

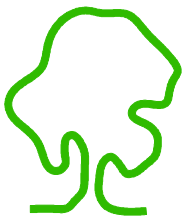
PAVILION BUNGALOW



HOOK LANE, BOGNOR REGIS, WEST SUSSEX, PO22 8AT

Flood Risk Assessment

August 2025



eas ltd

Environmental Assessment Services Ltd

REPORT DATA SHEET

Requirement	Data
Report Reference	834/PRowePlanning/PavilionBungalow/FRA
Date	August 2025
Client	Callan Wood
Report type	Flood Risk Assessment
Revisions	
Prepared by	Xanthe Lyford BSc (Hons)  Signed
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CALLAN WOOD

PAVILION BUNGALOW, HOOK LANE,
BOGNOR REGIS, WEST SUSSEX, PO22 8AT

Flood Risk Assessment

August 2025

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Flood Risk Assessment

August 2025

1. INTRODUCTION

- 1.1 Environmental Assessment Services Limited has been instructed to prepare a site-specific Flood Risk Assessment (FRA) in relation to the proposed development at Pavilion Bungalow in Bognor Regis, West Sussex.
- 1.2 The site lies within an area at risk of flooding and therefore requires a flood risk assessment in support of the planning application.
- 1.3 This FRA is prepared generally in accordance with the Environment Agency's standing advice for carrying out Flood Risk Assessments (available online).
- 1.4 This report has been prepared for the purpose of addressing Local Planning Authority and Environment Agency (EA) concerns in relation to flood risks associated with the proposed redevelopment. It should be appreciated that the potential for flooding at a site depends on many factors, some natural, some man-made and some arising from accident, and that these factors may change substantially over the life of the proposed development.
- 1.5 The flood risk in this report is based on available information, which is generally catalogued in the report but does not take into account any special risks or requirements of the proposed redevelopment unless we have been specifically informed.

2. EXISTING SITE & PROPOSED REDEVELOPMENT

- 2.1 The site lies within a residential area, located off Hook Lane, in Bognor Regis, West Sussex. The Ordnance Survey Grid reference for the centre of the site is SZ 94329 99778. The building plan area is approximately 0.02 ha. The site elevation is approximately + 1.7 m AOD. See Figure 1 in Appendix A for the site location.
- 2.2 The site currently comprises an existing single-storey residence to the south of the site (to remain) and a building (formerly used as a nursery and most recently as a repair garage) located in the approximate centre of the site. The majority of the site is laid to hardstanding (tarmac), except for a garden area around the existing southern dwelling and an area of permeable road planings in the area to the south, adjacent to the bungalow. The site is bordered to north and south by areas of rough grassland/shrubs, to the east by agricultural fields laid to

pasture and to the west by residential dwellings. The site is accessed from Hook Lane by a gated entrance leading to a parking area in front of the residence and the old nursery building. The closest watercourse is the Adlingbourne Rife approximately 163 m northeast of the site. See Figure 4 in Appendix A for photographs of the site as existing.

- 2.3 It is proposed to redevelop the site by the construction of ten residential dwellings comprising two residences to the south of the site, adjacent to the bungalow, three two-storey residences on the footprint of the existing old nursery building and five two-storey residences along the western boundary of the site. See Figure 3 in Appendix A for proposed development plans.
- 2.4 According to the BGS Geological Survey (available online), the site lies on Quaternary beach and tidal flats deposits (sand, silt and clay) over Lewes Nodular Chalk, Seaford Chalk, Newhaven Chalk, Culver Chalk and Portsdown Chalk Formations formed during the Cretaceous period. The DEFRA MAGIC site describes the soil at the site as “*Loamy and clayey soils of coastal flats with naturally high groundwater*”. The site lies on a Principal aquifer with a Secondary A superficial drift. It is in a Medium-High groundwater vulnerability area but is not in a groundwater protection zone.
- 2.5 The site was visited on 20 August 2025. At the time of visit the area to the south of the bungalow was paved in road planings, with two mature trees on the eastern boundary. The old nursery building was in use as a garage, the area along the western boundary was in use for the storage of caravans and the rest of the site was used for storage of cars and waste, including three shipping containers to the rear/east of the site. The wider site was partly permeable surfaced (compacted earth) and partly tarmacked (at the entrance gateway and leading to the bungalow and nursery building).

3. HISTORY OF FLOODING

- 3.1 Bognor Regis and the surrounding Arun district have experienced significant flooding, particularly in recent years. Key flooding incidents occurred in 1974, 2000, 2012 and 2023.

