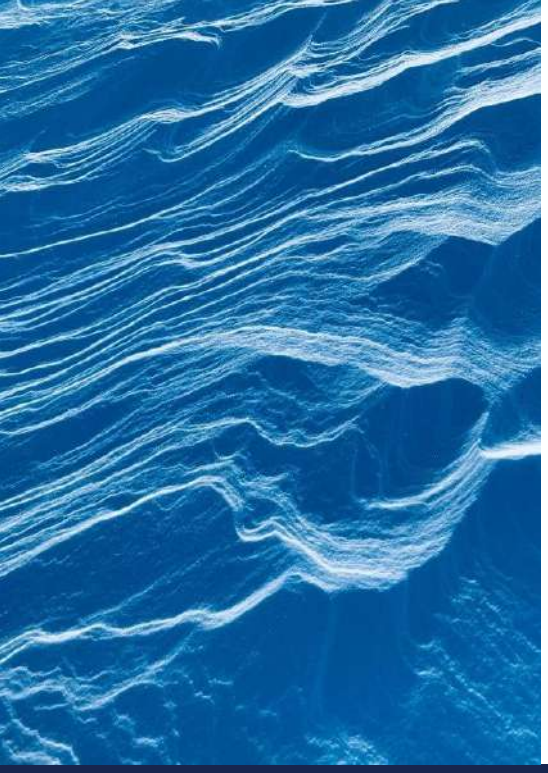

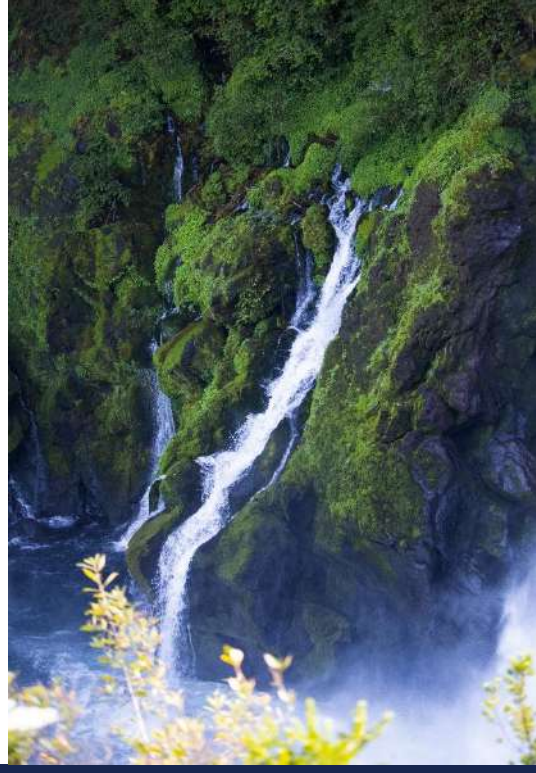

Flood Risk Assessment and Surface Water Drainage Strategy
AEG9666_BN11_Worthing_07

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water, civils and environment

Site Address: 39 Gerald Road
Goring-by-Sea
West Sussex
BN11 5QQ

UK Experts in Flood Modelling, Flood Risk Assessments, and Surface Water Drainage Strategies

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Document Issue Record

Project: Flood Risk Assessment and Surface Water Drainage Strategy

Prepared for: Mark Newman

Reference: AEG9666_BN11_Worthing_07

Site Location: 39 Gerald Road, Goring-by-Sea, West Sussex, BN11 5QQ

Issue	Date	Author	Check	Auth.	Comments
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Summary

Development Description	Existing	Proposed
Development Type	Residential dwelling	Single storey rear extension to the existing dwelling to provide greater habitable space.
EA Vulnerability Classification	More Vulnerable	No change
External Levels	The levels around the existing dwelling are at approximately 5.20m AOD and the levels in the rear garden are approximately 4.80m AOD	No change
Level of Sleeping Accommodation	First floor	No change
Surface Water Drainage	Existing dwelling is positively drained	New rear extension and part of existing side extension to be drained to a new soakaway.
Site Size	Approx. 510m^2	No change
Risk to Development	**Summary**	**Comment**
EA Flood Zone	Flood Zone 1	Low risk
Flood Source	Pluvial	Flood depths generally do not exceed 0.3m around the existing dwelling.
SFRA Available	Adur and Worthing Level 1 Strategic Flood Risk Assessment (Worthing Borough Council, 2024)	
Management Measures	**Summary**	**Comment**
Ground floor level above extreme flood levels	N/A	Finished floor levels of proposed extension to be set at existing floor level.
Safe Access/Egress Route	Yes	Site is located in Flood Zone 1.

Flood Resilient Design	Yes	Precautionary measures recommended – see Section 5.
Site Drainage Plan	Yes	New rear extension and part of existing side extension to be drained to a new soakaway.
Flood Warning and Evacuation Plan	N/A[1]	Recommended that occupier monitor Met Office Weather Warnings for extreme weather events.
Offsite Impacts	**Summary**	**Comment**
Displacement of floodwater	No	Minor developments likely to have a negligible impact on flood risk elsewhere, as per Para 051 of the NPPG.
Increase in surface run-off generation	No	New rear extension and part of existing side extension to be drained to a new soakaway.
Impact on hydraulic performance of channels	No	No nearby channels or ditches.

[1] not required for this assessment

[2] data not available.

1. Introduction

1.1. Aegaea were commissioned by Mark Newman to undertake a Flood Risk Assessment (FRA) and Surface Water Drainage Strategy (SWDS) to facilitate a planning application for the proposed development. This FRA & SWDS has been prepared in accordance with the requirements set out in the National Planning Policy Framework (NPPF) and the associated Planning Practice Guidance.

1.2. This FRA & SWDS is intended to support a full planning application and as such the level of detail included is commensurate and subject to the nature of the proposals.

Site Overview

1.3. The site of the proposed development is 39 Gerald Road, Goring-by-Sea, West Sussex, BN11 5QQ (Figure 1).

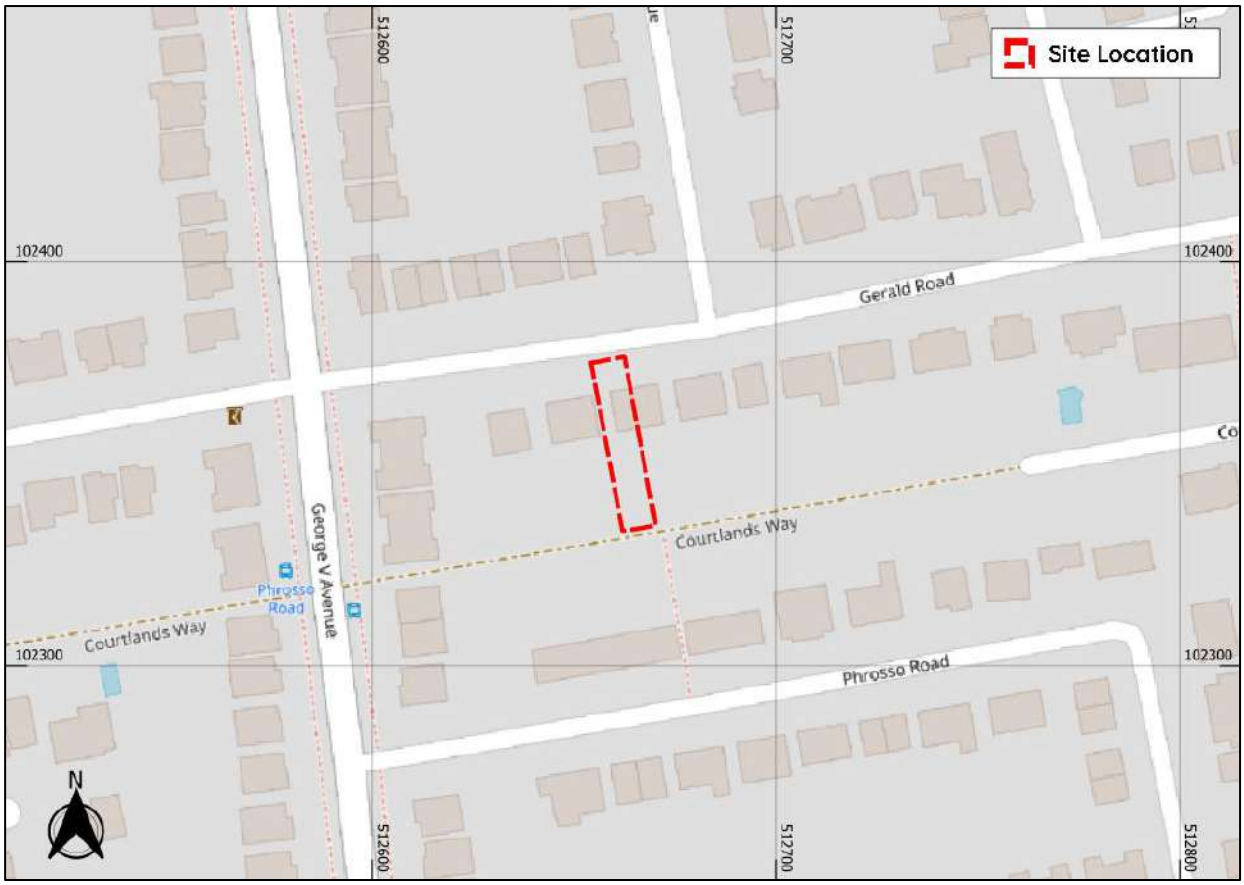

Figure 1: Site Location (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © https://www.openstreetmap.org and contributors)

1.4. The existing site consists of a residential dwelling. The proposed development is for the construction of a single storey rear/side extension, retention of rear garden building and pergola. Development plans are attached in Appendix A.

1.5. In the absence of a topographical survey, Environment Agency Light Detection and Ranging (LiDAR) data Digital Terrain Model has been used to review the topography of the site. Analysis of this data shows that the site is relatively flat with the rear garden being slightly lower than the level of the existing dwelling and Gerald Road. The levels around the existing dwelling are at approximately 5.20m AOD (Above Ordnance Datum) and the levels in the rear garden are approximately 4.80m AOD (Figure 2).

