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Flood Risk Assessment AEG9033_PO11_HaylingIsland_01

Site Address: 26 Wittering Road
Hayling Island
Hampshire
PO11 9SP

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

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Document Issue Record

Project: Flood Risk Assessment

Prepared for: OB Architecture LTD

Reference: AEG9033_PO11_HaylingIsland_01

Site Location: 26 Wittering Road, Hayling Island, Hampshire, PO11 9SP

Issue	Date	Author	Check	Auth.	Comments
1	08/01/2026	Mace Latham	AB	NB	First issue
2	21/05/2026	Abbie Betts	OH		Updated following revised site plans and revised EA tidal modelling data and revised proposed FFLs.
3	01/06/2026	Mace Latham	NB		Updates to reflect Sequential and Exception Test carried out by Atlas Planning Group.

Issue 2:

This report has been updated following receipt of updated site plans and revised Environment Agency East Solent Coastal Model data and subsequent review of updated tidal climate change allowances affecting the site.

The updated modelling includes revised Higher Central (HC) and Upper End (UE) climate change scenarios, which have been used to reassess the potential tidal flood risk to the proposed development.

In response to the updated modelling outputs, the proposed Finished Floor Levels (FFLs) have been increased to 4.68m AOD (300mm above the 1 in 200 year Higher Central flood level), and additional flood resilience and resistance measures have been recommended as part of the updated mitigation strategy for the site in relation to the 1 in 200 year Upper End flood level.

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does not ensure that there is no risk or that there is no residual risk from an extreme, unlikely or unforeseen flood event over the lifetime of the development.

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Summary

Development Description	Existing	Proposed
Development Type	Grounds / garden associated with an existing dwelling.	The erection of an additional dwelling within the grounds of the existing dwelling.
EA Vulnerability Classification	More Vulnerable	More Vulnerable
Ground Floor Level	The EA LiDAR data shows the ground elevation of the site varies between approximately 3.75m AOD (metres Above Ordnance Datum) and 4.42m AOD.	Proposed FFLs are to be raised to 4.68m AOD, which is 300mm above the maximum 200-year plus climate change Higher Central flood level of 4.38m AOD.
Level of Sleeping Accommodation	N/A ¹	Ground Floor.
Surface Water Drainage	N/A ¹	Small scale SuDS such as water butts and rainwater planters are recommended to be included in external areas.
Site Size	Approximately 925m ²	No change.
Risk to Development	Summary	Comment
EA Flood Zone	Flood Zone 1 based on EA Flood Map for Planning	When considering the Partnership for South Hampshire (PUSH) Strategic Flood Risk Assessment (SFRA) climate change mapping, the site is within the 2085 future Flood Zone 2 and 3.
Flood Source	Tidal	
SFRA Available	PfSH Level 1 Strategic Flood Risk Assessment Part 1 (Partnership for South Hampshire, 2024) and The Partnership for Urban South Hampshire (PUSH) SFRA (2016)	
Management Measures	Summary	Comment
Ground floor level above extreme flood levels	Yes	Proposed FFLs are to be raised to 4.68m AOD, which is 300mm above the maximum 200-year plus climate

Safe Access/Egress Route		change Higher Central flood level of 4.38m AOD. Thus, all sleeping accommodation is located a minimum of 300mm above the maximum 2125 tidal flood levels.
	No	The proposed dwelling is approximately 300mm above the maximum 2125 epoch flood levels. Thus, refuge can be sought at the ground level of the property.
Flood Resilient Design	Mitigation measures recommended as a precautionary approach.	Flood resilience and resistance measures are recommended up to the Upper End climate change flood level of 4.75m AOD. See details in Section 5.
Site Drainage Plan	N/A ¹	Small scale SuDS such as water butts and rainwater planters are recommended to be included in external areas.
Flood Warning and Evacuation Plan	N/A ¹	The site is not in an area where the EA provide specific flood warnings. However, the site is in close proximity to the EA's 'Tidal areas of North Eastoke including Eastoke Marina and Eastoke Avenue' Flood Warning Area.
Offsite Impacts	Summary	Comment
Displacement of floodwater	Negligible	The site is in EA Flood Zone 1, however is located on a future tidal Flood Zone as per the PUSH SFRA (2016) and according to paragraph 49 (reference ID 7-049-20220825 of the Planning Practice Guidance: "The loss of floodplain storage is less likely to be a concern in areas benefitting from appropriate flood risk management infrastructure or

<p>Increase in surface run-off generation</p> <p>Impact on hydraulic performance of channels</p>		<p>where the source of flood risk is solely tidal”</p> <p>Therefore, the development is not considered to impact on flood risk elsewhere as a result of floodwater displacement.</p>
	Negligible	<p>Small scale SuDS such as water butts and rainwater planters are recommended to be included in external areas.</p>
	Negligible	<p>The nearest Main River in relation to the site is ‘The Winner’ channel which is situated 190m east of the site.</p>

¹ not required for this assessment

² data not available.

1. Introduction

- 1.1. Aegaea were commissioned by OB Architecture LTD to undertake a Flood Risk Assessment (FRA) to facilitate a planning application for the proposed development. This FRA 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 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 26 Wittering Road, Hayling Island, Hampshire, PO11 9SP (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. It is understood that the client is seeking to submit a full planning application for the erection of a residential dwelling within the grounds of an existing dwelling. The proposed development includes the raising of Finished Floor Levels (FFLs) to 4.68m AOD. All proposed plans can be found in Appendix A of this report.
- 1.5. A topographic survey has been provided and can be found in Appendix B of this report. The survey shows that the ground levels of the site vary between 3.76m AOD (metres Above Ordnance Datum) at the northwest and 4.29m AOD to the east. It is also noted that the site borders the 'Sparkes Marina' to the east which is at levels of approximately 1.60m AOD.
- 1.6. Existing ground levels at the location of the proposed dwelling is 4.00m AOD.
- 1.7. EA Light Detection and Ranging (LiDAR) data Digital Terrain Model has been used to visualise the topography of the site and surrounding area (Figure 2).

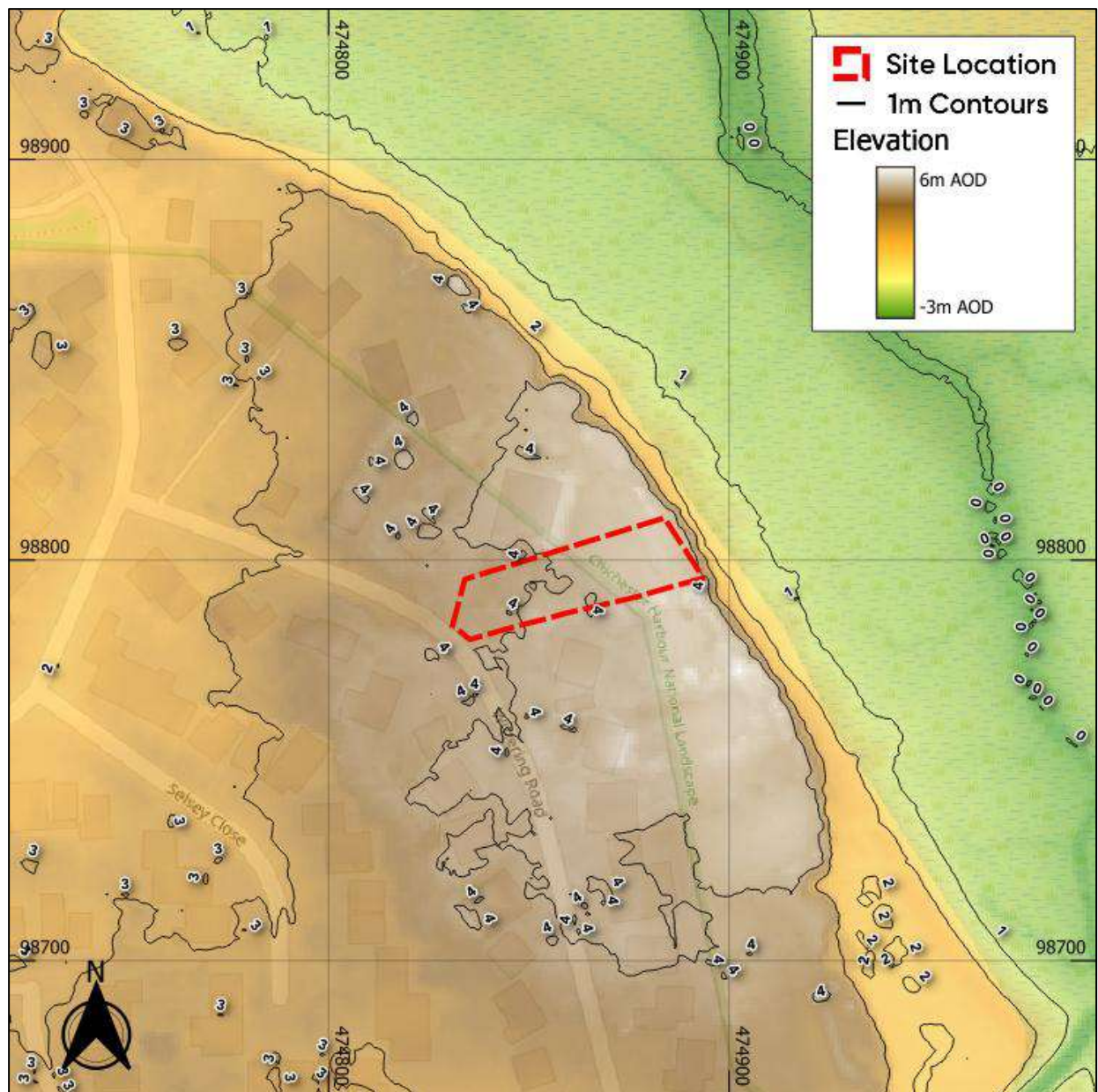


Figure 2: Site Topography (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © <https://www.openstreetmap.org> and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

- 1.8. Havant Borough Council is the Local Planning Authority (LPA) for the site and Hampshire 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

1.9. UK government planning guidance states¹ that an FRA is required for developments which are:

- *in flood zones 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*

1.10. The site is within Flood Zone 1 as per the EA Flood Map for Planning. However, when considering the Partnership for Urban South Hampshire (PUSH) Strategic Flood Risk Assessment (SFRA, 2016) climate change mapping, the site is within the 2085 future Flood Zone 2 and 3 (Figure 3).