West Sussex County Council Report on June 2012 Flood Event (2012) states:

“The June 2012 flood event occurred as a result of the rainfall which in parts of West Sussex exceeded 100mm of rain in just 16 hours. A series of 11 flooding clusters were report on including Barnham, Felpham and Central Bognor Regis”.

West Sussex Local Flood Risk Management Strategy: 2025 - 2030 states:

“End of October / Beginning November 2023 – Storm Ciarán caused heavy rainfall, leading to river overtopping, combined with high surface water. Several locations were affected, including but not limited to Bognor Regis,”.

- 3.2 Work is being carried out in the area to reduce the flood risk. Bognor Regis has been implementing flood resilience measures, with recent work focusing on deploying pumps to manage high water levels and addressing issues like culvert blockages. The area experienced significant rainfall in the 2023 storm, leading to high water levels in the Aldingbourne Rife and prompting the Environment Agency to dispatch pumps.
- 3.3 The ‘Aldingbourne Rife Strategy’ is being undertaken by the Environment Agency and will include an improved hydraulic model of the network of drainage systems including rife, ditches and sewers. There will be an improved hydrological assessment which will take account of the recent improvements available in respect of the hydrogeological linkage between rainfall on the South Downs and the emergence of groundwater on the coastal plains. The strategy will also assess the adequacy of the sluice and pumping station arrangement at Felpham, the sea defences and the adequacy of the various watercourse channels.
- 3.4 The Aldingbourne Rife which flows southwards approximately 163m southeast of the site is classed as “Main River” and as such the responsibility for the upkeep lies with the Environment Agency, while riparian owners (those who own land adjacent to a river) are generally responsible for the upkeep of watercourses on their land.

4. FLOOD RISK

- 4.1 The EA’s Flood Map for Planning shows that the site lies within Flood Zone 3a (high risk of fluvial flooding, greater than 3.3% chance of flooding in any year - Annual Exceedance Probability or AEP). The site is not shown to be at risk of surface water flooding in the 1 in 30 year scenario but shows an area to the west of the bungalow in the 1 in 100, increasing in size in the 1 in 1000 year scenarios. The long term predicted surface water flood risk shows this area to be at low risk of flooding (>1% chance any year) and to remain so in the 2040-2060 scenario. The site is shown to be at risk of fluvial and tidal flooding in the undefended scenarios but not at risk when flood defences are considered. Flooding from groundwater or reservoirs is considered unlikely at the site. See Appendix B for the EA’s flood risk maps.
- 4.2 The closest watercourse is the Aldingbourne Rife, in the catchment of the River Arun that lies to the northeast of the site, flowing in a southerly direction.
- 4.3 The EA were originally contacted in August 2025 regarding their flood data for the area (Product 4). See Appendix C for the Product 4 data. The EA provided modelled data for the site, including levels from six nodes situated across the site (the closest to the rife being node 2 on the northeast corner and node 6 on the southeast corner, with nodes 1 and 5 on the northwest and southwest corners respectively. Node 3 is in the centre of the existing nursery building and node 4 in the bungalow). The modelled flood levels in metres AOD (Above Ordnance Datum) for fluvial undefended (AEP) 1% + climate change for all the nodes is 2.19 m AOD. For defended it reduces to 1.93 m AOD for nodes 2, 3, 4 and 6

and dry for nodes 1 and 5. The tidal undefended water levels 0.5% (AEP) ranges from 2.99 m AOD at node 2 to 3.02 m AOD at nodes 5 and 6, the tidal defended nodes all show as dry in the modelled data. The defended tidal data from the model remains dry in the 2070 and 2115 scenarios. The fluvial water depths from the undefended model (AEP) 1% + climate change range from 0.25 m at node 5 to 0.57 m at node 2 and reduce to between dry and 0.27 m AOD in the defended model. The tidal water flood depths from the undefended model 0.5% (AEP) range from 0.30 m at node 6 to 1.60 m at node 2 and are dry in the defended scenarios. The Product 4 data shows a map of the nearest engineered flood defences to the site, lying approximately 188 m southeast of the site. See Appendix B for the map of the flood defences and the node locations.

- 4.4 Other organisations have and are undertaking flood risk assessments within the wider area; Bognor Regis and the Aldingbourne catchment lies within an area covered in the Arun District Council's Strategic Flood Risk Assessment (SFRA, updated in 2016). This has been reviewed as part of this assessment.