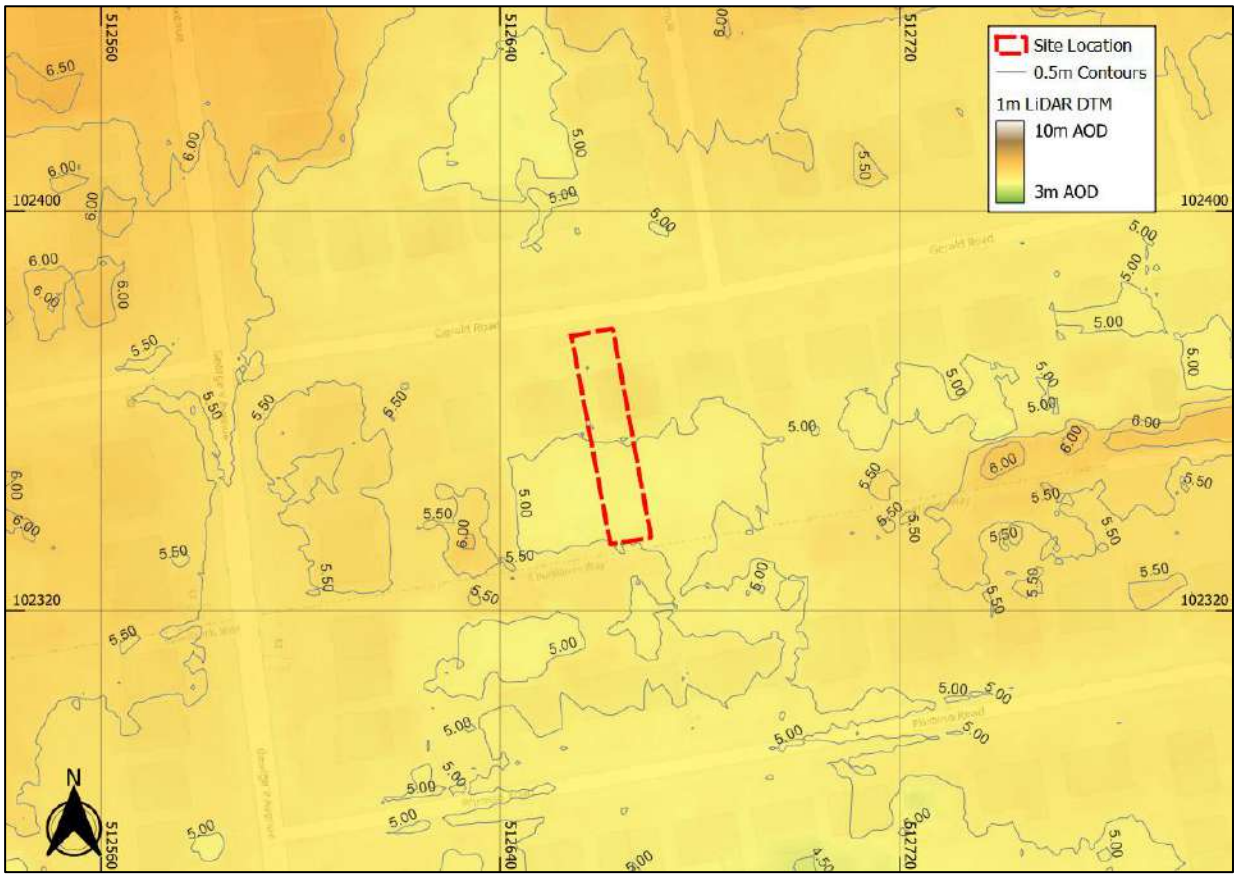

Figure 2: Site Topography (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © https://www.openstreetmap.org and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

1.6. Worthing Borough Council is the Local Planning Authority (LPA) for the site and West Sussex County Council is the designated Lead Local Flood Authority (LLFA). The site sits within the Environment Agency's Solent and South Downs region.

Planning Policy and Guidance

1.7. UK government planning guidance states[1] that an FRA is required for developments which are:

- *in flood zone 2 or 3 including minor development and change of use*
- *more than 1 hectare (ha) in flood zone 1*
- *less than 1 ha in flood zone 1, including a change of use in development type to a more vulnerable class (for example from commercial to residential), where they could be affected by sources of flooding other than rivers and the sea (for example surface water drains, reservoirs)*
- *in an area within flood zone 1 which has critical drainage problems as notified by the Environment Agency*

1.8. The LPA have requested a Flood Risk Assessment be submitted with the planning application due to the risk of surface water flooding.

1.9. The objective of this FRA is to demonstrate that the proposals are acceptable in terms of flood risk. This report summarises the findings of the study and specifically addresses the following issues in the context of the current legislative regime:

- Fluvial/tidal flood risk
- Surface water flood risk
- Risk of flooding from other sources

[1] **https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications#when-you-need-an-assessment**

2. Planning Policy

2.1. Inappropriate development in a flood risk area could pose significant risk in terms of personal safety and damage to property for the occupiers of the development or for people elsewhere. The approach taken in the assessment of flood risk at the planning stage is set out in national, regional, and local planning policy and associated guidance. This section summarises the key policies and guidance relevant to the proposed development.

National Planning Policy Framework (NPPF)

2.2. The National Planning Policy Framework[2] (NPPF) (MHCLG, 2024) which includes UK Government policy on development and flood risk states:

> *170. Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.*
>
> *176. Applications for some minor development and changes of use should also not be subject to the sequential test, nor the exception test [set out below], but should still meet the requirements for site-specific flood risk assessments set out in footnote 63.*
>
> *181. When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:*
>
> *a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;*

[2] https://www.gov.uk/guidance/national-planning-policy-framework, **last updated Dec 2024**

b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment;

c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;

d) any residual risk can be safely managed; and

e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.

2.3. Footnote 63 of the NPPF states:

A site-specific flood risk assessment should be provided for all development in Flood Zones 2 and 3. In Flood Zone 1, an assessment should accompany all proposals involving: sites of 1 hectare or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use.

2.4. Flood Zones in England are defined as follows:

Table 1: Flood Zone Definitions

Flood Zone	Definition
Zone 1 Low Probability	Land having less than 1 in 1,000 annual probability of river or sea flooding (all land outside Zones 2 and 3).
Zone 2 Medium Probability	Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding.
Zone 3a High Probability	Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding.
Zone 3b The Functional Floodplain	This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be

	defined solely on rigid probability parameters. Functional floodplain will normally comprise: land having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding). Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. (Not separately distinguished from Zone 3a on the Flood Map)

2.5. An FRA should be appropriate to the scale, nature, and location of the development. It should identify and assess the risk from all sources of flooding to and from the development and demonstrate how any flood risks will be managed over the lifetime of the development.

2.6. An assessment of hydrological impacts should be undertaken, including to surface water runoff and impacts to drainage networks in order to demonstrate how flood risk to others will be managed following development and taking climate change into account.

Local Plan

2.7. The Local Plan prepared by the Local Planning Authority, Worthing Borough Council, sets out the policies for development in the local area.

2.8. Policy DM20 Flood Risk and Sustainable Drainage outlines the requirements for new development within the area. It states:

a) The Council will work with relevant bodies to ensure that flood risk in Worthing is managed and reduced. Development should be directed away from areas of highest risk of flooding from any source and opportunities should be taken to reduce flooding through sustainable drainage systems and natural flood management to deliver multi-functional benefits for people and wildlife.

Flood Risk Assessment -

b) A site specific Flood Risk Assessment must be submitted with planning applications for:

i) sites of 1 hectare or greater in Flood Zone 1;

ii) all new development (including minor development and change of use) in Flood Zones 2 and 3;

iii) development that would introduce a more vulnerable class on land at increased flood risk in future or subject to other sources of flooding identified by the Strategic Flood Risk Assessment.

c) The Flood Risk Assessment should be proportionate to the degree of flood risk and appropriate to the scale, nature and location of development. It will need to demonstrate that:

i) the site has passed the sequential test (this has already been undertaken for all sites allocated in the Local Plan) and within the site the most vulnerable development is located in areas at lowest flood risk from any source unless there are overriding reasons for not doing so;

ii) Where required by national policy, demonstrate both parts of the exception test have been passed: the development would provide wider sustainability benefits to the community that outweigh the flood risk; and the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

iii) current and future flooding from all sources including in-combination and cumulative effects, and any residual risk can be safely managed;

iv) ensure safe access and egress to and from the development, where necessary as part of an agreed flood warning and evacuation plan;

v) development will not increase flood risk elsewhere, and where possible will reduce the overall level of flood risk; and

vi) development should be appropriately flood resistant and resilient so in the event of a flood it can be quickly brought back into use without significant refurbishment.

Sequential and Exception Tests

2.9. The Sequential and Exception Tests are applied in specific cases defined by UK Government policy. Their purpose is to drive development to areas of low flood risk and to support developments which improve flood risk for developments in areas at risk of flooding.

2.10. Under the NPPF, all new planning applications should undergo a Sequential Test in accordance with Paragraph 172. This test should be implemented by local planning authorities with a view to location, particularly vulnerable new developments outside of the floodplain.

2.11. However, Paragraph 176 of the NPPF states:

> *176. Applications for some* ***minor development*** *and change of use should also not be subject to the sequential test nor the exception test, but should still meet the requirements for site-specific flood risk assessments set out in footnote 63.*

2.12. Given the proposals are considered a minor development, a site-specific Sequential and Exception Test for the development is not considered necessary in line with the NPPF.

Summary

2.13. This flood risk assessment has been prepared with due consideration to the above local and national policy.

3. Consultation and Review

Documents and Online Mapping

3.1. Local Governments and Lead Local Flood Authorities provide documents which contain data and policies on flood risk and new development in their areas. These documents are introduced and briefly summarised below. For the purposes of this FRA, these documents have been reviewed for relevant information and any relevant data is discussed within the appropriate sub heading of this report.

3.2. The following sources of information have been reviewed for this assessment:

- Flood Map for Planning on the Environment Agency website *https://flood-map-for-planning.service.gov.uk/*
- Long Term Flood Risk Information on the Environment Agency website *https://www.gov.uk/check-long-term-flood-risk*
- National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2024)
- Planning Practice Guidance - Flood Risk and Coastal Change (Ministry of Housing, Communities and Local Government, 2022)
- Geoindex Onshore (British Geological Survey, 2024)
- Local Plan 2020-2036 (Worthing Borough Council, 2023)[3]
- Preliminary Flood Risk Assessment Addendum (West Sussex County Council, 2017)[4] and West Sussex Preliminary Flood Risk Assessment (West Sussex County Council, 2011)[5]
- Adur and Worthing Level 1 Strategic Flood Risk Assessment (Worthing Borough Council, 2024)[6]

[3] https://www.adur-worthing.gov.uk/media/Media,169486,smxx.pdf

[4] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/698548/PFRA_West_Sussex_County_Council_2017.pdf

[5] https://www.westsussex.gov.uk/media/1626/west_sussex_pfra.pdf

[6] https://www.adur-worthing.gov.uk/media/Media,171789,smxx.pdf

- Local Flood Risk Management Strategy: 2025 - 2030 (West Sussex County Council, 2025)[7]

Preliminary Flood Risk Assessment (PFRA)

3.3. The PFRA, published in 2011 and 2017, is a high-level appraisal of flood risk across Lead Local Flood Authority West Sussex County Council. The flood risk from all sources, including fluvial, surface water, groundwater, and surcharged sewers is evaluated. It is the basis upon which the Local Flood Risk Management Strategy is produced.

3.4. The PFRA summarises historical flood incidents in West Sussex County Council. The site is not recorded as having been affected by any flood event.