1.11. Thus, an FRA is required to be submitted alongside the planning application in line with the NPPF.

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



Figure 3: Future Flood Zone 2 and 3 - 2085 (PUSH SFRA, 2016)

1.12. 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

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 Framework² (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	<p>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:</p> <p>land having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or</p> <p>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).</p> <p>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)</p>

- 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, Havant Borough Council, sets out the policies for development in the local area.
- 2.8. Policy CS15.1 Flood and Coastal Erosion Risk: Flood outlines the requirements for new development within the area. It states:

Development in areas at risk of flooding now and in the future as identified on the latest Environment Agency flood risk maps and Strategic Flood Risk Assessment climate change maps will only be permitted where:

- 1. It meets the sequential and exception test (where required) in relation to PPS25.*
- 2. The site is located in a low hazard area as defined in the Strategic Flood Risk Assessment.*
- 3. A site-specific flood risk assessment demonstrates that the development will be safe, including the access, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.*
- 4. The scheme incorporates flood protection, flood resilience and resistance measures appropriate to the character and biodiversity of the area and the specific requirements of the site.*
- 5. Appropriate flood warning and evacuation plans are in place.*
- 6. New site drainage systems are designed taking account of events which exceed the normal design standard.*

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. Atlas Planning Group have prepared a Sequential and Exception Test report for the development at 26 Wittering Road in April 2026. This Sequential and Exception Test document concluded that out of the 293 sites identified within the search, no sites were considered an appropriate alternative and thus the Sequential Test is passed.

2.11. The Exception Test demonstrated that there were a number of benefits of the proposal, most specifically delivering a dwelling when the Council has a land supply of only 1.6 years, and that the proposal will not increase flood risk elsewhere whilst remaining safe for its lifetime. Therefore, the Exception Test at the site is also passed.

3. Consultation and Review

EA Consultation

- 3.1. The Environment Agency initially provided Product 6 data from the East Solent Coastal Model (2018) in January 2026. Subsequently, updated East Solent Coastal Model data was provided by the Environment Agency in May 2026, which supersedes the previously reviewed dataset. The updated modelling data includes revised climate change allowances, including Higher Central and Upper End scenarios, and has been used to reassess tidal flood risk to the site.
- 3.2. The EA correspondence can be found in Appendix C of this report.

Documents and Online Mapping

- 3.3. 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.
- 3.4. 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)

- Havant Borough Core Strategy (Havant Borough Council, 2011)³
- Preliminary Flood Risk Assessment Addendum (Hampshire County Council, 2017)⁴ and Preliminary Flood Risk Assessment (Hampshire County Council, 2011)⁵
- PfSH Level 1 Strategic Flood Risk Assessment Part 1 (Partnership for South Hampshire, 2024)⁶ and The Partnership for Urban South Hampshire (PUSH) SFRA (2016)⁷
- Local Flood and Water Management Strategy (Hampshire County Council, 2022)⁸

Preliminary Flood Risk Assessment (PFRA)

- 3.5. The PFRA, published in 2011 and 2017 (addendum), is a high-level appraisal of flood risk across Lead Local Flood Authority Hampshire 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.
- 3.6. The PFRA summarises historical flood incidents in Hampshire County Council. The site is not recorded as having been affected by any flood event.

Strategic Flood Risk Assessment (SFRA)

- 3.7. The SFRA, published in 2024, provides the evidence base for the Local Planning Authority Havant 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

³ <https://www.havant.gov.uk/media/7437/download?inline>

⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/698544/PFRA_Hampshire_County_Council_2017.pdf

⁵ <https://documents.hants.gov.uk/flood-water-management/watercourses/PFRAReportsavedJan2016.pdf>

⁶ https://www.newforest.gov.uk/media/4012/PfSH-SFRA-Part-1-Main-Report-2024/pdf/PfSH_SFRA_Part_1_Main_Report_2024.pdf?m=1719398783270

⁷ <https://www.portsmouth.gov.uk/wp-content/uploads/2021/12/PUSH-Strategic-Flood-Risk-Assessment-2016-update-main-report-February-2016-accessible.pdf>

⁸ <https://www.localplan.winchester.gov.uk/assets/inline/1071/BNE22-Local-Flood-Risk-Management-Strategy-for-Hampshire.pdf>

into account current flood risk, future flood risk, and the effect a proposed development would have on the risk of flooding.

- 3.8. The SFRA mapping provided by Havant 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)

- 3.9. 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.
- 3.10. The Hampshire County Council LFRMS is used within this report to identify any flood management infrastructure and historical incidences of flooding.

4. Sources of Flood Risk

Fluvial and 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.

Main Rivers and Watercourses

- 4.3. The nearest Main River in relation to the site is 'The Winner' channel which is situated 190m east of the site. It is noted that given the location is coastal, the watercourses within the area are estuaries and are tidally influenced.
- 4.4. The Winner originates from the Emsworth Channel and Chichester Channel both of which are identified as EA Main Rivers according to EA data.

EA Flood Map for Planning

- 4.5. The site is situated within Flood Zone 1 based on the EA Flood Map for Planning (Figure 4). Flood Zone 1 denotes land having less than 1 in 1,000 annual probability of river or sea flooding (all land outside Zones 2 and 3).
- 4.6. It is noted that interrogation of the nearby Flood Zone extents shows that the extents are derived from tidal models only and thus **the fluvial flood risk is considered to be low.**
- 4.7. However, as per the PUSH SFRA (2016) mapping (Figure 3), the site is situated within Flood Zone 2 and 3. Therefore, in order to assess the tidal flood risk in detail, the EA detailed model for the area has been reviewed below.



Figure 4: 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)

Historical Flood Outline Dataset

- 4.8. According to the EA Recorded and Historical Flood Outlines dataset, the site nor the nearby vicinity (<200m) has experienced flooding previously (Figure 5).

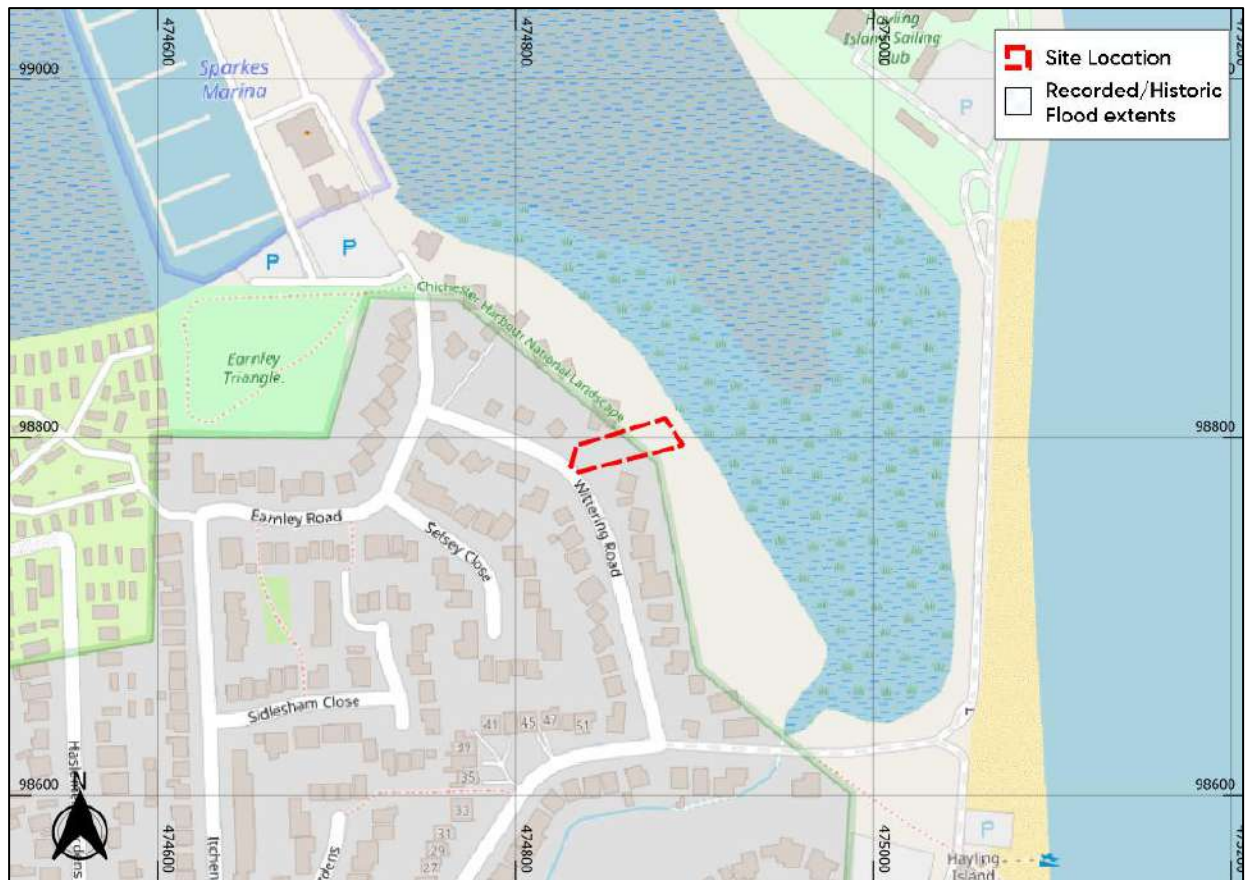


Figure 5: EA Historic Flood Mapping (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © <https://www.openstreetmap.org> and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

East Solent Coastal Model (2018) - Update

- 4.9. The Environment Agency has provided updated tidal modelling data from the East Solent Model (2018) to fully assess the tidal flood risk to the site and proposed development. The model includes multiple present day scenarios and climate change allowances in addition to the 1 in 200 year scenario.
- 4.10. The updated dataset includes revised climate change allowances including Higher Central (HC) and Upper End (UE) scenarios.

Present Day Scenarios

- 4.11. Based on the present day modelled extents, the site remains unaffected up to and including the 1 in 1000 year scenario as shown in Figure 6.