4.5 Alternative Sources of Flooding

- 4.5.1 It is important to note that flooding is not due simply to river flooding. The Flood Zones (and consequently the application of the Sequential Test to guide development towards areas of lowest risk) are based solely upon the risk of river or sea flooding. It is essential therefore that other potential sources of flood risk, including culvert blockage, sewer flooding and surface water flooding are taken into account.
- 4.5.2 An assessment of alternative sources of flooding has also been made from a review of Arun District Council's Strategic Flood Risk Assessment (SFRA, 2016), Environment Agency (EA) online mapping and the Environment Agency's Flood maps for planning.

4.6 Surface Water Flooding

- 4.6.1 The geology of the catchment area (superficial drift over Chalk Formation) typically comprises variable-good permeability, the soil type being permeable chalk which does not give rise to rapid river responses during rainfall events. It is possible for culverts and drainage ditches to become blocked and/or inundated with water (due to heavy rain) which may cause localised surface water flooding, however there is not a history of surface water flooding at the site and the EA's flood maps for planning show the site as being at Very Low risk of surface water flooding.

4.7 Sewer Flooding

There are no records of the site being directly affected by sewer flooding.

4.8 Groundwater Flooding

DEFRA magic site shows the site to be in an area of Medium-High groundwater vulnerability, but not in a groundwater protection zone. The EA's flood data

website states that flooding from groundwater is unlikely in this area. We are not aware of any historical groundwater flooding at the site.

4.9 Reservoir Flooding

We are not aware of any artificial waterbodies within the wider area (such as reservoirs) that may pose a potential threat of flooding to the site. The EA's flood data website states that flooding from reservoirs is unlikely in this area.

4.10 Climate Change

4.10.1 The frequency and intensity of rainfall events may increase in the future as a result of climate change. Higher intensity rainfall is likely to increase the risk of fluvial, surface water and groundwater flooding at and within the vicinity of the site. The Environment Agency's Climate Change Allowances mandate the consideration of future changes to weather events relating to climate changes.

4.10.2 The EA's Product 4 modelled data contains defended climate change modelled data for fluvial risk of flooding from rivers where there are flood defences and where defences have been removed, including estimated impact of climate change. The modelled data shows that for the defended 0.5% scenarios in 2070 and 1215 the site will remain dry. As long as the flood defences are suitably maintained, the risk to the site and the neighbouring residences will remain unchanged.

4.10.3 The Arun and Western Streams Catchment Flood Management Plan Summary Report December 2009 states:

"The scenario which has the greatest effect on future flood risk is climate change with up to 20% increase in peak flood flows. This scenario is used to assess likely impacts in the catchment. In the Arun catchment the future flood risk is likely to be from river flooding and tide-locking events caused by sea level rise."

They state that they will take increased action to maintain the level of protection due to the increased risk due to climate change:

"Areas of low, moderate or high flood risk where we are already managing the flood risk effectively but where we may need to take further actions to keep pace with climate change."

They also maintain that their policy would achieve the economic and social objectives making sure that flood risk does not increase in the future as a result of climate change and urban development.

4.10.4 In this case, the proposed development site lies within Flood Zone 3a, at high risk of fluvial and tidal flooding (where defences are not considered and within a low risk of surface water flooding). Results from detailed modelling were used to define the upper end and higher central climate change allowances for the River Arun and its tributaries. Results mostly show a trend of increased risk

only when defences are not considered in land at risk from a 1% AEP event (Flood Zone 3a) in the future compared to the current extent. This would indicate that the site will remain in Flood Zone 3a and at a similar level of risk for the lifespan of the proposed redevelopment so long as the flood defences are maintained to a suitable level.

5. PLANNING STATUS WITH RESPECT TO FLOODING

- 5.1 The extent to which information relating to flood risk required at a site is presently based on the level of 'Flood Risk' at the proposed development (i.e. how likely an area is to flood), and the 'vulnerability' of the proposed development/future site users to flooding. The site lies in Flood Zone 3a but is successfully protected by flood defences and in an area already used for residential use.
- 5.2 The Sequential Test is designed to move development towards sites within a lower flood risk zone, in this case Flood Zone 1 or 2. The applicant must demonstrate that there are no reasonably available alternative sites within the local area of lower flood risk that are suitable for the proposed development; in this case residential dwellings.
- 5.3 Right Move, Zoopla and On The Market websites were consulted on the 11 September to assess if there was any land available within the Bognor Regis area at a lower level of flood risk for the potential development of ten dwellings. A search of the land agent site Henry Adams also resulted in no availability within the area. Additionally, the Arun District Council Brownfield Land Register was reviewed on the 12 September 2025, see below for the list of developable plots within Bognor Regis:

Ref	Site Name	Area (ha)	No of dwellings	Justifications	Reason for unsuitability as alternative site
BR10	Covers, Richmond Road	1.19	32-32	Arun Local Plan Viability Study 2016 - assessed as viable and achievable. Developable.	Too large and too many dwellings. The site is not available until the current business relocates.
18BR2	Richmond Arms, 224 London Road	0.04	10	BR/8/21/RES for 10 flats - allowed on appeal. Deliverable.	At risk of surface water flooding in all scenarios. Upwards renovation of existing public house.
BR19811	Land at Durban Road/Ash Grove	0.08	14	BR/90/18/PL for 14 flats - lapsed.	Flood Zone 2 and 3. Too many dwellings.