Strategic Flood Risk Assessment (SFRA)

3.5. The SFRA, published in 2020 and 2024, provides the evidence base for the Local Planning Authority Worthing Borough Council Local Plan and guidance for consideration when determining planning applications. The SFRA seeks to place new development into areas of lower flood risk taking into account current flood risk, future flood risk, and the effect a proposed development would have on the risk of flooding.

3.6. The SFRA mapping provided by Worthing Borough Council has been used throughout production of this report as a source of information, particularly pertaining to historical flood incidents.

Local Flood Risk Management Strategy (LFRMS)

3.7. The Local Flood Risk Management Strategy sets out roles and responsibilities for flood risk management, assesses the risk of flooding in the area, where funding can be found to manage flood risk, and the policies, objectives, and actions of the Lead Local Flood Authority.

3.8. The West Sussex County Council LFRMS is used within this report to identify any flood management infrastructure and historical incidences of flooding.

[7] **https://www.westsussex.gov.uk/media/zxfdrox1/westsussex_lfrms.pdf**

4. Sources of Flood Risk

Fluvial / Tidal

4.1. Flooding from watercourses arises when flows exceed the capacity of the channel, or where a restrictive structure is encountered, resulting in water overtopping the banks into the floodplain.

4.2. Tidal flooding occurs when a high tide and high winds combine to elevate sea levels. An area behind coastal flood defences can still flood if waves overtop the defences or break through them. Tidal flooding can also occur a long way from the coast by raising river levels. Water may overtop the river bank or river defences when tide levels are high.

4.3. The entirety of the site is situated within Flood Zone 1 based on the latest EA Flood Map for Planning (Figure 3). Flood Zone 1 denotes land less than 1 in 1,000 annual probability of river or sea flooding (all land outside Zones 2 and 3).

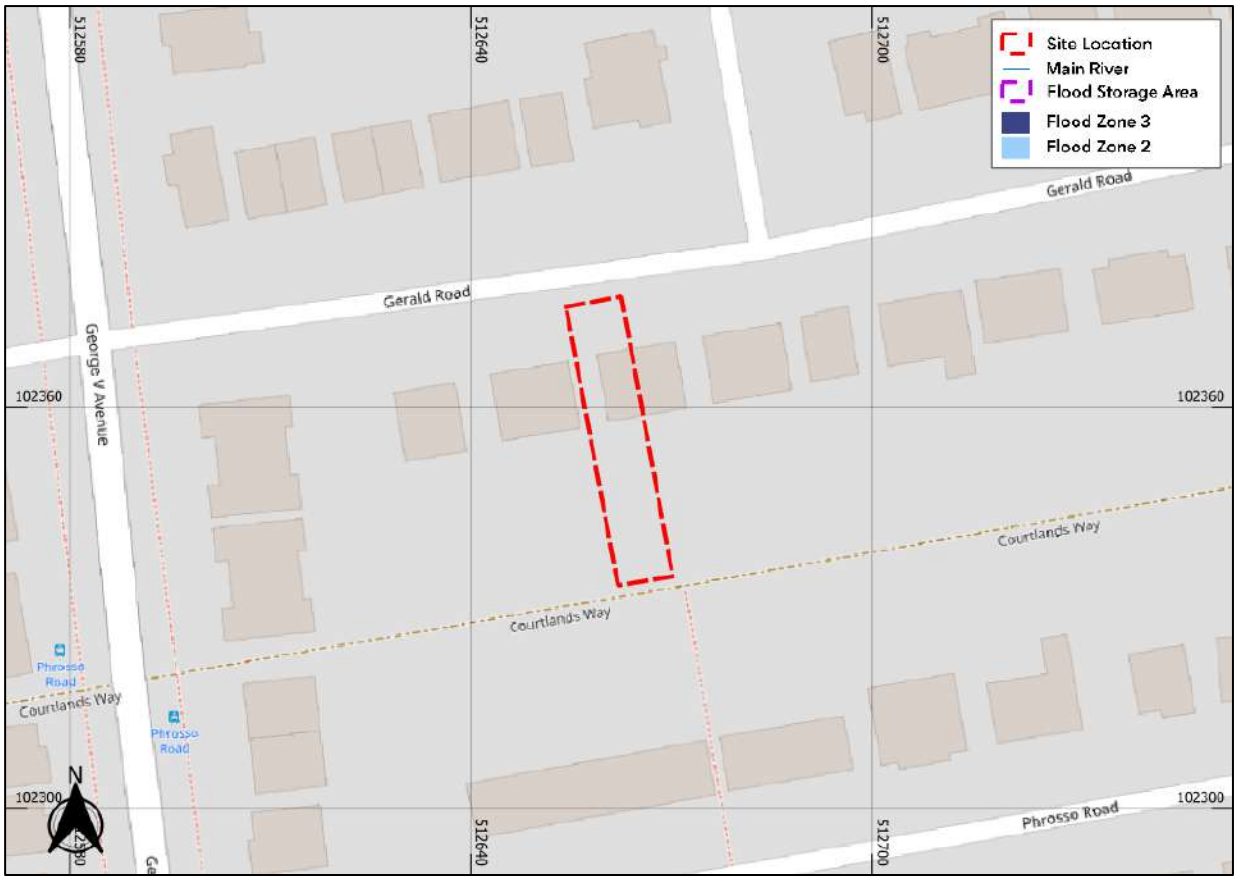

Figure 3: EA Flood Map for Planning (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © https://www.openstreetmap.org and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

4.4. There is no watercourse within 500m of the site, as per OS mapping. The closest tidal waterbody to the site is the English Channel with the mean high-water line located approximately 430m to the south of the site.

4.5. According to the EA Recorded and Historical Flood Mapping, there has been no recorded historical flood events on or in the vicinity of the site (Figure 4).

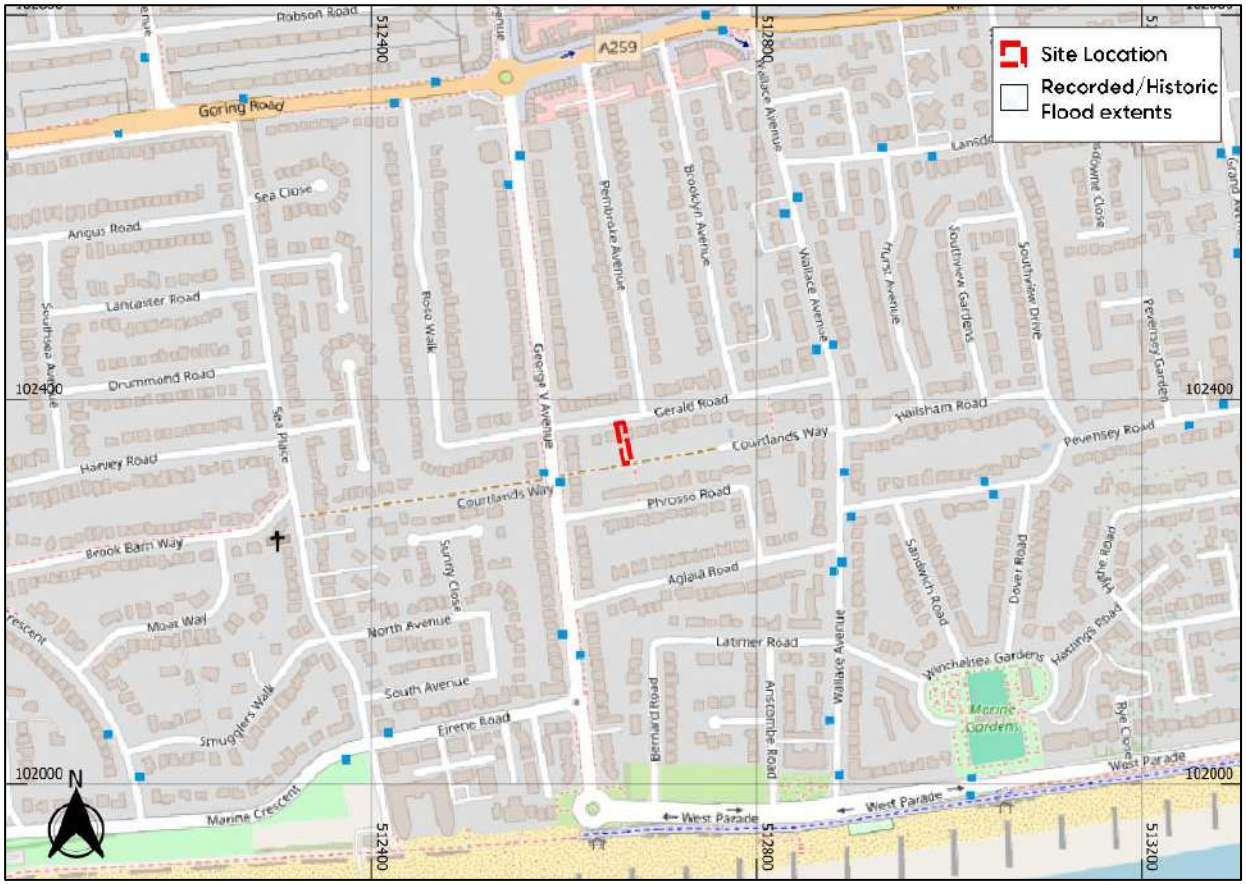

Figure 4: EA Historic Flood Mapping (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © https://www.openstreetmap.org and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

4.6. Given the site is located in Flood Zone 1, the site and proposed development is considered to be low risk from fluvial and tidal flooding.

Canals

4.7. The Canal and River Trust (CRT) generally maintains canal levels using reservoirs, feeders, and boreholes and manages water levels by transferring it within the canal system.

4.8. According to the UK CRT Network mapping[8], there are no identified CRT maintained canals within a 1.0km radius of the site.

4.9. The risk of flooding to this site from canals is considered to be low.

Pluvial

4.10. The National Flood Risk Assessment (NaFRA2), published in January 2025, has updated the Risks of Flooding from Surface Water (RoFSW) products which shows the chance of flooding from surface water to areas of land.

4.11. The RoFSW products are an assessment of where surface water flooding may occur when rainwater does not drain away through the normal drainage systems or soak into the ground but lies on or flows over the ground instead. It includes information about flooding extents and depths including the potential impact of climate change on flood risk, based on the latest UK Climate Projections (UKCP18).

4.12. Risk is displayed as one of three likelihood categories:

- High – greater than or equal to 1 in 30 (3.3%) chance of flooding in any year.
- Medium – less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance of flooding in any given year.
- Low – less than 1 in 100 (1%) but greater than or equal to 1 in 1000 (0.1%) chance of flooding in any given year.

4.13. The RoFSW depth mapping shows the annual chance of flooding (based on the three risk categories listed above) **beyond a specific depth**, for depths at the following intervals from 20cm to 120cm (0.2m, 0.3m, 0.6m, 0.9m and 1.2m).