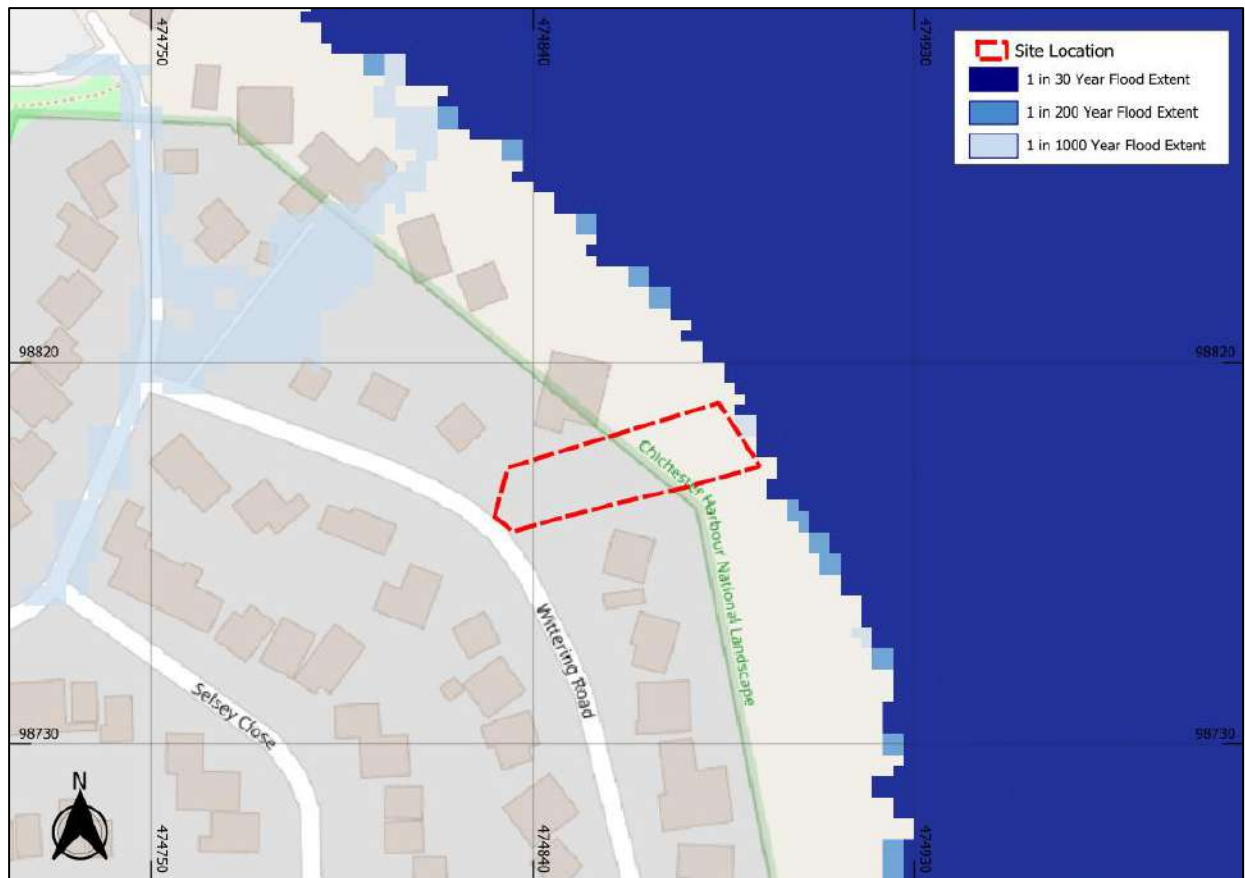


Figure 6: EA East Solent Coastal Model Present Day Flood Extents (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © <https://www.openstreetmap.org> and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

Climate Change Scenario

- 4.12. The EA East Solent Coastal Model (2018) update includes revised Higher Central (HC) and Upper End (UE) climate change scenarios for the 1 in 200 year 2125 tidal event. In line with current climate change guidance for residential development, the Higher Central climate change allowance has been used as the design event for the proposed development. The Upper End climate change scenario has also been analysed to consider the potential residual tidal flood risk to the site
- 4.13. Review of the updated modelling indicates that the maximum 200 year plus climate change Higher Central flood level affecting the site is 4.38m AOD and the maximum Upper End flood level is 4.75m AOD.

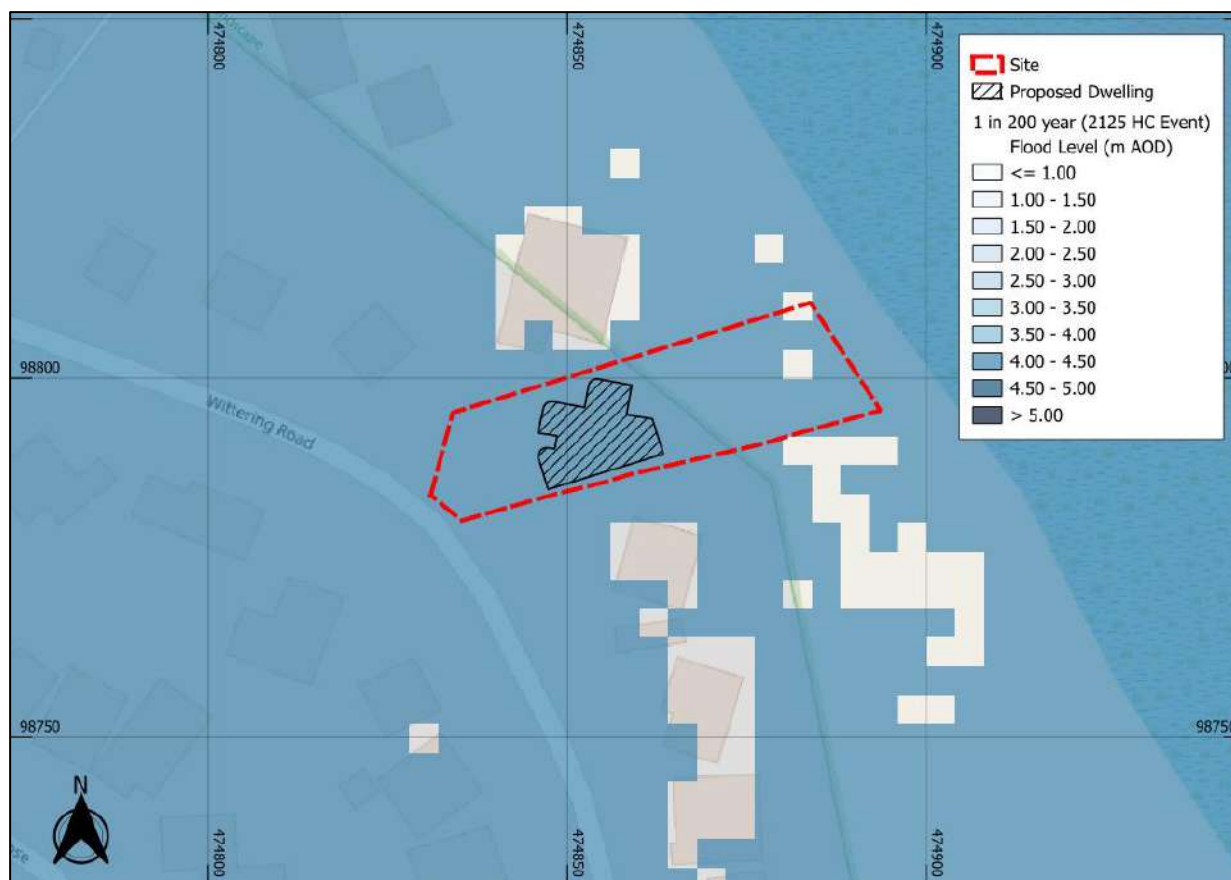


Figure 7: EA East Solent Coastal Model Update - 1 in 200 Year + 2125CC Flood Depths (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © <https://www.openstreetmap.org> and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

- 4.14. The proposed ground floor FFLs of the dwelling are to be raised to 4.68m AOD, which provides approximately 300mm freeboard above the maximum modelled Higher Central flood level of 4.38m AOD. The proposed raising of internal floor levels will reduce the potential risk of floodwater ingress to the development during the design climate change event.
- 4.15. Furthermore, flood resilience and resistance measures are additionally recommended up to the Upper End climate change flood level of 4.75m AOD as a precautionary approach to improve the resilience of the development and to reduce potential impacts during more extreme tidal events.

Tidal Flood Risk Summary

- 4.16. According to the EA Flood Map for Planning, site is located within Flood Zone 1. Review of the updated EA East Solent Coastal Model data indicates that the site may be affected by tidal flooding during the 1 in 200 year climate change event.

- 4.17. Review of the updated modelling indicates a maximum 2125 Higher Central flood level of 4.38m AOD affecting the site, whilst the Upper End climate change scenario indicates a maximum flood level of approximately 4.75m AOD.
- 4.18. The proposed ground floor FFLs of the dwelling are to be raised to 4.68m AOD, which provides approximately 300mm freeboard above the maximum modelled Higher Central flood level.
- 4.19. Furthermore, flood resilience and resistance measures are additionally recommended up to the Upper End climate change flood level of 4.75m AOD as a precautionary approach to improve the resilience of the development and to reduce potential impacts during more extreme tidal events.
- 4.20. Therefore, when considering the proposed raised ground floor FFLs and recommended flood resilience measures, the tidal flood risk to the proposed development is considered to be low.

Canals

- 4.21. 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.
- 4.22. No CRT maintained canals were identified within 1.0km of the site according to the UK CRT Network mapping⁹.
- 4.23. The risk of flooding to this site from canals is considered to be low.

Pluvial

- 4.24. Pluvial flooding can occur during prolonged or intense storm events when the infiltration potential of soils, or the capacity of drainage infrastructure is overwhelmed leading to the accumulation of surface water and the generation of overland flow routes.

⁹ <https://canalrivertrust.org.uk/canals-and-rivers>

RoFSW Data Analysis

- 4.25. The National Flood Risk Assessment (NaFRA2) has updated the Risks of Flooding from Surface Water (RoFSW) products which shows the chance of flooding from surface water to areas of land.
- 4.26. 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).
- 4.27. 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.
- 4.28. 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).
- 4.29. 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 – 2060 “2050s” epoch) and central allowances are being used initially, to support short and medium-term decisions informed by the highest flood likelihood projections.
- 4.30. Given the similarity between the present day and climate change scenarios, the climate change scenario has been assessed below as a modelled ‘worst-case’ scenario.

Climate Change Scenario

- 4.31. Examination of the EA's 'Flood Risk from Surface Water – Climate Change' mapping indicates that the entirety of the site is outside the modelled low, medium and high likelihood categories even when considering the effects of climate change (Figure 8).