BR28019	5 Victoria Drive	0.02	5	BR/280/19/PL for the redevelopment of existing retail site to a mixed-use development. Deliverable.	Too few dwellings and mixed use.
BR19	Regis Centre, The Esplanade	1.57	90-100	BR/156/16/PL for mixed use redevelopment of the site - allowed on appeal. Lapsed. Developable.	Too large area and too many dwellings.
24BR1	The Arcade, Bognor Regis	0.15	36	Site available subject to resolution of flexible retail tenancies. Site is a locally listed building. Deliverable	Too large area and too many dwellings.
BR23822	2-10 The Hatters Inn, Queensway	0.08	43	BR/238/22/PL for three storey upward extension and redevelopment of existing first and second floors to deliver 43 flats - approved. Deliverable.	Too large area and too many dwellings.

- 5.4 On this basis it can be considered that the Sequential Test is satisfied, as the development is in an existing residential area and there is no availability of alternative land for a development of this size and nature within the Bognor Regis area.
- 5.5 If it is not possible for development to be located in areas with a lower risk of flooding (taking into account wider sustainable development objectives), the Exception Test may have to be applied. The need for the Exception Test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification. Residential development is classified as “more vulnerable”, more vulnerable development is deemed to be appropriate for Flood Zones 1 and 2 under current guidance.
- 5.6 The Exception Test is designed to assess whether development should be allowed in areas at higher risk of flooding, specifically when suitable land at lower risk is unavailable for the specific land use type. It essentially allows for development to proceed if it can be demonstrated that the benefits of the

development outweigh the flood risk, and that the development will be safe and will not increase flood risk elsewhere. In order to pass the Exception Test, the proposal must provide sustainability benefits beyond the application site for the community and show that the proposed development will not increase flood risk elsewhere. Examples of benefits beyond the application site include providing affordable housing to meet an identified local need.

- 5.7 According to the Arun District Council Housing Strategy 2024-2029 there is a requirement for residential accommodation within the area. They state:

“Arun’s population is forecast to grow by an additional 8,950 households between 2023 and 2033. Housing will be required to meet the needs of these additional households, as well as demand from existing households who may be inadequately housed.”

- 5.8 As no other suitable sites at a lower flood risk have been identified, and there is an unfulfilled need for housing in the area, it can be safely considered that the Exception Test is also satisfied.
- 5.9 In the event that development takes place in Flood Zones 2 or 3, the Council will require flood resistance and resilience measures in line with current Environment Agency advice. New developments will need to contain SuDS. All development within Flood Zones 2 and 3 will require surface water runoff to be controlled, as near to its source as possible, and at greenfield rates. Where SuDS have not been used in these areas the applicant should justify these reasons.
- 5.10 The risk to property and future site users from fluvial flood waters is considered in the following sections of the report, together with an assessment of the likely impact of the proposed redevelopment on flood risk elsewhere. Where appropriate, recommendations to reduce the flood risk have been given.

6. RISKS TO PROPERTY

- 6.1 As established, the site lies within Flood Zone 3a (High risk from fluvial and tidal sources – where defences are not considered).
- 6.2 The site is relatively flat, with a slight incline towards the agricultural fields to the east. This suggests that any surface water will flow as greenfield in an easterly direction before joining the Aldingbourne Rife which flows south towards the estuary where it discharges at Longbrook Park. At the time of our visit there were several surface water drains visible onsite. A surface water drain is located in the front forecourt of the old nursery building (currently in use as a garage). There were drainpipe down pipes leading to a set of three manholes to the west of the nursery building. Drainpipe downpipes were seen on the southern side of the bungalow. See Figure 4 in Appendix A for photographs of the existing drainage.
- 6.3 As residential developments are considered ‘more vulnerable’, it is recommended that the finished ground floor level of the building is elevated at

least 0.3 m above the existing ground level or 0.6 m above the design flood level, whichever is greater, in order to provide some level of protection to property from any potential flooding.