4.14. As well as present day risk of flooding from surface water, climate change scenarios have been produced to indicate the predicted impacts of climate change on future flood risk. The climate change allowances are based on the latest UK Climate Projections (UKCP18) from the Met Office, using the Representative Concentration Pathway (RCP) 8.5. A near-term epoch (2040 –

[8] **https://canalrivertrust.org.uk/canals-and-rivers**

2060 "2050s" epoch) and central allowances are being used initially, to support short and medium-term decisions informed by the highest flood likelihood projections.

4.15. Review of the pluvial (surface water) likelihood extents are similar between the present day and climate change scenarios. Given the minimal difference between the pluvial risk, the climate change scenario has been assessed below as a 'worst-case' scenario.

Climate Change Scenario

4.16. Examination of the EA's 'Flood Risk from Surface Water – Climate Change' mapping indicates that the majority of the site is at 'high' risk of flooding with small areas of 'medium' risk located to the rear and front of the existing dwelling (Figure 5).

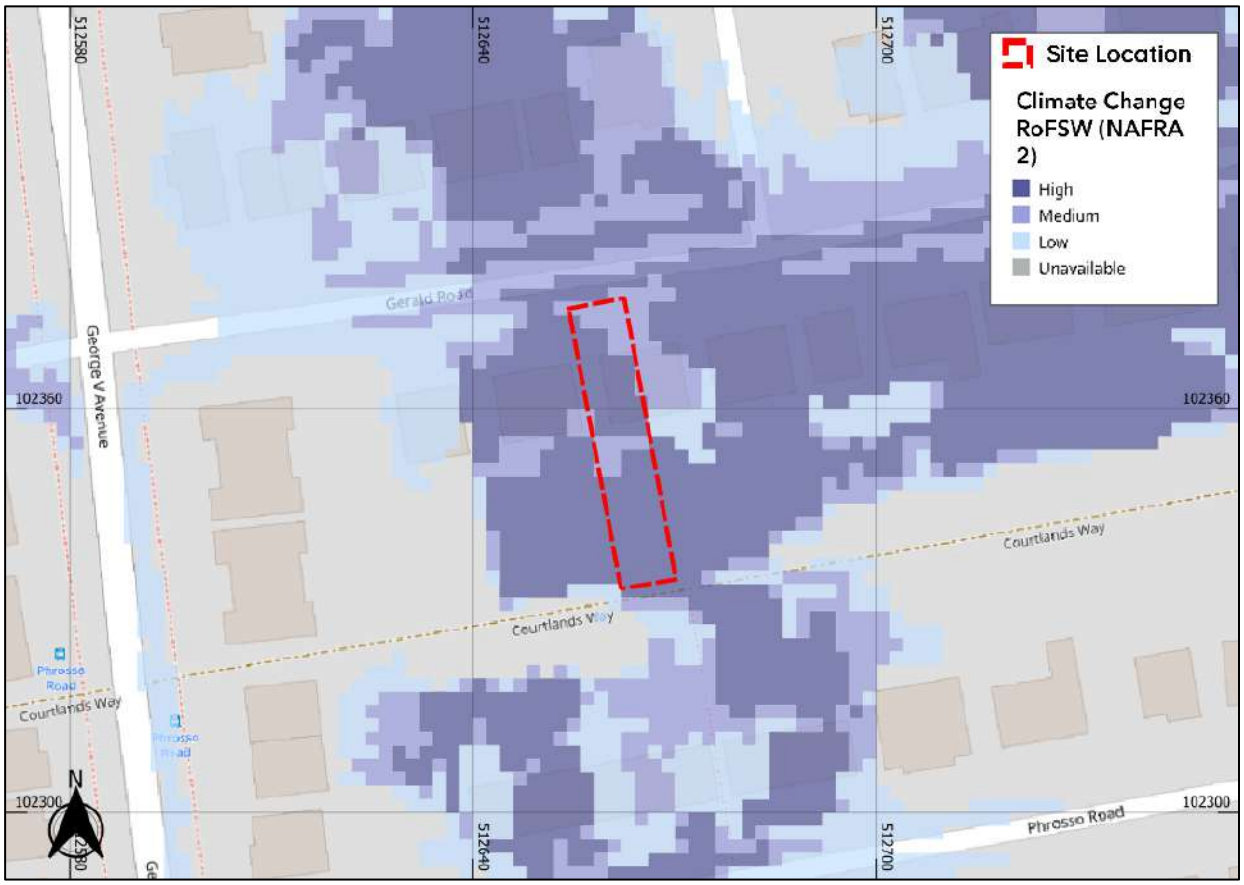

Figure 5: EA Surface Water Flood Risk Mapping (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © https://www.openstreetmap.org and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

4.17. Analysis of the risk of flood depths exceeding 0.3m shows that the areas around the existing dwelling are unlikely to experience depths exceeding 0.3m. However, some areas in the rear garden are shown to be a medium and high risk (Figure 6)

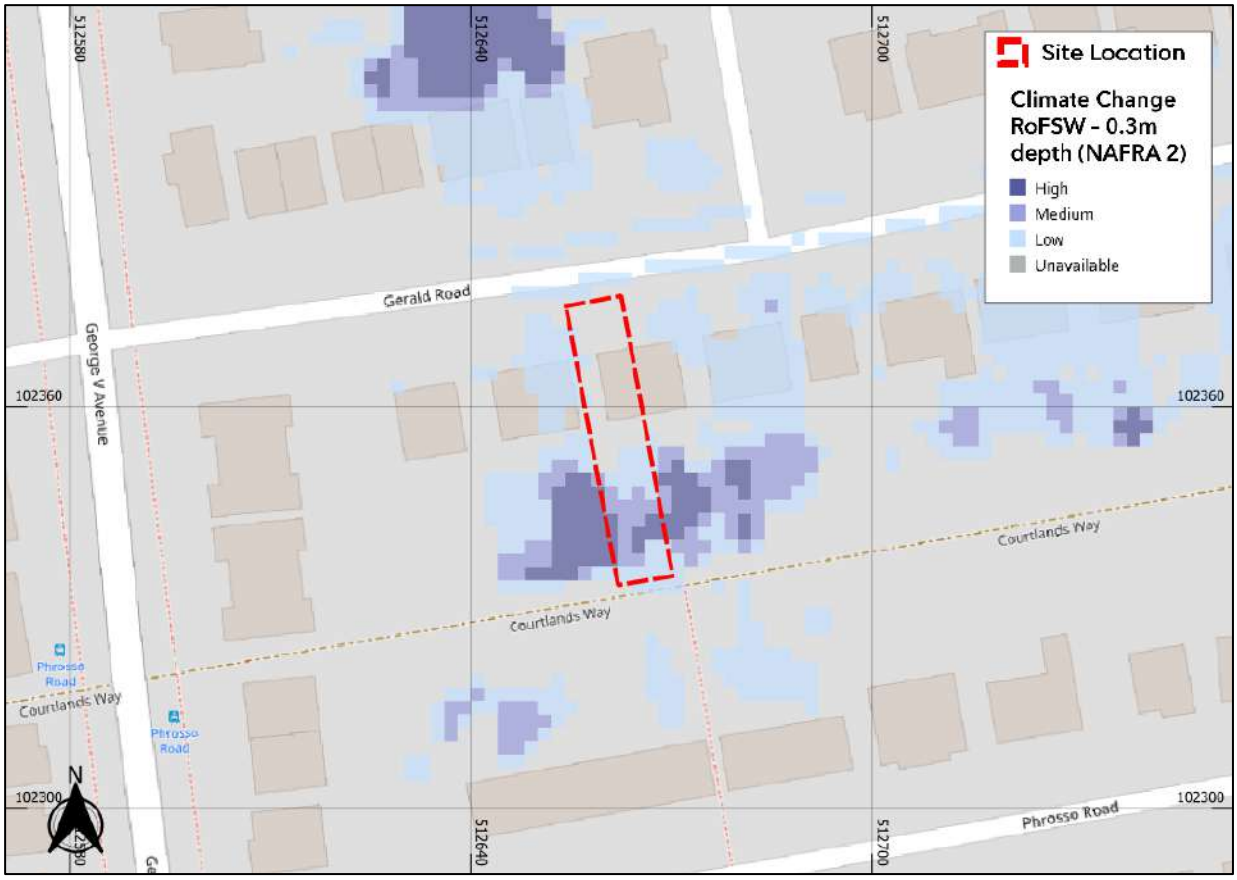

Figure 6: EA RoFSW Likelihood of Flood Depths >0.3m – Climate Change (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © https://www.openstreetmap.org and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

4.18. The likelihood of flood depths exceeding 0.6m mapping shows that the majority of the site is located outside the low, medium and high likelihood extents (Figure 7).

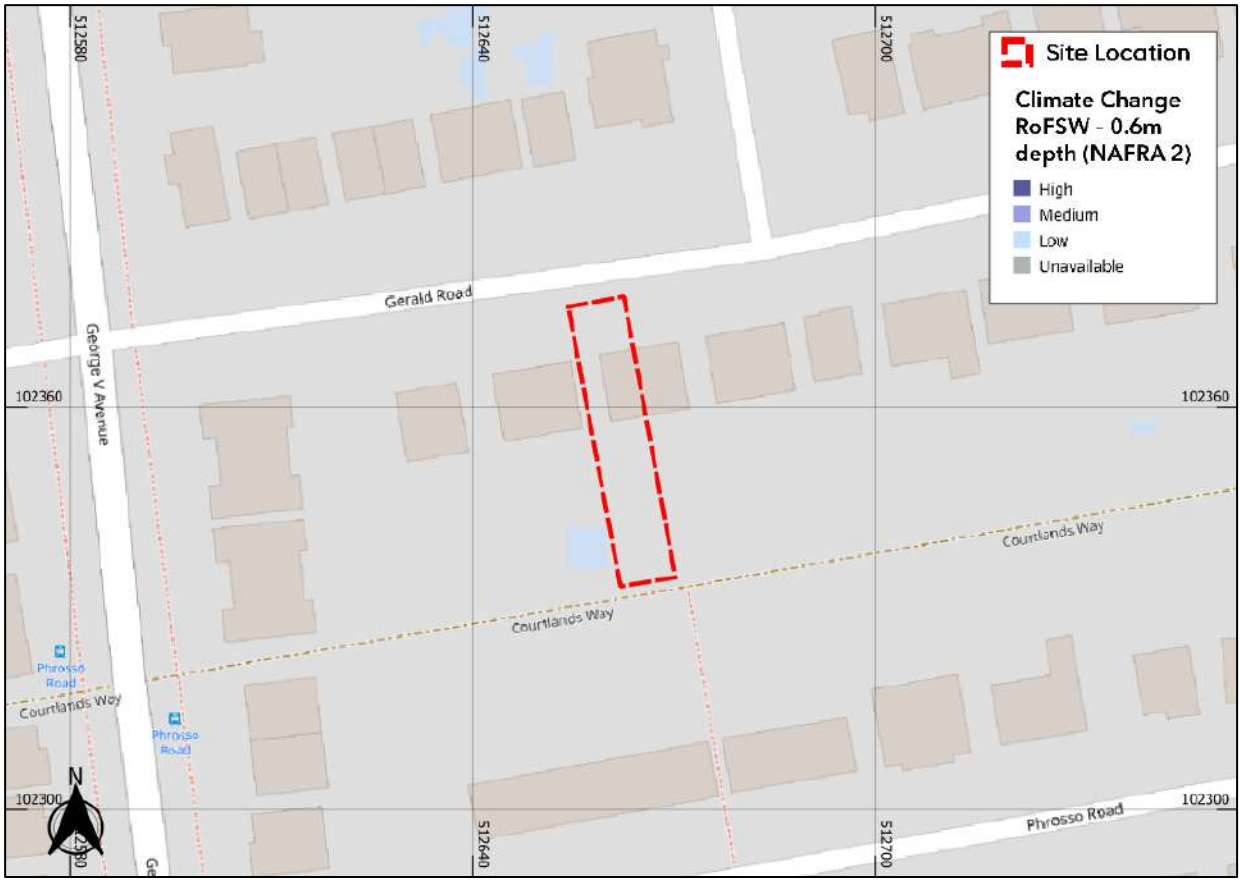

Figure 7: EA RoFSW Likelihood of Flood Depths >0.6m – Climate Change (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © https://www.openstreetmap.org and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

4.19. Review of the remaining flood depth intervals (0.9m and 1.2m) shows that the entirety of the site, including the proposed development, is located outside the modelled likelihood categories.