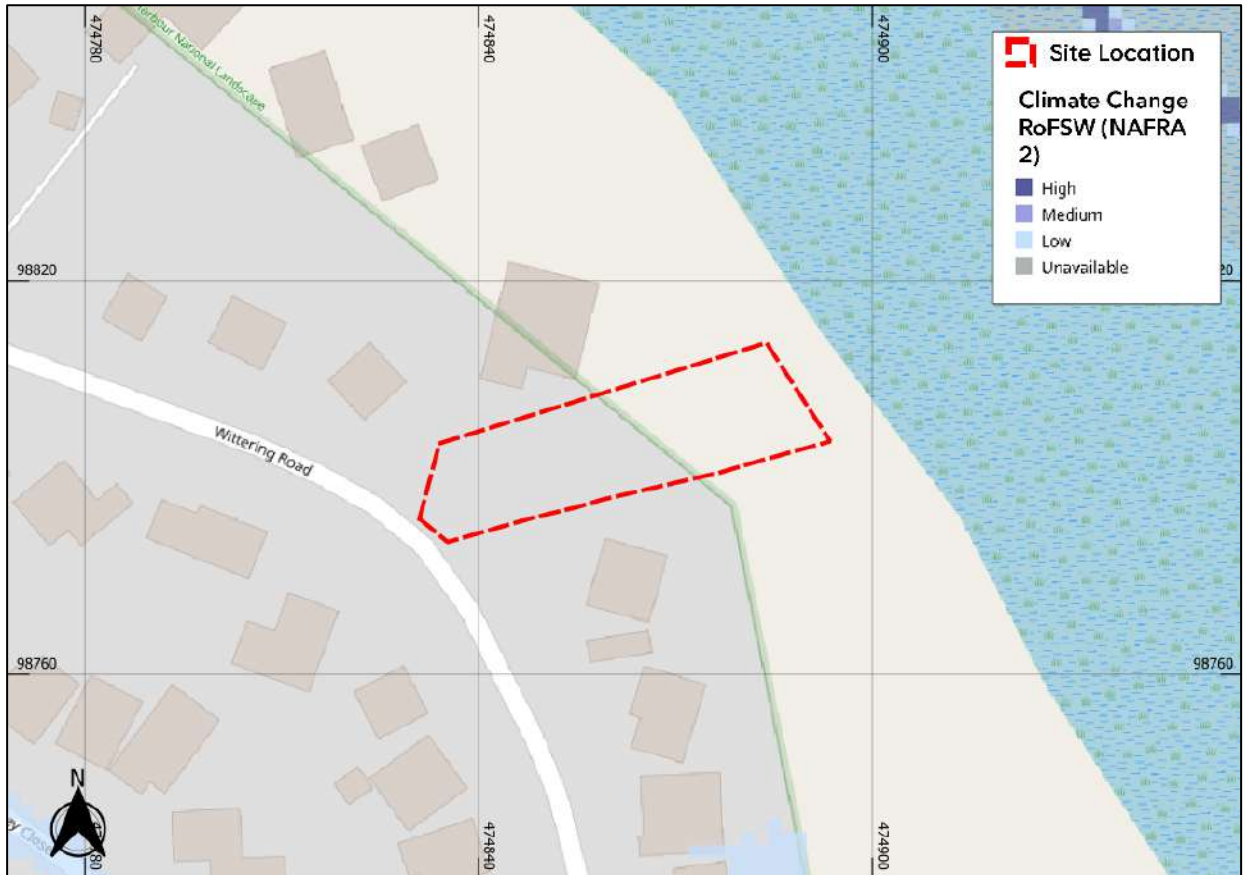


Figure 8: EA Surface Water Flood Risk Mapping – Climate Change (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © <https://www.openstreetmap.org> and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

- 4.32. Thus, the pluvial (surface water) flood risk is considered to be low.

Reservoirs

- 4.33. 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.

- 4.34. According to the EA's Flood Risk from Reservoirs mapping the site is outside modelled flood extents in the event of reservoir flooding (Figure 9).

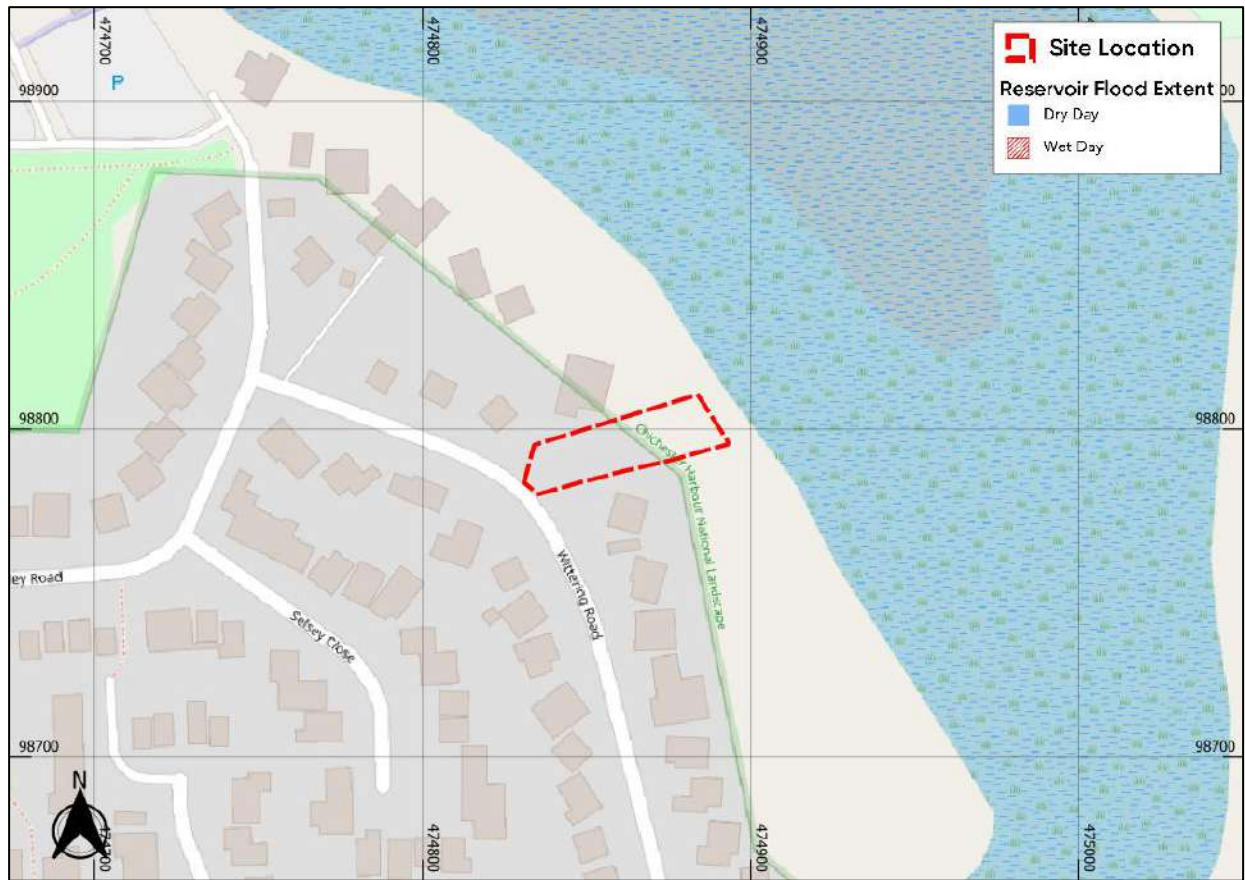


Figure 9: EA Reservoir Flood Risk Mapping (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). ©<https://www.openstreetmap.org> and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

- 4.35. Thus, the site is considered to be low risk from reservoir flooding in the event of a breach.

Groundwater

- 4.36. Groundwater flooding occurs in areas where underlying geology is permeable, and water can rise within the strata sufficiently to breach the surface.
- 4.37. The British Geological Survey's (BGS) mapping shows superficial deposits of River Terrace Deposits (undifferentiated) comprised of sand, silt and clay along with Storm Beach Deposits comprised of gravel underlying the site. The bedrock geology underlying the site is mapped as London Clay Formation comprised of clay, silt and sand.
- 4.38. There are no boreholes within 200m of the site according to BGS mapping.

- 4.39. The PfSH SFRA mapping indicates the site (represented by the black circle) is located in an area with 'Low Bedrock Permeability' and there are no recorded groundwater flooding incidents near the site (shown via a black hash on the online mapping) (Figure 10).

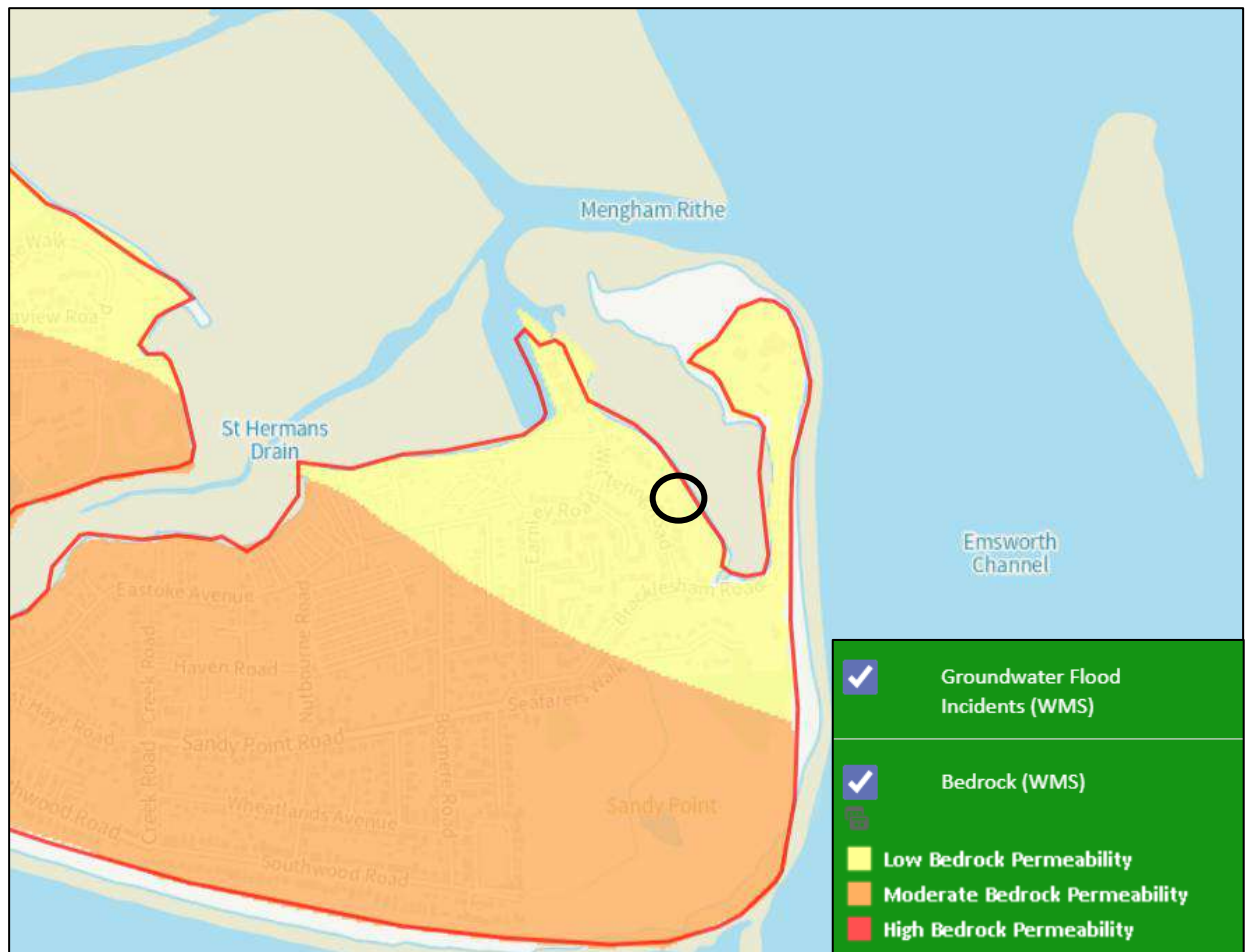


Figure 10: PfSH SFRA Mapping (2024) Groundwater Flooding Data

- 4.40. Furthermore, the development proposals do not include any proposed basements.
- 4.41. The risk from groundwater to the development is therefore considered to be low.