- 6.4 Measures that could be incorporated into the design to reduce the amount of time the building could be left unusable should an extreme flood event occur include resilient measures that aim at avoiding structural damage by:
- Using materials with low permeability to at least 0.3 m (300 mm) above ground floor level.
 - Making it easy for water to drain away after flooding.
 - Making sure there is access to all spaces to enable drying and cleaning.
 - Raised levels of electrical sockets.
- 6.5 Materials and detailing for new dwellings should comply with good practice for flood resilient structures, as set out in *'Improving Flood Performance of New Buildings; Flood Resilient Construction'*, CIRIA May 2007.

7. RISKS TO OCCUPIERS

- 7.1 Factors affecting the likely risks to users from flooding include (but are not limited to) the predicted flood depth, velocity of flood waters, rate of onset of flooding and the duration of flooding. Other factors affecting the risk to future site users include the vulnerability of future site users.
- 7.2 From what is presently known, site users are considered to be at a high risk (greater than 3.3% chance of flooding from rivers and the sea). However, the site is defended and has no known history of flooding that directly affected the site.
- 7.3 As such, should an extreme flood event occur in which the flood defences failed, the residents would have to wade through flood waters up to 0.8 m deep (danger to most) in a westerly direction along Hook Lane before turning north onto Maklin Road to reach dry land. However, the property and its residents are not expected to be directly impacted by the flood waters as the proposed development is well defended by the local flood defences for Aldingbourne Rife. (See flood maps Appendix B).
- 7.4 Bognor Regis has a flood warning system in place for coastal areas including Felpham, South Bersted, North Bersted, and Shripney. The site lies within this area. See Appendix B for a map of the areas covered by the Bognor Regis Flood Warning scheme. The future residents should be encouraged to sign up to this service which can deliver warnings by phone or text.

8. FLOOD EVACUATION PLAN

- 8.1 A Site Evacuation Plan would need to be in place in the event of an extreme flood event. Given that the site is in Flood Risk Zone 3a and considering the

possible effects of climate change and the proposed lifetime of the site, an Evacuation Plan comprising an exit route and procedure should be put into place.

- 8.2 Safe, direct access onto Hook Lane would be needed, and a pre-arranged route safely out of the flood zone would need to be followed. The proposed route is shown below:

- Leave the site via Hook Lane heading west.
- Turn right into Malkin Road.
- Follow the road for approximately 60 m to exit the Flood Zone and reach dry land.

If the residents are leaving by car, the same evacuation route should be followed. Residents may then be taken to a pre-arranged location outside of the flood zone.

- 8.3 Residents should contact the local authority to check if it is safe to return to their property. It may be several months before the property is habitable and fully dried out following a flood.
- 8.4 Residents should regularly update their evacuation plan and check with the EA that the flood risk for the property has not changed. They should be aware of how to turn off the gas, electricity, and water mains supply. See Appendix D for a flood Warning and Evacuation Plan Template.

9. LIKELY IMPACT ON FLOOD RISK ELSEWHERE

- 9.1 The development of the site will likely increase the impermeable area as the site is currently laid to part impermeable tarmac (in front of the old nursery building and in the area of the gateway leading to the bungalow and larger site as well as the roofs of the existing bungalow, nursery building, caravans and shipping containers), part permeable compacted earth to the north and east/rear of the site and part permeable road planings in the area to the south of the bungalow. It is proposed to include some garden areas surrounding the residences as well as permeable paving in the paths, patios and parking areas, which will help to increase the permeable areas onsite and reduce the surface water runoff making the site more sustainable. Once developed, the area of the site not covered by the proposed dwellings will be of permeable surfacing, therefore keeping the surface runoff from the developed site to a minimum. Other measures to reduce the surface water runoff from the site and increase sustainability include water butts on the drainpipe downpipes to be used for irrigation and/or rain gardens.
- 9.2 The proposed development involves the construction of ten residential dwellings. The increase in impermeability comprises the area of the roof of the building. See Appendix A Figure 3 for the proposed development.
- 9.3 It is assumed that the surface water from the proposed development is to be drained into a soakaway or attenuation storage with a controlled flow discharge

into the watercourse to the southeast of the site and flow southeast towards Aldingbourne Rife, as is the case with the existing residence and the old nursery building. The foul water is to be drained into the main foul sewer system at manhole number 3701, located in the entranceway to the site in Hook Lane to the southwest. See Figure 4 in Appendix A for photographs of the drains and manholes at the site and Appendix E for the Southern Water sewer maps.