4.20. Given that flood depths around the existing dwelling and proposed extension are unlikely to exceed 0.3m, the risk of flooding from pluvial sources is considered to be low to moderate.

Reservoirs

4.21. Large waterbodies or reservoirs that have walls built above the surrounding ground level pose a risk of flooding. Walls could fail due to old age, accident, or because excess flood water has been added to the reservoir. Although a breach is unlikely the consequences would be significant, leading to rapid inundation of the downstream floodplain.

4.22. According to the EA's Flood Risk from Reservoirs mapping the site is outside flood extents in the event of reservoir flooding (Figure 8).

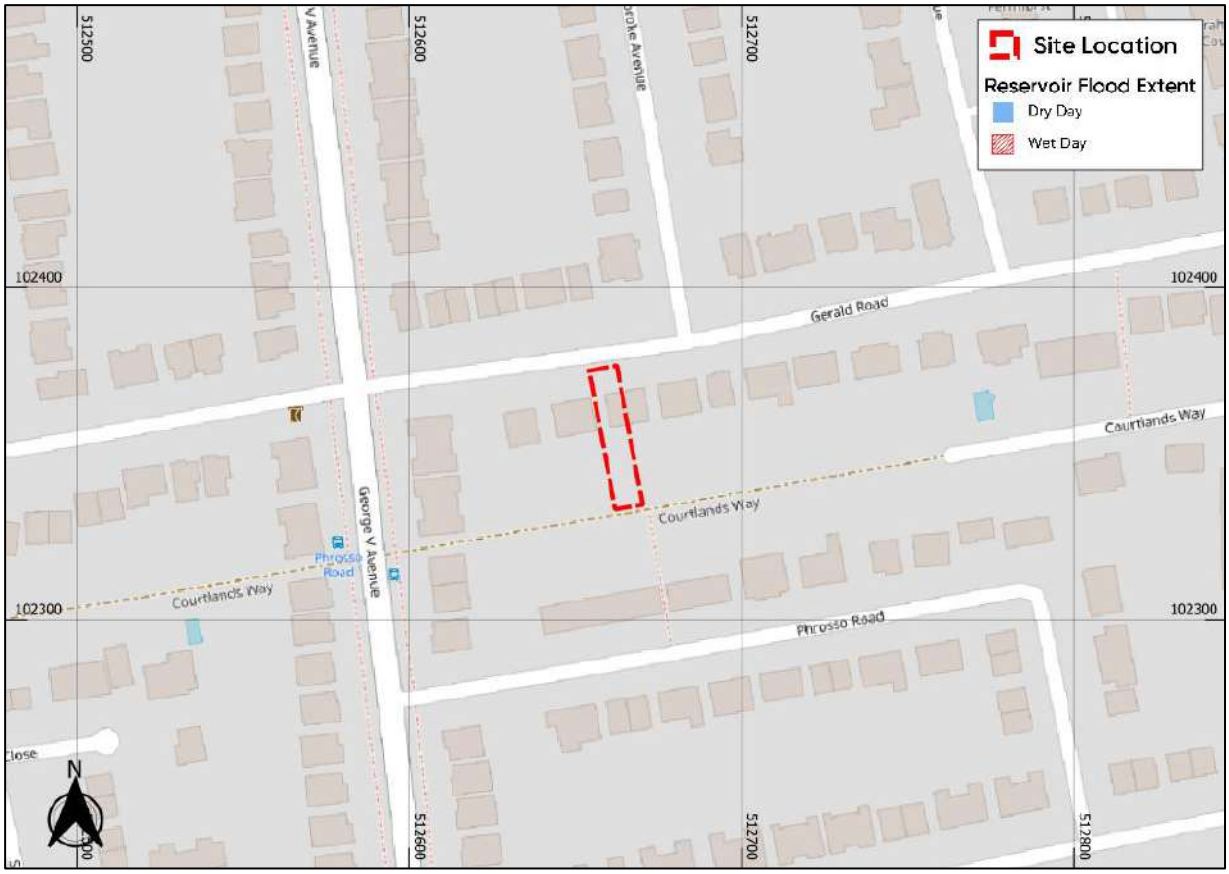

Figure 8: EA Reservoir Flood Risk Mapping (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). ©https://www.openstreetmap.org and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

4.23. Thus, the site is considered to be low risk from reservoir flooding.

Groundwater

4.24. Groundwater flooding occurs in areas where underlying geology is permeable and water can rise within the strata sufficiently to breach the surface.

4.25. The British Geological Survey's (BGS) mapping shows superficial deposits of River Terrace Deposits (undifferentiated) comprised of sand, silt and clay underlying the site. The bedrock geology underlying the site is mapped as New Pit Chalk Formation comprised of chalk.

4.26. The SFRA presents the JBA Groundwater Flooding mapping, which assesses the future risk of groundwater flooding. The Groundwater Flood Map is a national scale 5m resolution map. The modelling involves simulating groundwater levels for a range of return periods (including 75, 100 and 200-years). Groundwater levels are then compared to ground surface levels to

determine the head difference in metres. The JBA Groundwater Map categorises the head difference (m) into five feature classes based on the 100-year model outputs.

4.27. The site is located in an area classified as 'Groundwater levels are between 0.025m and 0.5m below the ground surface' (Figure 10). Within this zone there is a risk of groundwater flooding to both surface and subsurface assets. There is the possibility of groundwater emerging at the surface locally.

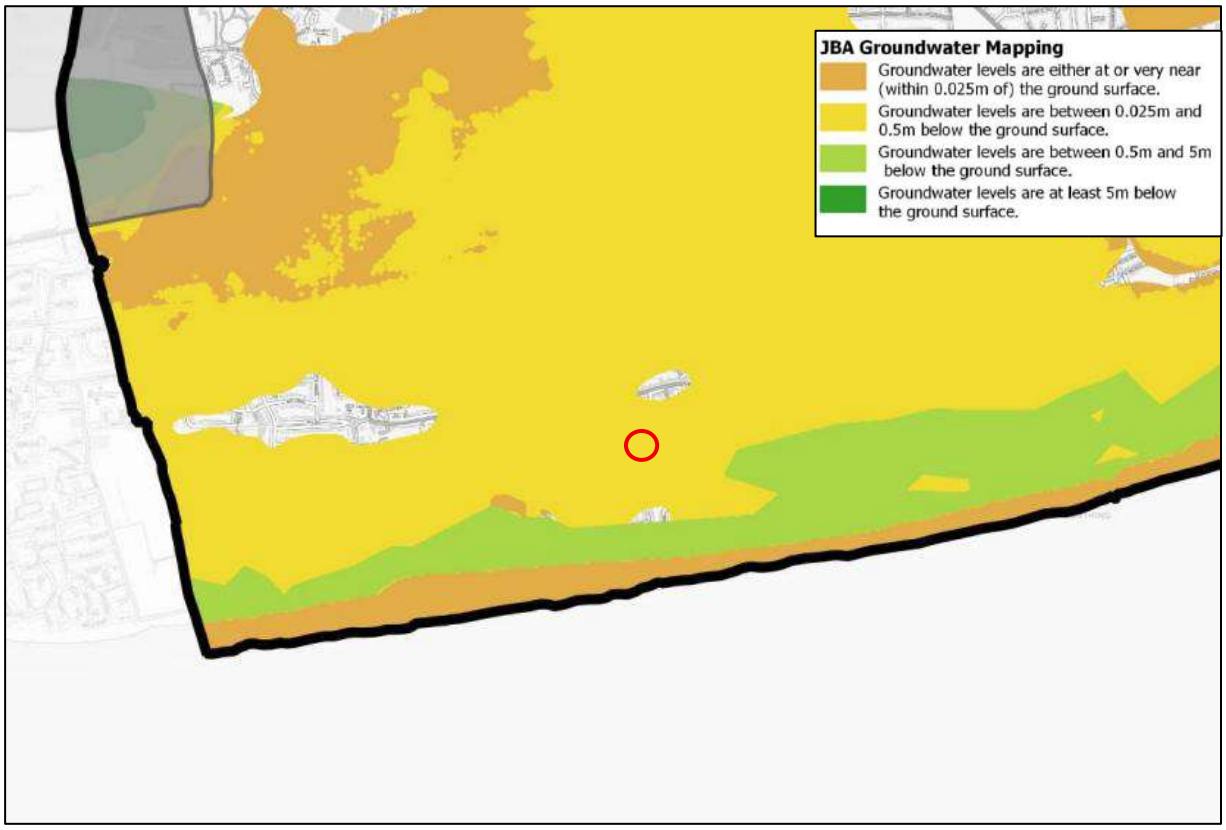

Figure 9: JBA Groundwater Mapping (Adur and Worthing Level 1 Strategic Flood Risk Assessment (Worthing Borough Council, 2024)

4.28. As part of the SFRA, Tidal Drainage Risk Zones and Groundwater Risk Zones were derived to understand how increases in tidal levels associated with climate change may impact groundwater and surface water flood risk within the Local Plan areas. For the Groundwater Risk Zones, only areas which are within permeable geological units connected to the coast were considered with the analysis as these are the only areas which are expected to be at risk of tidally influenced groundwater flooding.

4.29. The site is located within a GW2 area (Figure 9). This is classified as an area where groundwater levels more than 0.5m below the surface and region is below the present-day tidal level OR

groundwater level between 0.025m and 0.5m below the surface and region is above the current tidal level but below the future tidal level.