Sewers

- 4.42. 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.
- 4.43. The PfSH SFRA (2024) provides mapping of historical sewer flood incident records kept by the local authority and provided by Southern Water. No incidents have been recorded on-site.



Figure 11: PFSH SFRA Mapping (2024) Southern Water Flooding Data

4.44. Thus, the development is therefore considered to be at low risk of flooding from sewers.

5. Flood Risk Mitigation

Tidal

- 5.1. The site is within Flood Zone 1 as per the EA Flood Map for Planning, which was updated in August 2025. However, when considering the Partnership for Urban South Hampshire (PUSH) Strategic Flood Risk Assessment (SFRA, 2016) climate change mapping, the site is within the 2085 future Flood Zone 2 and 3.
- 5.2. Given the above, updated Environment Agency East Solent Coastal Model data has been reviewed to assess the potential tidal flood risk to the site. Review of the updated modelling indicates a maximum Higher Central climate change flood level of 4.38m AOD affecting the site, whilst the Upper End climate change scenario indicates a maximum flood level of approximately 4.75m AOD.
- 5.3. The proposed Finished Floor Levels (FFLs) of the dwelling are to be raised to 4.68m AOD, which provides approximately 300mm freeboard above the maximum modelled Higher Central flood level.
- 5.4. Furthermore, flood resilience and resistance measures are recommended up to the Upper End climate change flood level of 4.75m AOD as a precautionary approach to improve the resilience of the development and to reduce potential impacts during residual tidal events.
- 5.5. In accordance with the CLG guidance *Improving the Flood Performance of New Buildings: Flood Resilient Construction* (2007)¹⁰, the owner may wish to consider flood resilience and resistance measures to help manage residual flood risk at the property such as:

- FFLs to be set to 4.68m AOD, 300mm above the 1 in 200 year HC flood level.

¹⁰ https://assets.publishing.service.gov.uk/media/602d673ee90e0709e8d085d8/Improving_the_Flood_Resilience_of_Buildings_Through_Improved_Materials_Methods_and_Details_Technical_Report.pdf

- *Any internal finishes should be water-resistant; sacrificial linings can be used where appropriate to minimize flood damage to to a level of 5.05m AOD (300mm above the 1 in 200 year UE flood level).*
- *Raised wiring and power outlets at ground floor level should be raised to 5.05m AOD (300mm above the 1 in 200 year UE flood level).*
- *Non-return valves should be installed around the property. Maintenance of these valves is important to ensure their continued effectiveness so should be maintained in line with manufactures recommendations.*
- *Watertight seals should be installed on doors around the property.*
- *Insulation to be low adsorption board or semi rigid self-draining wool bats.*

All Other Analysed Sources of Flooding

- 5.6. Based on the analysis conducted in Section 4 of this FRA, the flood risk from other analysed sources such as fluvial, canal, pluvial, reservoir, groundwater and sewers are considered to be low and thus no further mitigation is recommended than outlined above.
- 5.7. It is also noted that the proposals include the raising of FFLs to 4.68m AOD and thus will provide a precautionary approach against any potential flood risk.

Increase to Flood Risk Elsewhere

- 5.8. As has been identified within this report the site is affected by potential future tidal flooding as per the SFRA, but according to paragraph 49 (reference ID 7-049-20220825 of the Planning Practice Guidance;

"The loss of floodplain storage is less likely to be a concern in areas benefitting from appropriate flood risk management infrastructure or where the source of flood risk is solely tidal"

- 5.9. Therefore, the development is not considered to impact on flood risk elsewhere as a result of floodwater displacement.

Flood Warnings & Safe Access Egress

- 5.10. Based on the EA Flood Map for Planning, the site is situated within Flood Zone 1. However, updated EA East Solent Coastal Model data indicates that the site may be affected by tidal flooding during the 1 in 200 year climate change event.
- 5.11. Flood hazard mapping associated with the updated EA East Solent Coastal Model (2018) Higher Central climate change scenario has also been reviewed as part of this assessment.
- 5.12. The majority of Wittering Road adjacent to the site is located within an area with a flood hazard rating of between 1.25-2.00, which equates to a 'danger for most' classification. The modelled flood hazard mapping also indicates that western areas of the site are within the same 'danger for most' category, whilst other areas of the site are affected by flood hazard ratings of between 0.75-1.25, which represents a 'danger for some' classification (i.e. the elderly and infirm) (Figure 12)

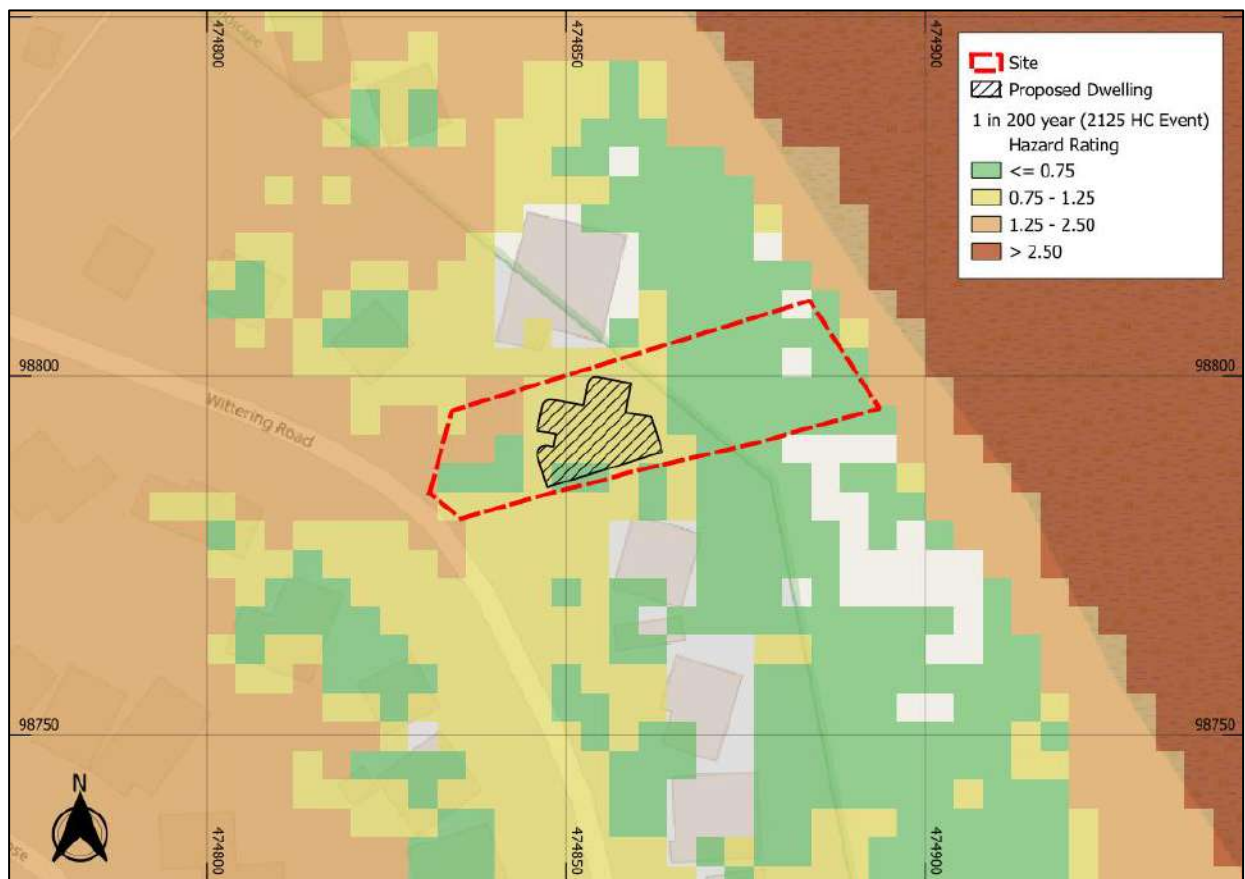


Figure 12: EA East Solent Coastal Model 1 in 200 year HC Flood Hazard (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © <https://www.openstreetmap.org> and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

- 5.13. Therefore, safe access and egress may not be achievable during future tidal flood events associated with the design climate change scenario.
- 5.14. The proposed FFLs of the dwelling are to be raised to 4.68m AOD, which provides approximately 300mm freeboard above the maximum modelled Higher Central climate change flood level of 4.38m AOD. Therefore, the proposed building is considered to provide safe refuge for future residents during the design flood event.
- 5.15. The site is not located within an area where the EA provide specific flood warnings. However, the site is in close proximity to the EA's 'Tidal areas of North Eastoke including Eastoke Marina and Eastoke Avenue' Flood Warning Area. Given the proximity to this area, future residents are encouraged to sign up to the EA Flood Warning Service as a precautionary approach.
- 5.16. Flood warnings/alerts can be issued at any time of the day or night. Signing up to this service provides residents with advance notice prior to a potential flood event. The amount of warning time provided before flooding occurs depends on site-specific factors such as proximity to the source of flooding, surrounding topography, and the flood mechanism itself. Flood alerts and warnings provide residents with time to take appropriate action, including communicating flood risk to occupants, moving valuable belongings to higher levels, and evacuating the site if necessary

6. Conclusions

- 6.1. This FRA has been undertaken with reference to the requirements of NPPF and Planning Practice Guidance with respect to the development at 26 Wittering Road, Hayling Island, Hampshire, PO11 9SP. 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.
- 6.2. An assessment of the risk of flooding from all sources has been undertaken and is summarised in the table below:

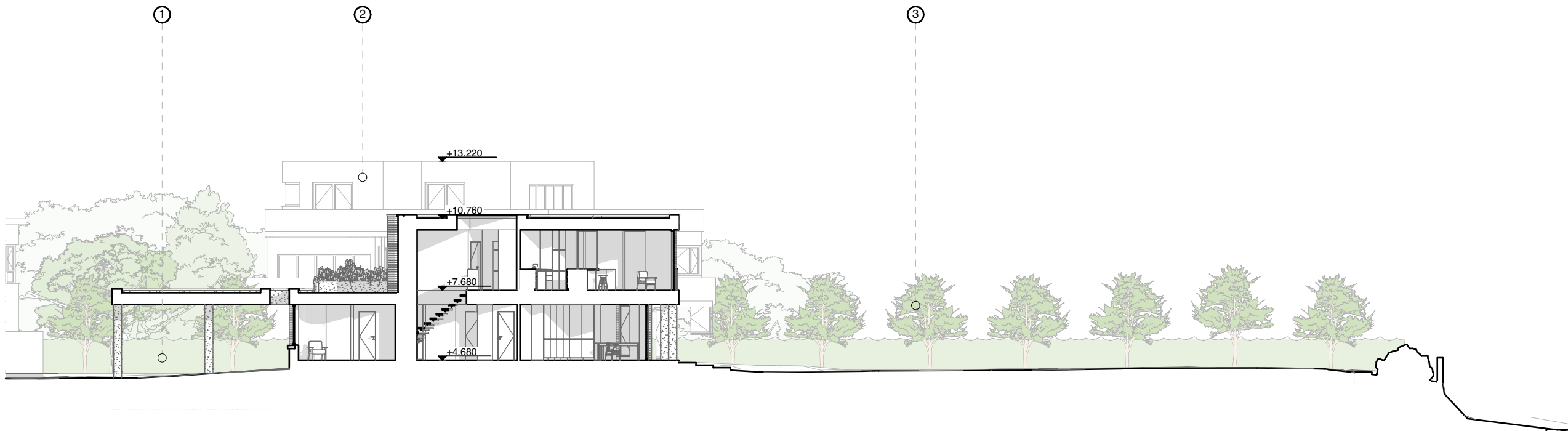
Source of Flooding	Flood Risk Summary
Tidal	<p>The site is within Flood Zone 1 as per the EA Flood Map for Planning. However, when considering the Partnership for South Hampshire (PUSH) Strategic Flood Risk Assessment (SFRA) climate change mapping, the site is within the 2085 future Flood Zone 2 and 3.</p> <p>Given the above, updated EA East Solent Coastal Model data has been reviewed to assess the potential tidal flood risk to the site. Review of the updated modelling indicates a maximum Higher Central climate change flood level of 4.38m AOD affecting the site, whilst the Upper End climate change scenario indicates a maximum flood level of approximately 4.75m AOD.</p> <p>The proposed Finished Floor Levels (FFLs) of the dwelling are to be raised to 4.68m AOD, which provides approximately 300mm freeboard above the maximum modelled Higher Central climate change flood level.</p> <p>Flood resilience and resistance measures are additionally recommended up to the Upper End climate change flood level of 4.75m AOD as a precautionary approach to improve the resilience of the development during residual extreme tidal events.</p> <p>Therefore, when considering the proposed raised Finished Floor Levels and recommended flood resilience measures, the tidal flood risk to the proposed development is considered to be low.</p>
Fluvial Pluvial Reservoirs Groundwater	<p>The proposed dwelling is considered to be at low risk from other analysed sources of flooding.</p>

Sewers	
Canals	

- 6.3. The FRA 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.
- 6.4. This Flood Risk Assessment should be submitted as part of the planning application to satisfy the requirements under NPPF.

Appendix A - Development Proposals

- 1 Carport
- 2 26 Wittering Road
- 3 New planting to boundary



1:200
Proposed Site Section

Scale @ A3: 1:200

0 2 4 6 8 10

NOTE: This drawing is to be scaled for planning purposes only

Project: 26 Wittering Road

Address: 26 Wittering Road,
Hayling Island, PO11 9SP

Client: Peter & Gusti Taylor

Drawing: Proposed Site Section

483 - OBA - 00 - ZZ - DR - A - 0300 - 02

Status: Planning OBA proj no: 483

02	Planning	19/05/2026
01	Planning	04/12/2025
rev	description	date

O B ARCHITECTURE

The Dispensary, 5-6 The Square, Winchester, SO23 9ES
6a Maltings Place, 169 Tower Bridge Road, London, SE1 3JB
01962 865344 info@obarchitecture.co.uk www.obarchitecture.co.uk

04 Proposals

Proposed Site Plan

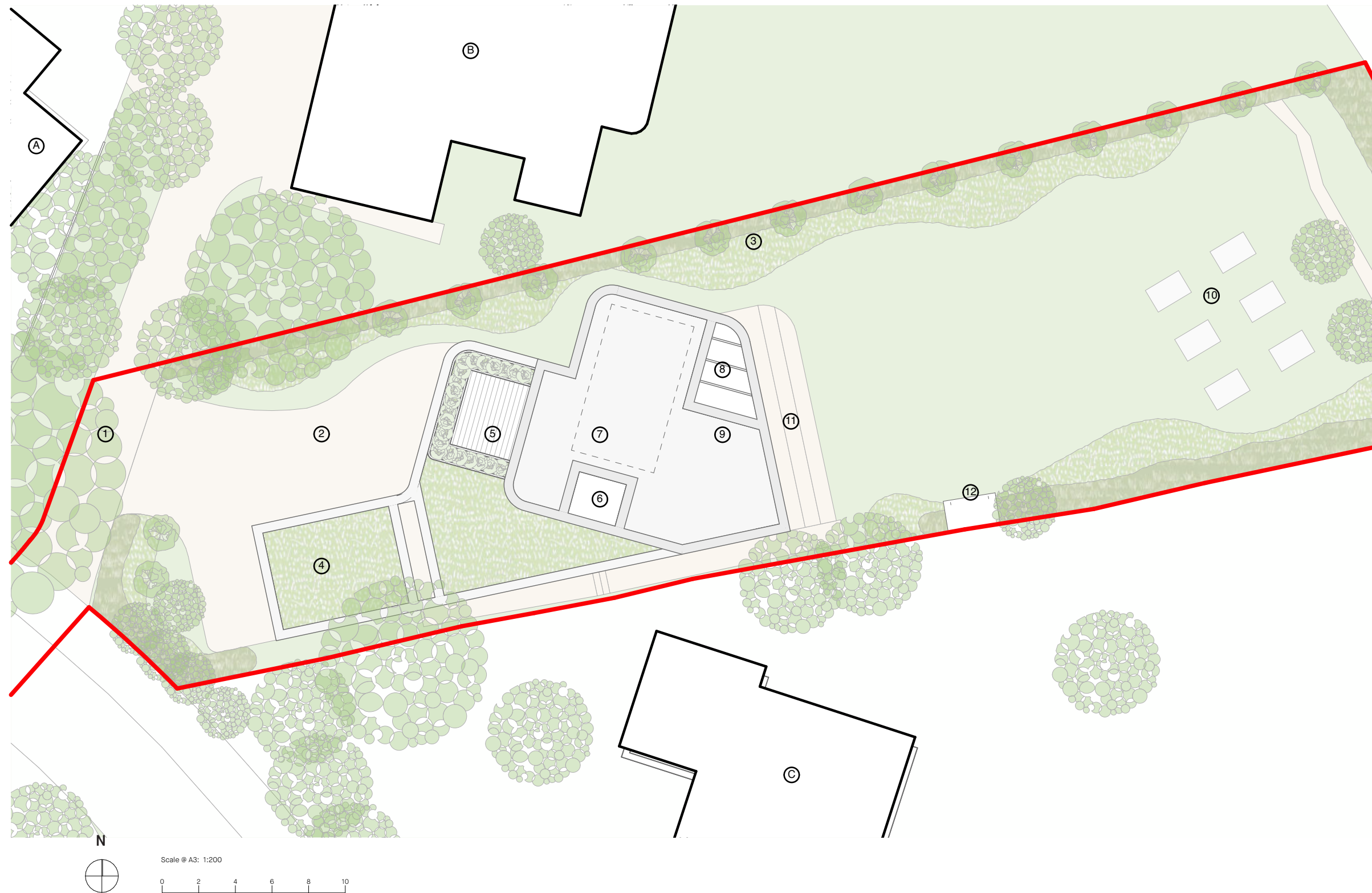
Based on contextual and architectural analysis, the proposed house is strategically positioned on the site to mitigate overlooking both to and from the plot and the neighbouring properties. Minimising the impact on outlook and site lines from neighbouring properties including that of the host dwelling.

This careful positioning and sensitive design ensure the new dwelling integrates seamlessly with its surroundings while enhancing the living experience for the occupants.

The new driveway and entry off the existing access and driveway to the host dwelling designed to provide easy, level access into the building, ensuring convenience and accessibility.

Additionally, a carport is included, offering a sheltered space for embarking and disembarking vehicles safely.

The elongated plot allows for ample private amenity space orientated towards Chichester Harbour, providing the residents with a serene outdoor area.