10. SUMMARY & RECOMMENDATIONS

- 10.1 The site currently comprises an existing single-storey residence to the south of the site (to remain) and a building located in the approximate centre of the site (previously a nursery building and most recently used as a repair garage). It is proposed to redevelop the site by the construction of ten residential dwellings. See Appendix A Figure 3 for the proposed development.
- 10.2 The site lies within Flood Zone 3a (high risk of flooding from fluvial and tidal sources, greater than 3.3 % chance of flooding in any year where defences are not considered). The site is not at risk of flooding from surface water in the 1 in 30 scenario and at slight risk in the west of the site in the 1 in 100 and 1 in 1000 scenarios. The site is protected from flooding by the existing flood defences and the modelled defended data from the EA's Product 4 information shows the site to be predicted to remain safe in the 2070 and 2115 0.5% modelled scenarios as long as the flood defences area in place and operational. See Appendix C for the EA's Product 4 data. There were no historical records of the site being affected by flooding directly and according to the owners, the site had not suffered from flooding in the past. See Appendix B for the latest Flood Risk maps from the EA's site.
- 10.3 A site-specific Flood Risk Assessment has been prepared in order to make an assessment of the likely risk of flooding at the site from all (foreseeable) sources, and to assess the likely risk posed to property and site users, and the likely impact on flood risk elsewhere as a result of the proposed development of the site. This assessment also includes, where appropriate, recommendations to reduce the risk and improve existing drainage at the site.
- 10.4 The redevelopment of the site will likely increase the areas of impermeable surfacing within the site by the areas of the roof of the dwellings. The rest of the site is to be of permeable surfacing to keep the surface water runoff to a minimum and make the site more sustainable. The proposed redevelopment of the site should only slightly increase the flood risk elsewhere as the site as existing is partly non-permeable hardstanding (in the areas surrounding the bungalow and the old nursery building and the roofs of the existing building, shipping containers and caravans). There will be permeable paved paths, parking areas and garden areas in the proposed development. Additional SuDS measures to increase the sustainability of the site and reduce the surface water runoff could include rain gardens and rainwater harvesting water butts on the drainpipe downpipes.

- 10.5 Measures to protect the structure of the building, and to reduce the time period that the property is unusable following an extreme flood event, should also be incorporated into the design of the proposed buildings as a precautionary approach: using building materials of a non-permeable nature up to a level of 0.3 m above floor level and raising electrical sockets within the dwellings and amenity blocks. (see paragraphs 6.4 - 6.5).
- 10.6 As the site lies within Flood Zone 3a, the Sequential Test (to move development to areas of lower flood risk where possible) needs to be satisfied before planning can be approved. According to the Arun District Council Brownfield Land Register, which was reviewed on the 12 September 2025, there is no suitable land at a lower flood risk available for the development of this size and nature in the Bognor Regis area. It can be therefore concluded that the Sequential Test is satisfied for the site. The Exception Test is designed to assess whether development should be allowed in areas at higher risk of flooding, specifically when suitable land at lower risk is unavailable for the specific land use type was considered. According to the Arun District Council Housing Strategy 2024-2029, there is a requirement for residential accommodation of this type within the area. They state:

“Arun’s population is forecast to grow by an additional 8,950 households between 2023 and 2033. Housing will be required to meet the needs of these additional households, as well as demand from existing households who may be inadequately housed.”

On this basis it can be assumed that the Exception Test for the site is also satisfied.

☆☆☆☆☆☆

APPENDIX A :

- Figure 1 : Site Location
- Figure 2 : Site As Existing
- Figure 3 : Proposed Plans
- Figure 4 : Photographs



Pavilion Bungalow

Hook Lane, Bognor Regis, West Sussex, Po22 8AT

Figure 1: Site Location

Scale as shown

August 2025



Pavilion Bungalow

Hook Lane, Bognor Regis, West Sussex, Po22 8AT

Figure 2: Site as Existing

Scale as shown

August 2025



Pavilion Bungalow
 Hook Lane, Bognor Regis, West Sussex, Po22 8AT
 Figure 3: Proposed Deveoplment

Scale as shown
 August 2025

Figure 4: Photographs

Existing bungalow (to remain with second floor extension)



Area to the south of the site



Nursery Building (western façade)



Nursery Building (eastern façade)



Nursery Building (northern façade)



Entrance gateway leading to Hook Lane



Shipping containers to the east/rear of the site



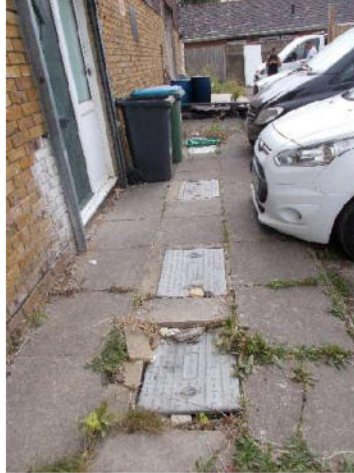
Western boundary (vehicle storage)