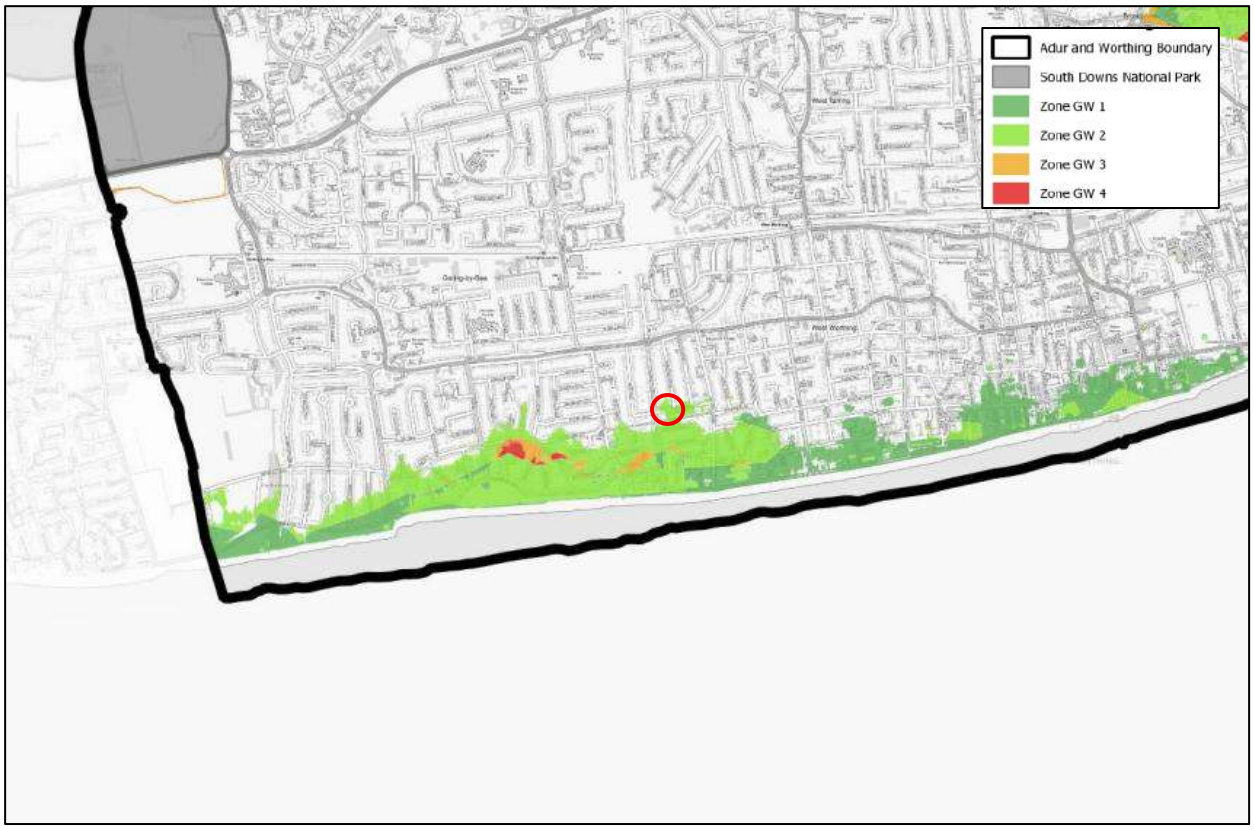

Figure 10: JBA Tidal Groundwater Mapping (Adur and Worthing Level 1 Strategic Flood Risk Assessment (Worthing Borough Council, 2024)

4.30. A trial pit was dug in the rear garden to a depth of 1m to investigate any groundwater concerns. The pit was found to be dry with no ingress of any groundwater.

4.31. In addition, as the development proposals do not include any proposed basements the risk from groundwater to the development is considered to be low.

Sewers

4.32. Foul or surface water sewers can be a cause of flooding if the drainage network becomes overwhelmed, either by blockage or due to local development beyond the designed capabilities of the drainage system.

4.33. It is noted that the SFRA (2024) references a table showing Sewer Incident Report Form database for Adur District and Worthing Borough SFRA areas.

4.34. Within the sites 5-figure post code area (BN11 5), there has been 11 recorded sewer flood incidents. There is no evidence to suggest that these incidents have impacted the site. Given the wide area a 5-figure post code area covers it is unlikely that these events impacted the site.

4.35. The development is therefore considered to be at low risk of flooding from sewers.

5. Flood Risk Mitigation

All Sources of Flooding

5.1. Flood risk from all sources stated in this report is considered to be low, barring some low to moderate risk from pluvial sources. However, flood depths around the existing dwelling and proposed extension largely would not exceed 0.3m.

5.2. Therefore, given the predicted risk, it is recommended that standard precautionary waterproofing measures should be adopted in accordance with CLG Report *Improving the Flood Performance of New Buildings Flood Resilient Construction (2007)*[9] (standards for the installation and retrofit of resistance measures are available in British Standard 851188-1:2019+A1:2021). The following mitigation measures are recommended:

- Damp Proof Membranes (d.p.m.) should be included in any design to minimise the passage of water through ground floors to a level of at least 300mm above the finished floor level. Impermeable polythene membranes should be at least 1200 gauge to minimise ripping. Effective methods of joining membrane sections are overlaps of 300mm and also taping (mastic tape with an overlap of 50mm minimum).
- External renders are effective barriers to water penetration and should be used with blocks (or bricks) to at 300mm above the proposed finished floor level. External cement renders with lime content (in addition to cement) can induce faster surface drying.
- Cavity insulation should preferably incorporate rigid closed cell materials as these retain integrity and have low moisture take-up. Other common types are not generally recommended as they can remain wet several months after exposure to flood water which slows down the wall drying process. Blown-in insulation can slump due to excessive moisture uptake, and some types can retain high levels of moisture for long periods of time (under natural drying conditions).

[9] **https://assets.publishing.service.gov.uk/media/602d673ee90e0709e8d085d8/Improving_the_Flood_Resilience_of_Buildings_Through_Improved_Materials__Methods_and_Details_Technical_Report.pdf**

- Ground floor to be solid (i.e. concrete floors), with waterproof membrane/screed.

Increase to Flood Risk Elsewhere

5.3. The proposed development is for the construction of an extension to the existing dwelling on site. It is understood that the proposed development is for the construction of a rear extension and internal alterations to an existing dwelling to provide greater habitable space. As such, the proposal constitutes a Minor Development under the NPPF.

5.4. Paragraph 051 of the Flood Risk and Coastal Change Planning Practice Guidance (PPG) states:

> *Minor developments are unlikely to raise significant flood issues unless:*
>
> - *they would have an adverse effect on a watercourse, floodplain or its flood defences;*
> - *they would impede access to flood defence and management facilities, or;*
> - *where the cumulative impact of such developments would have a significant effect on local flood storage capacity or flood flows.*

5.5. As such, the proposed development in isolation should have a negligible impact on flood risk elsewhere.

Flood Warnings

5.6. As a further precaution and risk reduction, the residents of the site should sign up to receive Met Office Severe Weather Warnings. The Met Office issues weather warnings up to 5 days in advance, through the National Severe Weather Warning Service, when severe weather has the potential to bring impacts to the UK. It is also possible to stay up to date with weather warnings through the Met Office app (available on both android and apple), social media (twitter, Facebook) or email alerts.

5.7. During periods of bad weather, site users should monitor local weather reports and sign up for the Met Office UK weather warnings. Warnings can be monitored through an Apple/Android app, Twitter or directly via emails.

6. Surface Water Drainage Strategy

Surface Water Drainage Hierarchy

6.1. In accordance with the SuDS management train approach, the use of various SuDS measures to reduce and control surface water flows have been considered in detail for the development.

6.2. The management of surface water has been considered in respect to the SuDS hierarchy below (Table 2), as detailed in the CIRIA 753 "The SuDS Manual" (section 3.2.3) and the non-statutory National Standards for SuDS (2025).

Table 2: SuDS Drainage Hierarchy

SUDS DRAINAGE HIERARCHY				
			Suitability	**Comment**
	1.	**Collect for non-potable use**	✓	Plot scale opportunities, such as a water butt, are possible to be incorporated around the site. Water butts will provide water for non-potable uses around the garden.
	2.	**Use infiltration techniques, such as porous surfaces in non-clay areas**	✓	A trial pit was dug in the rear garden to a depth of 1m to investigate any groundwater concerns. The pit was found to be dry with no ingress of any groundwater. At the time of writing no infiltration testing has been undertaken on site. However, given the 'freely draining' nature of the underlying soil, it is likely infiltration would be a suitable option and the drainage strategy has been designed on this basis. An assumed $3x10^{-5}$m/s (0.09m/hr) has been utilised in line with CIRIA guidance.
	3.	**Discharge to surface waters**	-	More preferential discharge location higher up the hierarchy takes priority
	4.	**Discharge to a surface water sewer, highway drain or another drainage system**		
	5.	**Discharge to combined sewer**		

Pre-Development / Greenfield Runoff Rates

6.3. To determine the required outflow rate for the proposed surface water drainage strategy, the greenfield runoff rate for the total proposed impermeable area of the site has been calculated using the IH124 method (via the ICP SuDS variation) within InfoDrainage Software v2025.5.

6.4. The total site area is approximately 0.03ha.

6.5. The greenfield runoff rate (QBAR rural) was calculated in InfoDrainage (v2025.5) using the ICP SuDS methodology. For sites smaller than 50 ha, the IH124 method is applied to a 50 ha site and the results multiplied by a scale factor equal to the site area (in hectares) divided by 50. QBAR was calculated using the following formula (equation yields m^3/s):

$$QBAR_{rural} = 0.00180 \times AREA^{0.89} \times SAAR^{1.17} \times SOIL^{2.17}$$

6.6. The greenfield runoff rate (Qbar) for the proposed site area of $40m^2$ was calculated to be <0.1l/s. Greenfield runoff rate calculations are attached within the proposed runoff rate calculations sheet in Appendix B.

InfoDrainage - Input Criteria

6.7. The overall site area is measured to be approximately $355m^2$. The proposed rear extension totals $20m^2$. The proposed extension also replaces a downpipe associated with the existing side extension and therefore this side extension (an additional $20m^2$) has also been included within the calculations. The remaining parts of the roof are to drain as existing and have been excluded from the calculations. Therefore, the total roof area within the calculations is $40m^2$.

6.8. To be conservative, all impermeable areas have been modelled with a volumetric runoff coefficient of 1.0.

6.9. Infiltration tests have not been provided. Soilscapes describes the soil in the area as being 'freely draining'. Therefore, an assumed infiltration rate of $3x10^{-5}m/s$ (0.09m/hr) has been utilised, as per table 25.1 (typical infiltration coefficients based on soil texture) of the CIRIA C753 The SuDS Manual. Infiltration rates should be confirmed on site prior to the design being finalised.

6.10. InfoDrainage Software (v2025.5) was used to calculate the existing runoff rates from the development proposals area, the criteria shown in Table 3.