- 1 Access to new site from existing driveway
- 2 New driveway
- 3 New planted boundary
- 4 Green roof to first floor roof
- 5 Terrace to first floor
- 6 Roof light above stair
- 7 Zone allocated for Solar PV
- 8 Covered Balcony
- 9 Rear patio
- 10 Rear Garden
- 11 Rear Patio
- 12 Bike Store

A 26a Wittering Road
B 26 Wittering Road
C 22 Wittering Road

Proposed Site Plan

04 Proposals

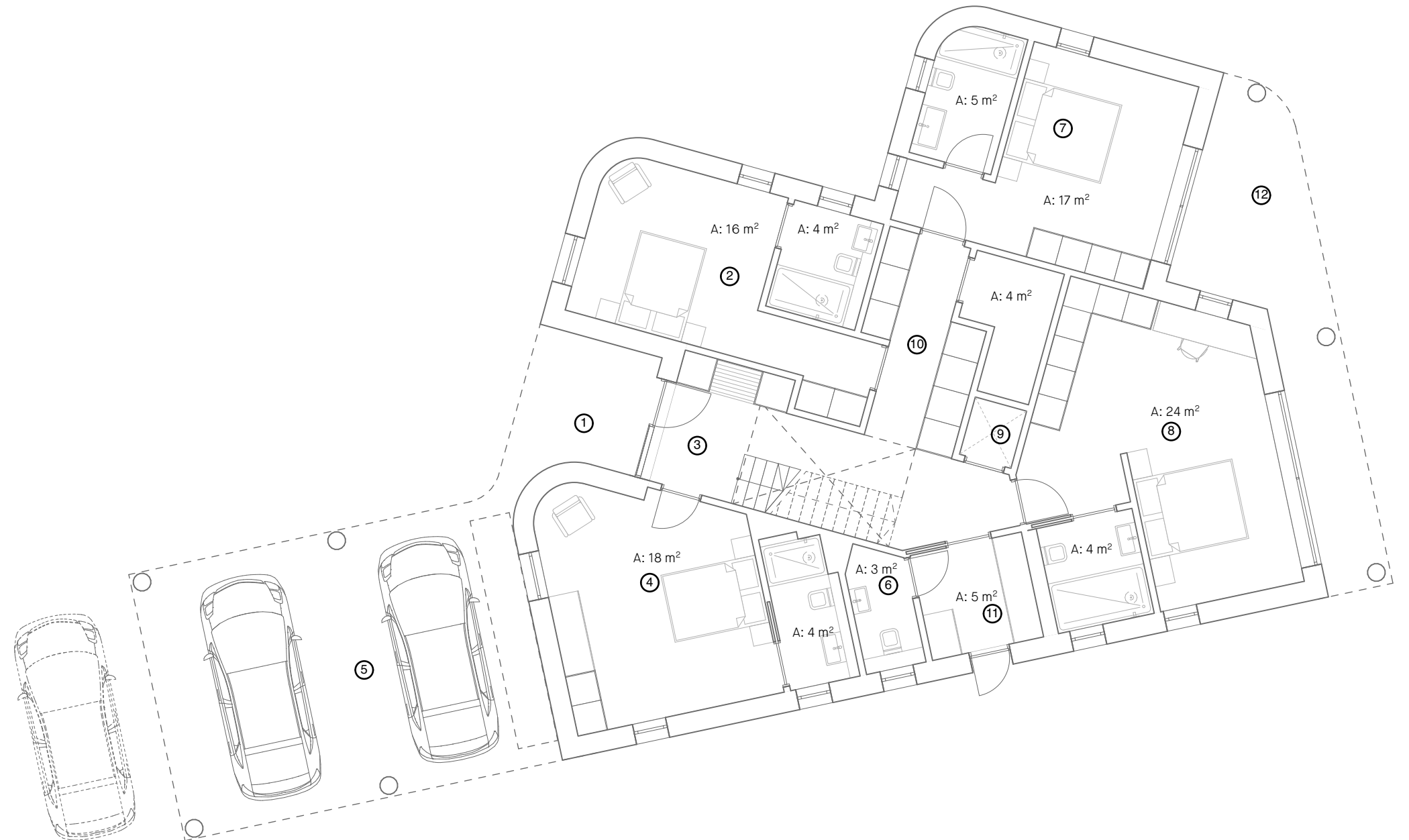
Proposed Ground Floor Plan

The ground floor of the proposed house is orientated to allow clear access down the hall and up to the living spaces on the first floor.

A large cupboard has been incorporated into the design to accommodate the future installation of a platform lift, ensuring the house is future-proofed for residents with disabilities.

The bedrooms are arranged at the rear of the ground floor, overlooking the garden and Chichester Harbour. Each bedroom is equipped with an en suite.

Additionally, a dedicated self-contained annex is provided for a live-in carer, ensuring continuous care for the family in the future if required.



- 1 Covered porch
- 2 Bedroom + en suite
- 3 Entrance hall
- 4 Annex with kitchenette + en suite
- 5 Carport
- 6 Plantroom
- 7 Bedroom + en suite
- 8 Master bedroom + en suite
- 9 Storage / Future through lift to first floor
- 10 Storage
- 11 Utility and access to rear garden
- 12 Outline of balcony above



Proposed Ground Floor Plan

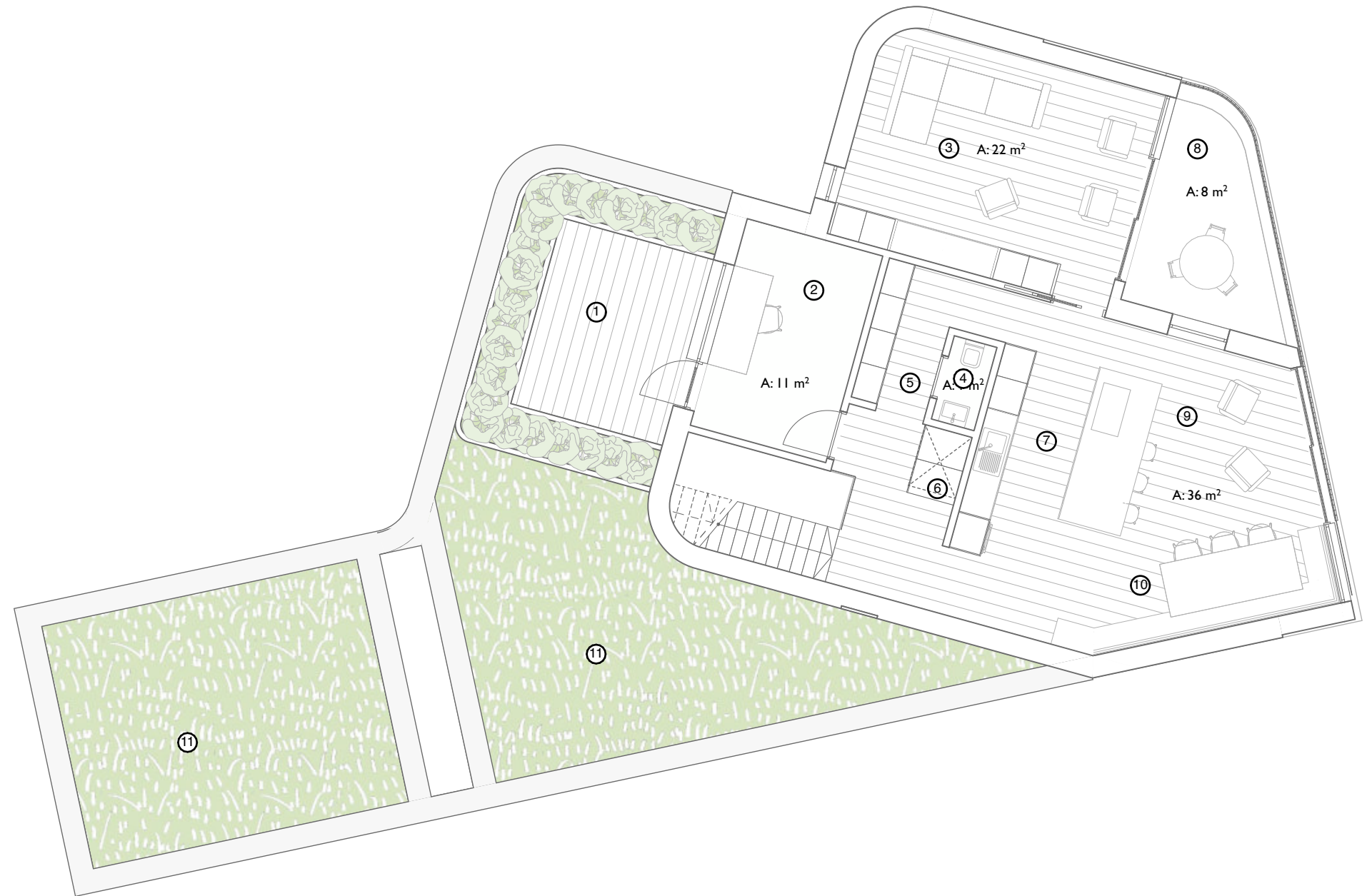
04 Proposals

Proposed First Floor Plan

The first floor is arranged as an open-plan living area. The kitchen is centrally located, ensuring easy access for all users. The dining and sitting areas are positioned to take advantage of the views, featuring sliding doors that open to a Juliet balcony, which mitigates overlooking.

A reception area also overlooks the same views and has access to a covered balcony, providing an additional outdoor space.

A study space is situated towards the west, accessible from the open-plan area, offering a quiet spot for work or study. The centre of the plan is allocated for storage and a WC, ensuring convenience and maintaining the clean, open feel of the living space.



- 1 Terrace
- 2 Study
- 3 Reception room
- 4 WC
- 5 Storage / Pantry
- 6 Future through lift to ground floor
- 7 Kitchen
- 8 Balcony
- 9 Lounge / sitting area
- 10 Dining
- 11 Green roof