Debris stored onsite



Manholes to the west of the nursery building



Manhole to the east of the nursery building



Surface water drain in the front forecourt of the nursery building



Existing bungalow (showing drainpipe downpipes)



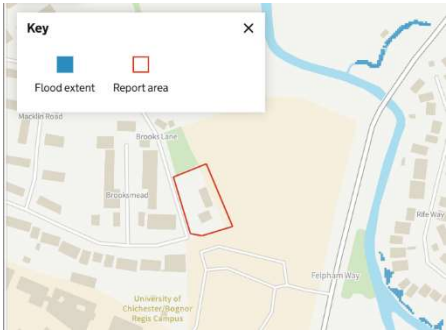
APPENDIX B:

ENVIRONMENT AGENCY FLOOD MAPS

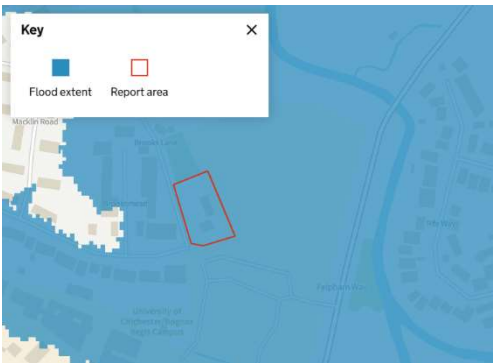
Flood Zone map



Rivers and the sea with defences

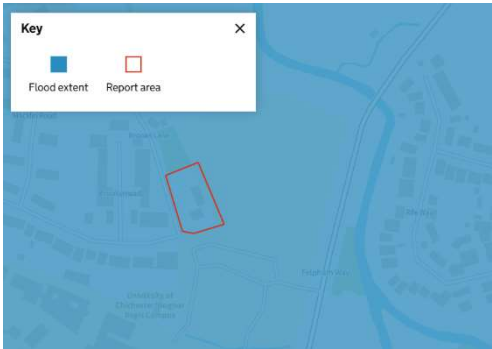


Rivers and the sea without defences

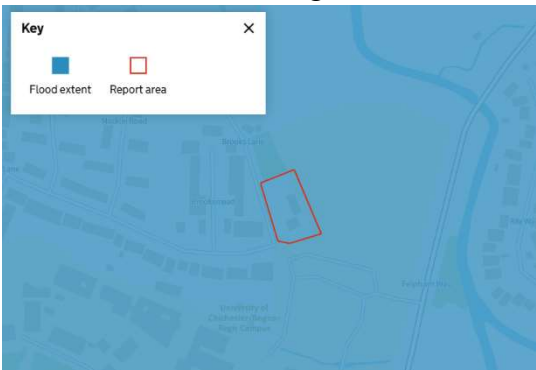