Table 3: Simulation Criteria

Simulation criteria	
Rainfall Data	FEH
Year	2022
Location	GB 509351 103685 TQ 09351 03685
Return Periods	2, 30, 30+40%CC, 100, 100+45%CC
Storm Durations	15, 30, 60, 120, 240, 360, 480, 960, 1140, 2880 minute
Volumetric Runoff Co	All impermeable areas - 1.0 for both summer and winter storm seasons.
Percentage Impervious	100%
Time of Concentration	5 minutes

6.11. The Environment Agency Peak Rainfall Climate Change Allowance guidance was reviewed and subsequently the Defra Peak Rainfall Allowances Map was assessed to determine appropriate climate change allowances to inform the surface water drainage strategy. The upper end allowance for the Arun and Western Streams Management Catchment have been used for the 3.3% and 1% exceedance probability events for the 2070s epoch, which equates to +40% and +45% respectively.

InfoDrainage Modelling Results

6.12. The full calculation outputs can be found in Appendix B of this report although the 1 in 100 year +45% climate change results have been summarised below. The methodology used within the calculations simulates an assumed infiltration rate to provide indicative attenuation volumes.

- The total required attenuation to discharge surface water runoff via infiltration within the soakaway is 2.45m^3. The critical storm duration for the permeable surface is 120minute winter storm. The half drain time is 176mins.
- No flooding is observed in this event based on the InfoDrainage model.

6.13. As such, these results indicate that the runoff from the proposed development could be accommodated within a drainage system of the approximate size modelled.

Surface Water Drainage Arrangement

6.14. The principles of the surface water drainage arrangements are outlined below. The surface water drainage arrangement is included as Appendix C.

- All surface water generated by the existing side extension and proposed rear extension will be captured via rainwater downpipes and directed towards the soakaway located in the rear garden.
- By ensuring that runoff is managed as close to the source as possible, mimicking the existing drainage regime, so there should be no adverse impacts as a result of the development.
- Keeping excavations as shallow as practical has been a major design consideration in order to reduce risk and allow easy, safe, cost-effective and time efficient construction. Materials used for the swale construction should be graded to give the right balance between achieving good structural performance and providing sufficient permeability.
- It is proposed for the developer to consider systems made of recycled materials. This would reduce the embodied carbon of the proposed drainage system. The feasibility of such a system must be confirmed with a manufacturer whilst considering the nature of the site.
- Maintenance of the proposed systems is provided in later sections of this report. As all elements are relatively shallow and accessible, maintenance can be conducted in an easy, safe, cost effective and timely manner.

Water Quality

6.15. A key element of SuDS is that they have the potential to improve the quality of surface water discharged from a site. In order to assess this, the "Pollution hazard indices for different land use classifications", provided in the CIRIA SuDS Manual (C753) as table 26.2, has been reviewed. The indices use four different methods of assessing pollution potential based on the hazard level, total suspended solids (TSS), Metals, and Hydrocarbons.

Table 4: Pollutant Hazard Indices

Land Use	Pollution Hazard Level	Total Suspended Solids (TSS)	Metals	Hydrocarbons
Residential roofs	Very Low	0.2	0.2	0.05

6.16. Runoff from roofs is generally considered low contamination risk and does not usually warrant any significant treatment. However, to prevent potential sediment from impacting the SuDS system, sediment traps should be provided on the outlet to the storage structures to prevent sedimentation in the below ground network, with rodding access provided either side for cleaning and maintenance.

6.17. It is important that a regular maintenance schedule is provided on the SuDS systems to ensure efficiency with pollutant removal.

Maintenance

6.18. Table 5 presents details regarding the maintenance requirements for the proposed SuDS included as part of the development, taken from the CIRIA C753 The SuDS manual. Each manufacturer will have bespoke requirements however the below should be used as a guide. All SuDS will be privately maintained.

Table 5: Soakaway SuDS Maintenance Requirements (Source: CIRIA SuDS Manual)

Soakaway		
Maintenance Schedule	**Required Action**	**Typical Frequency**
Regular Maintenance	Inspect for sediment and debris in pre-treatment components and floor of inspection tube or chamber and inside of concrete manhole rings	Annually
	Cleaning of gutters and any filters on downpipes	Annually (or as required)
	Trimming any roots that may be causing blockages	Annually (or as required)
Occasional Maintenance	Remove sediment and debris from pre-treatment components and floor of inspection tube or chamber and inside of concrete manhole rings	As required, based on inspections
Remedial Actions	Reconstruct soakaway and/or replace or clean void fill if performance deteriorates or failure occurs	As required
	Replacement of clogged geotextile (will require reconstruction of soakaway)	As required
Monitoring	Inspect silt traps and note rate of sediment accumulation	Monthly in the first year and then annually
	Check soakaway to ensure emptying is occurring	Annually

Designing for Exceedance

6.19. Exceedance events are those greater than the design rainfall event, i.e. greater than the 100 year rainfall event plus 45% increase for climate change.

6.20. Periods of exceedance occur when the rate of surface water runoff exceeds the drainage system capacity. Conveyance beneath ground cannot, generally, be economically or sustainably constructed to the scale required for the most extreme rainfall events. This may result, on

occasion, in the surface water runoff exceeding the capacity of the drainage network, with excess water (exceedance flow) being conveyed above ground.

6.21. For situations where extreme rainfall intensity exceeds inlet capacities, or for extreme storm events exceeding the design flood event considered for drainage design, any overland flow will follow the existing topography of the site and flow in a southerly direction, away from the threshold of the dwelling on site, and pond in the topographically lower rear garden.

6.22. The soakaway has been designed with circa 14% additional capacity which will provide some additional attenuation capacity during any exceedance events.

7. Conclusions

7.1. This FRA & SWDS has been undertaken with reference to the requirements of NPPF and Planning Practice Guidance with respect to the development at 39 Gerald Road, Goring-by-Sea, West Sussex, BN11 5QQ. It has been written to support a planning application and prepared with due consideration to the nature of the proposed development to provide the appropriate level of detail.

7.2. An assessment of the risk of flooding from all sources has been undertaken and is summarised in the table below:

Source of Flooding	Flood Risk Summary
Fluvial/Tidal	The site is located within Flood Zone 1.
Pluvial	Examination of the EA's 'Flood Risk from Surface Water – Climate Change' mapping indicates that the majority of the site is at 'high' risk of flooding with small areas of 'medium' risk located to the rear and front of the existing dwelling Analysis of the risk of flood depths exceeding 0.3m shows that the areas around the existing dwelling and proposed extension are unlikely to experience depths exceeding 0.3m. However, some areas in the rear garden are shown to be a medium and high risk.
Reservoirs Groundwater Sewers Canals	The site is considered to be at low risk from other sources.

7.3. The FRA & SWDS supports the planning application and demonstrates that there is an acceptable level of flood risk to the site if the mitigation strategies recommended are implemented in the scheme. The development does not increase flood risk off site or to the wider area.

7.4. The following conclusions can be drawn from this FRA & SWDS:

- This FRA has identified no prohibitive constraints in developing the proposed site for the proposed usage.

- The Site is in Flood Zone 1 and therefore at low risk of flooding from fluvial/tidal sources.
- Examination of the EA's 'Flood Risk from Surface Water – Climate Change' mapping indicates that the majority of the site is at 'high' risk of flooding with small areas of 'medium' risk located to the rear and front of the existing dwelling. However, flood depths around the existing dwelling and proposed extension largely would not exceed 0.3m.
- All surface water generated by the existing side extension and proposed rear extension will be captured via rainwater downpipes and directed towards the soakaway located in the rear garden.
- The total required attenuation to discharge surface water runoff via infiltration within the soakaway is 2.45m^3. The critical storm duration for the permeable surface is 120minute winter storm. The half drain time is 176mins.

7.5. This Flood Risk Assessment and Surface Water Drainage Strategy should be submitted as part of the planning application to satisfy the requirements under NPPF.

Appendix A - Development Proposals

Buy A Plan®

Ordnance Survey Licensed Data

39, Gerald Road, Marine, Worthing, West Sussex, BN11 5QQ



Site Plan (also called a Block Plan) shows area bounded by: 512615.92, 102316.99 512705.92, 102406.99 (at a scale of 1:500), OSGridRef: TQ1266 236. The representation of a road, track or path is no evidence of a right of way. The representation of features as lines is no evidence of a property boundary.

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27/10/25 Amended Site Plan showing Proposal area Pergola & Garden room

16/12/25 Garden room Soakaway shown

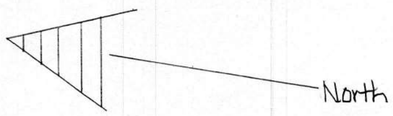
21/10/25 new site Plan for 39 Gerald road
@ 1:100 scale

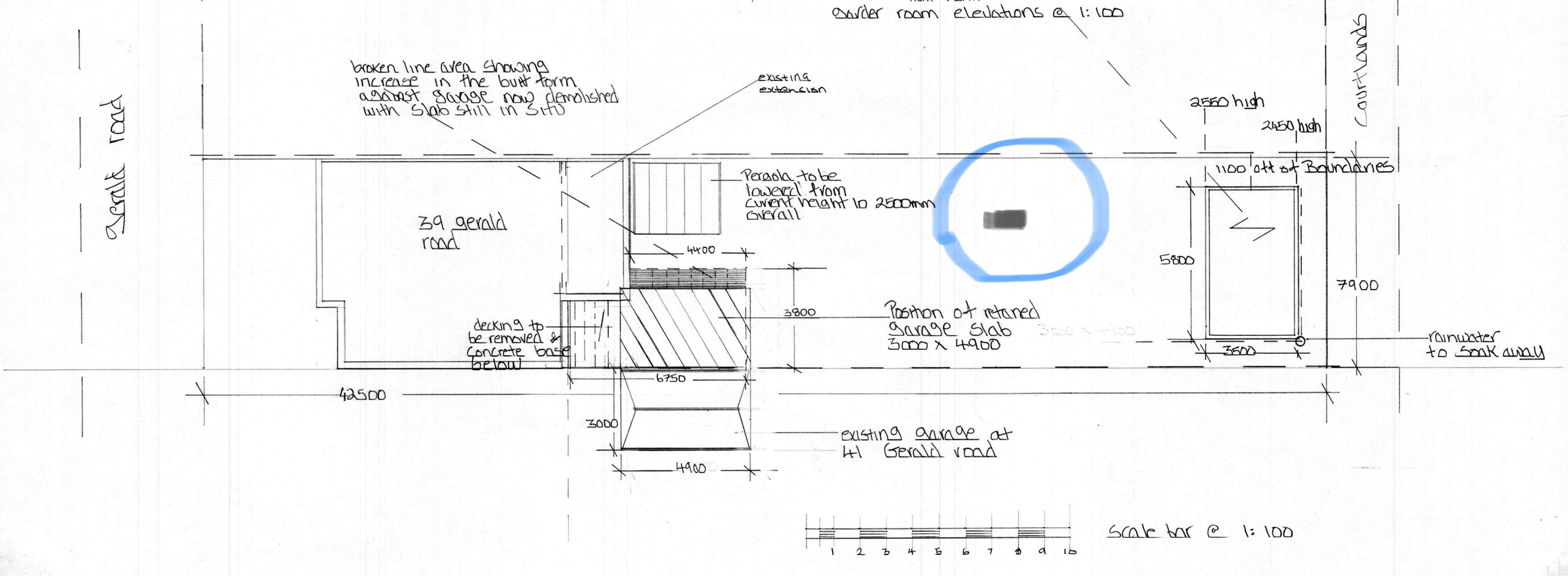
Showing —

Garden room erected Summer 2025 with dims & elevations
Pergola to be lowered in height to 2500mm overall.
Position of existing garage slab @ number 39 to be removed
Proposed extension area showing modest increase in the built form @ circa 4 sq.m.