Proposed First Floor Plan

05 External Representation

Front View

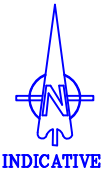


05 External Representation

View of Rear



Appendix B - Topographic Survey



98850N

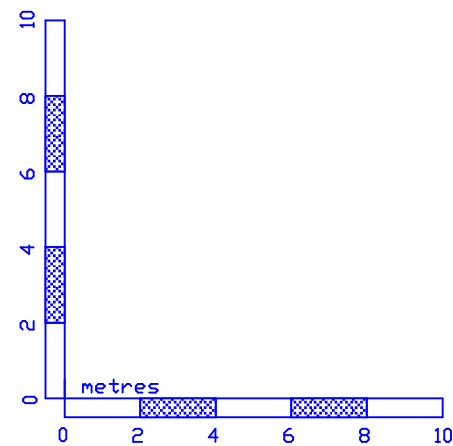
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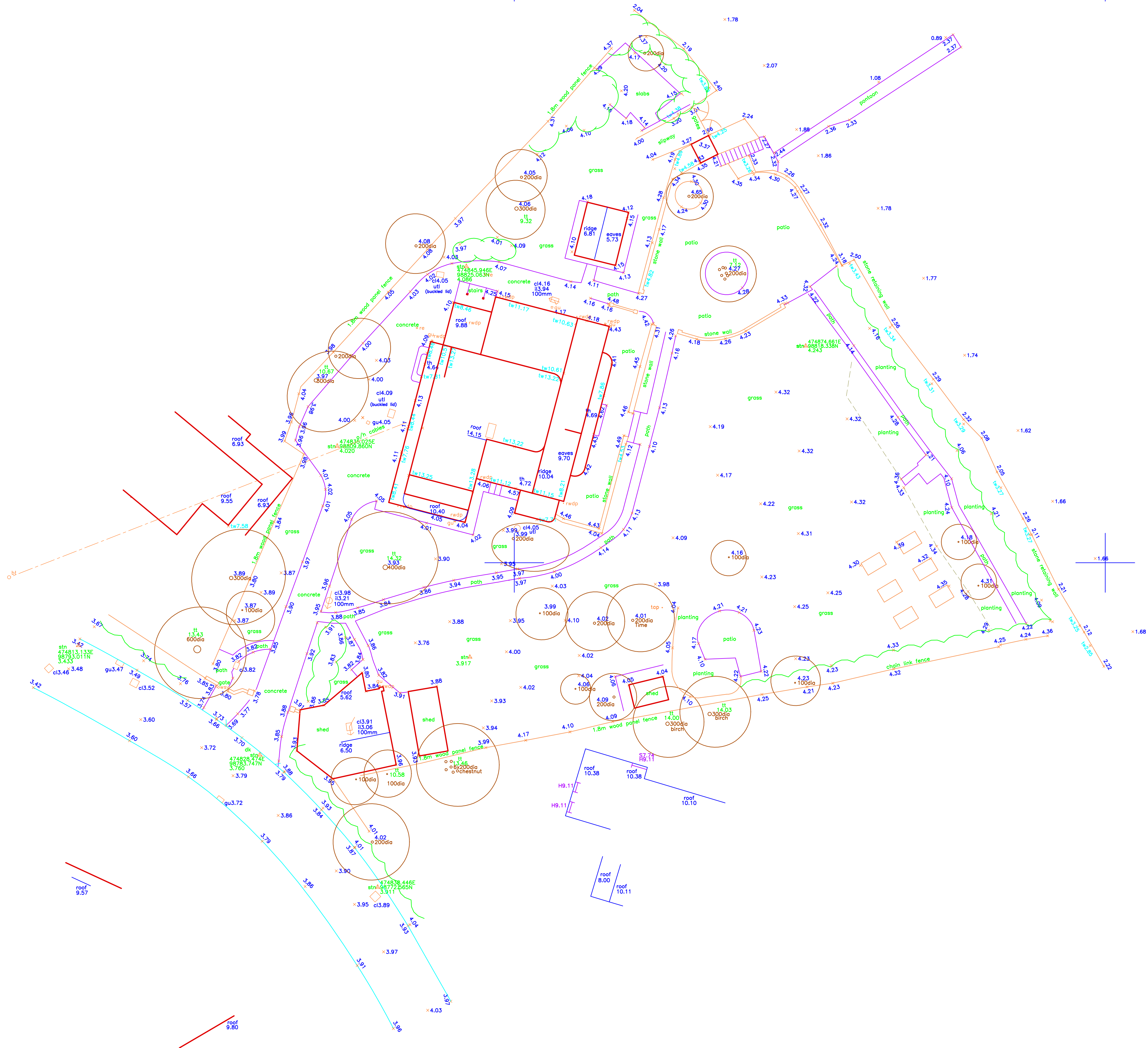
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KEY:	
bt	British Telecom
cb	Control Box
cl	Cover Level
ctv	Cable Television
dk	Drop Kerb
el	Electric
ep	Electricity Pole
fh	Fire Hydrant
gu	Gully
gsv	Gas Stop Valve
ht	Height
ic	Inspection Cover
il	Invert Level
lp	Lamp Post
mkr	Marker
o/h	Overhead
pb	Post Box
pxg	Pan Crossing
rp	Name Plate
rs	Road Sign
sv	Stop Valve
tb	Telephone Box
tl	Traffic Light
tt	Top of Tree
th	Threshold
tw	Top of Wall
uti	Unable to Lift
vp	Vent pipe
wn	Water Meter
wsv	Water Stop Valve



Appendix C - EA Consultation

Good morning Tina,

Apologies but upon further review of this application (APP/26/00089), we realise we have made a mistake in our response.

We should have objected to this application due to an inadequate Flood Risk Assessment - they should be making an assessment of the freeboard which would likely result in a larger allowance.

Additionally, the applicant has used an older version of our East Solent model as they requested it back in September 2025 before the release of the updated model. Though the applicant has calculated the climate change allowance using the latest UKCP18 data it's incorrect as it's based on the older model.

Would you be able to accept an updated response from us?

Thank you,

Victoria Hindmarsh

Planning Advisor | Sustainable Places | Solent & South Downs | Environment Agency

Environment Agency | Worthing Office | Teville Gate House | Teville Road | Worthing | BN11 1UR

Email: Victoria.Hindmarsh@environment-agency.gov.uk

Local planning Authority: Havant Borough Council

Reference: APP/26/00089

Site Address: 26 Wittering Road, Hayling Island, PO11 9SP

Proposal: Erection of a detached, three-bedroom, self-build dwelling with associated access, parking, hard and soft landscaping, and associated works, with an ancillary one-bedroom carers annexe following subdivision of the plot and demolition of the existing buildings

Coastal Partners Comments

Thank you for consulting Coastal Partners on the above application. We offer the following comments:

The site lies in the Environment Agency's Flood Zone 1 and is therefore considered to be at low risk (less than 1 in 1000 year / <0.1% annual probability of experiencing an extreme tidal flood event). However, in the future, with climate change taken into account, the site is expected to move into Flood Zone 3, and is therefore considered to become at high risk of flooding (1 in 200 year / 0.5% annual probability of experiencing an extreme tidal flood event) during the lifetime of the development.

All the sleeping accommodation in the proposed dwelling is located at ground floor level.

The applicant has provided a site specific Flood Risk Assessment. The assessment has concluded that, based on current EA modelling with climate change allowances applied, flood levels could reach 4.20m AOD. In response, finished flood levels are proposed at 4.50m AOD, 500mm above existing ground levels and 300mm above the expected flood level.

EA guidance recommends that finished floor levels should lie 600mm above the expected flood level. The applicant should seek to achieve this, or demonstrate why it cannot be achieved. If it is not possible to achieve, the new dwelling should be designed with suitable flood resistance and resilience techniques / methods to 600mm above the expected flood level - this element is currently absent from the applicant's

FRA. Guidance on possible resistance and resilience measures can be found at

- [Flood risk assessment: Flood Zones 1, 2, 3 and 3b - GOV.UK](#), under the heading 'Extra flood resistance and resilience measures' and
- <https://www.gov.uk/government/publications/flood-resilientconstruction-of-new-buildings>

Havant Borough Council
Development Control
Civic Offices Civic Centre Road
Havant
Hampshire
PO9 2AX

Our ref: HA/2026/127544/01-L01
Your ref: APP/26/00089
Date: 11 March 2026

Dear Planning Officer,

ERECTION OF A DETACHED, THREE-BEDROOM, SELF-BUILD DWELLING WITH ASSOCIATED ACCESS, PARKING, HARD AND SOFT LANDSCAPING, AND ASSOCIATED WORKS, WITH AN ANCILLARY ONE-BEDROOM CARERS ANNEXE FOLLOWING SUBDIVISION OF THE PLOT AND DEMOLITION OF THE EXISTING BUILDINGS.

26 WITTERING ROAD, HAYLING ISLAND, PO11 9SP

Thank you for consulting the Environment Agency on the above application.

We have reviewed the information as submitted and set out our position and comments below.

Environment Agency position

We have **no objection to the proposed development as submitted, provided that the following condition be attached** to any planning permission granted, and that the details in relation to this condition be submitted and approved by the Local Planning Authority (LPA).

The proposed development will only meet the National Planning Policy Framework's (NPPF's) requirements in relation to flood risk if the following planning condition is included.

Condition

The development shall be carried out in accordance with the submitted flood risk assessment (by aegaea, ref AEG9033_PO11_HaylingIsland_01, 08 Jan 2026) and the following mitigation measures it details:

- Finished floor levels shall be set no lower than 4.5 metres Above Ordnance Datum (mAOD)

These mitigation measures shall be fully implemented prior to occupation and subsequently in accordance with the scheme's timing/phasing arrangements. The measures detailed above shall be retained and maintained thereafter throughout the lifetime of the development.

Reason

To reduce the risk of flooding to the proposed development and future occupants.

Advice to LPA

The Flood Risk Assessment for the proposed development shows that the property is currently located in Flood Zone 1 (land defined by the NPPF as having a low probability of flooding) but is located in the future tidal flood zone as shown in the Partnership for South Hampshire (PfSH) Strategic Flood Risk Assessment (SFRA). The FRA therefore proposes raising the finished floor levels of the new property to 4.5mAOD, above the future predicted tidal flood level.

Sign up for flood warnings

The applicant/occupants should phone Floodline on 0345 988 1188 to register for a flood warning, or visit [Sign up for flood warnings - GOV.UK](#). It is a free service that provides warnings of flooding from rivers, the sea and groundwater, direct by telephone, email or text message. Anyone can sign up.

Flood warnings can give people valuable time to prepare for flooding – time that allows them to move themselves, their families and precious items to safety. Flood warnings can also save lives and enable the emergency services to prepare and help communities.

For practical advice on preparing for a flood, visit [Prepare for flooding: Protect yourself from future flooding - GOV.UK](#).

To get help during a flood, visit [What to do before or during a flood - GOV.UK](#).

For advice on what to do after a flood, visit [What to do after a flood - GOV.UK](#).

Please do not hesitate to contact me using the contact details shown below should you have any queries regarding the above information.

Yours faithfully

Victoria Hindmarsh
Planning Advisor

Direct e-mail Victoria.Hindmarsh@environment-agency.gov.uk

Coastal Partners would expect flood resistance measures to be implemented in all situations where internal flooding could occur. Resilience measures should not be utilised instead of resistance measures but alongside them.

It is noted that the FRA recommends that future occupants sign up to the EA's Flood Warning Service. Coastal Partners support this recommendation. However, the LPA, in arriving at their decision, should note that the applicant's FRA does not consider whether access or egress from the site would be possible at the time of a flood. Given that the area around the site lies in present day Flood Zone 3, it must be assumed that no dry or safe access or egress would be possible, and that occupants may need to evacuate before a flood event, or remain in their dwelling. The LPA must consider whether they are satisfied with this arrangement in terms of the overall acceptability of the development.

It is suggested that in its present form the FRA does not robustly demonstrate that the development will be safe for its lifetime and raise a **holding objection** to this proposal.

End Note:

Coastal Partners makes comments only in relation to tidal flood and erosion risk, and it is for the LPA to consider all other forms of flood risk as required by the NPPF and PPG, taking advice from any relevant consultees. Equally, it is for the LPA to satisfy themselves that any NPPF / PPG / local policy requirements for passing the sequential and exception tests have been met for all forms of flooding, including for tidal risk.



Jacqueline Boulter

Principal Planner

Coastal Partners, Havant Borough Council, Public Service Plaza, Havant, PO9

2AX