Garden room elevations @ 1:100





Appendix B - InfoDrainage Calculations

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network	16/01/2026 Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Inflows Storm Phase: Phase	Company Address: Aegaea		



Existing Roof

Type : Catchment Area

Area (ha)	0.002

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Proposed Extension

Type : Catchment Area

Area (ha)	0.002

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network	16/01/2026 Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Stormwater Controls Storm Phase: Phase	Company Address: Aegaea		



Cellular Storage

Type : Cellular Storage

Dimensions

Exceedance Level (m)	4.900
Depth (m)	0.420
Base Level (m)	4.000
Number of Crates Long	4
Number of Crates Wide	3
Number of Crates High	2
Porosity (%)	94
Crate Length (m)	1
Crate Width (m)	0.5
Crate Height (m)	0.21
Total Volume (m³)	2.849

Inlets

Inlet

Inlet Type	Point Inflow
Incoming Item(s)	Existing Roof Proposed Extension
Bypass Destination	(None)
Capacity Type	No Restriction

Advanced

Base Infiltration Rate (m/hr)	0.09
Side Infiltration Rate (m/hr)	0.09
Safety Factor	2.0

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network	16/01/2026 Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Inflow Summary Storm Phase: Phase	Company Address: Aegaea		

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Existing Roof	Cellular Storage		Time of Concentration	0.002	100	0	100	0.002
Proposed Extension	Cellular Storage		Time of Concentration	0.002	100	0	100	0.002
TOTAL		**0.0**		**0.004**				**0.004**

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network	16/01/2026 Designed by: OH	Checked by: JA	Approved By: NDD
Report Title:	Company Address:		
Rainfall Analysis Criteria	Aegaea		

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall

FEH

Type: FEH

Site Location	GB 509351 103685 TQ 09351 03685
Rainfall Version	2022
Summer	☑
Winter	☑

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0.000
30.0	0.000
30.0	40.000
100.0	0.000
100.0	45.000

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
240	480
360	720
480	960
960	1920
1440	2880

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network	16/01/2026 Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Aegaea		

FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Lost Volume (m³)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Cellular Storage	FEH: 2 years: +0 %: 120 mins: Winter	4.070	4.070	0.070	0.070	0.3	0.397	0.000	0.0	0.865	0.000	47	86.077

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network		Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Aegaea		

Status
OK

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network	16/01/2026 Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Aegaea		

FEH: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Lost Volume (m³)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Cellular Storage	FEH: 30 years: +0 %: 120 mins: Winter	4.202	4.202	0.202	0.202	0.6	1.138	0.000	0.0	1.296	0.000	108	60.038

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network		Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Aegaea		

Status
OK

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network	16/01/2026 Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Aegaea		

FEH: 30 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Lost Volume (m³)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Cellular Storage	FEH: 30 years: +40 %: 120 mins: Winter	4.315	4.315	0.315	0.315	0.8	1.779	0.000	0.0	1.462	0.000	149	37.555

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network		Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Aegaea		

Status
OK

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network	16/01/2026 Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Aegaea		

FEH: 100 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Lost Volume (m³)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Cellular Storage	FEH: 100 years: +0 %: 120 mins: Winter	4.274	4.274	0.274	0.274	0.8	1.545	0.000	0.0	1.404	0.000	135	45.756

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network		Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Aegaea		

Status
OK

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network	16/01/2026 Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Aegaea		

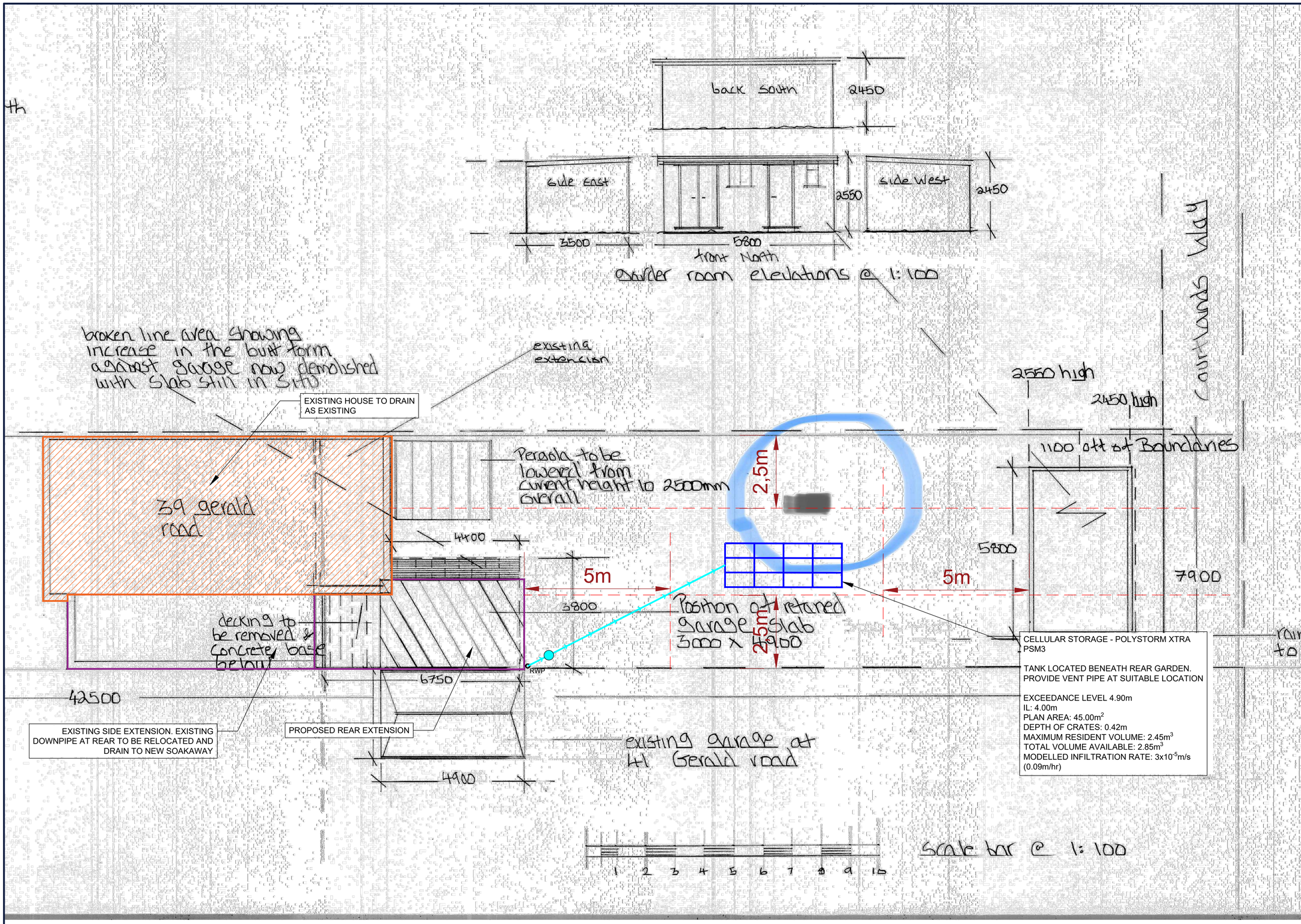
FEH: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Lost Volume (m³)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Cellular Storage	FEH: 100 years: +45 %: 120 mins: Winter	4.501	4.501	0.501	0.501	1.1	2.446	0.000	0.0	1.644	0.000	176	14.127

Project:	Date:		
AEG9666 39 Gerald Road, Goring-by-Sea, West Sussex Proposed Network		Designed by: OH	Checked by: JA	Approved By: NDD
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Aegaea		

Status
OK

Appendix C - SuDS Layout



NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT REPORTS, PLANS AND ARCHITECTURAL DRAWINGS
2. THIS DRAWING SHOULD NOT BE SCALED. THERE SHOULD BE NO RELIANCE ON THIS DRAWING WITH REGARDS TO DIMENSIONS. ALL DIMENSIONS SHOULD BE CONFIRMED ON SITE.
3. ANY DISCREPANCY ON THIS DRAWING SHOULD BE REPORTED TO AEGAEA IMMEDIATELY FOR CLARIFICATION.
4. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORKS AND FOR THE STABILITY, INSTALLATION AND HEALTH AND SAFETY OF THE WORKS.
5. AEGAEA HAVE PRODUCED THIS DRAWING BASED ON THE DRAWINGS AND INFORMATION PROVIDED BY THE CLIENT AVAILABLE AT THE TIME OF PRODUCTION. WE CANNOT ACCEPT RESPONSIBILITY FOR DISCREPANCIES RESULTING FROM NEW PLANS/ INFORMATION BEING ISSUED POST-ISSUE OF THIS DRAWING. THE CONTRACTOR SHOULD REVIEW THIS DRAWING IN LIGHT OF WIDER SITE INFORMATION SUCH AS CONTAMINATION, UTILITIES SURVEYS AND SITE INVESTIGATIONS
6. IT IS THE RESPONSIBILITY OF THE PRINCIPLE CONTRACTOR TO MAKE THE DESIGNER AND CLIENT AWARE OF SITE-SPECIFIC RISKS AND HAZARDS THAT MAY AFFECT THE DRAWING AND SPECIFICATION

LEGEND

- SURFACE WATER INSPECTION CHAMBER
- PROPOSED PRIVATE SURFACE WATER DRAIN
- GEOCULLULAR SOAKAWAY
- RWP — RAINWATER DOWNPIPE
- CATCHMENT BOUNDARY
- CATCHMENT AREA EXCLUDED

CLIENT:

MARK NEWMAN

SITE:

39 GERALD STREET, GORING-BY-SEA, WEST SUSSEX BN11 5QQ

DRAWING:

SURFACE WATER DRAINAGE LAYOUT

DRAWING NUMBER:

AEG9666-DR01 SHEET 1 OF 1

DATE:

16/01/2026

REV:

A

DRAWN BY:

OH

DRAWING SCALE:

SEE DRAWING

PRELIMINARY DRAWING FOR PLANNING ONLY - NOT FOR CONSTRUCTION

aegaea

water, civils and environment