Rivers and the sea without defences

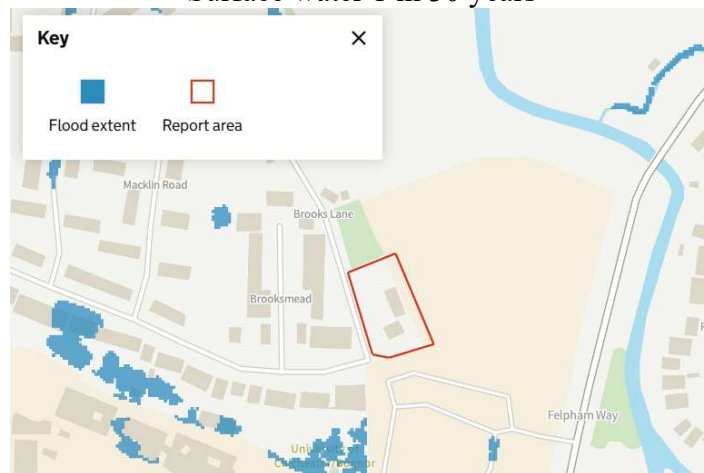
+ climate change



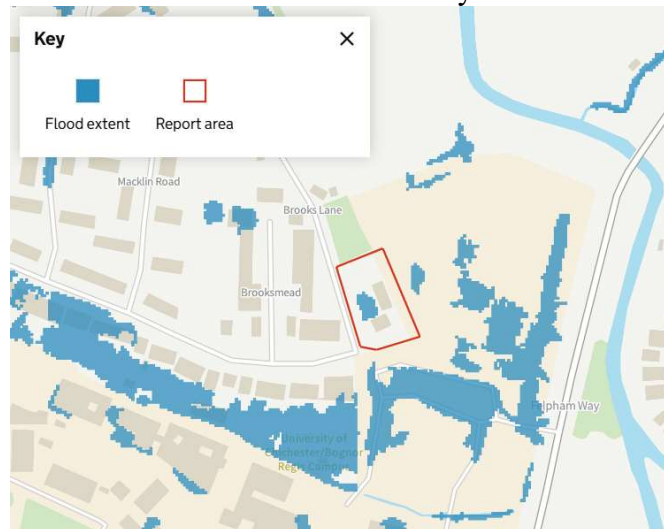
Rivers and the sea with defences
+ climate change



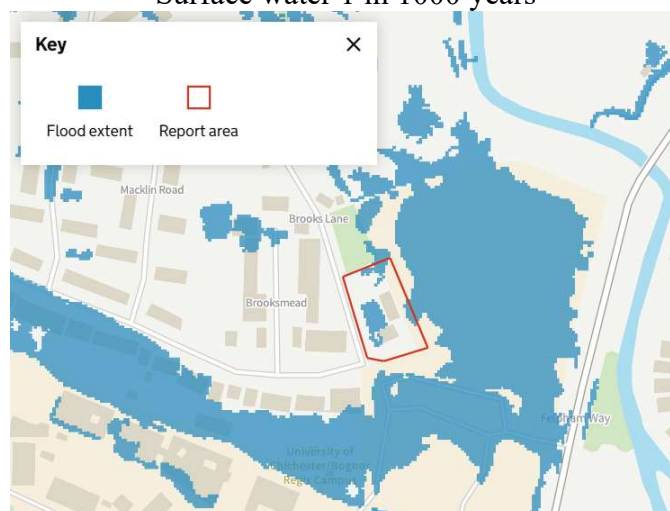
Surface water 1 in 30 years



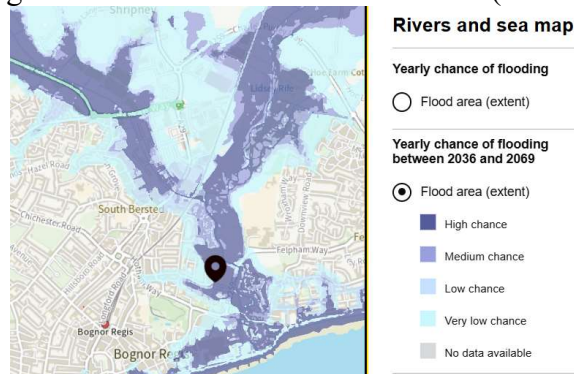
Surface water 1 in 100 years



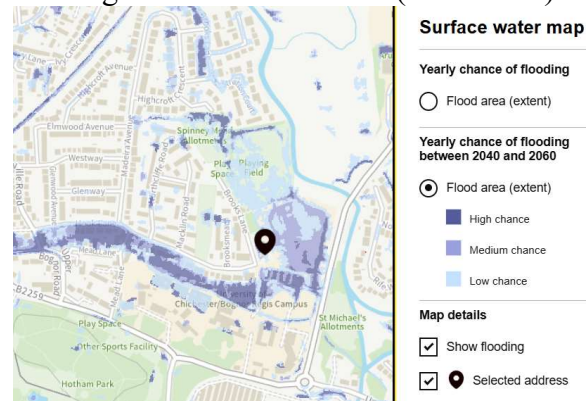
Surface water 1 in 1000 years



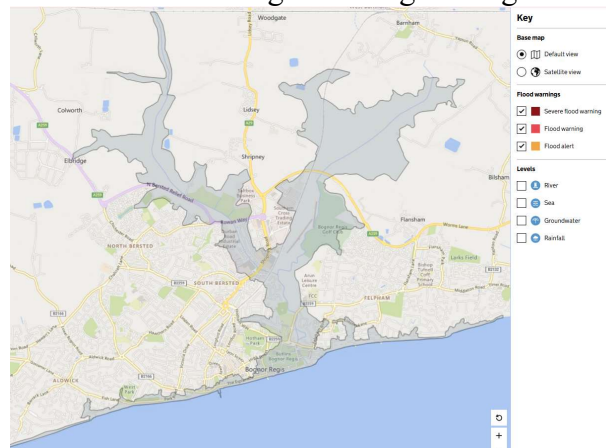
Long term Rivers and the sea Predictions (2036-2069)



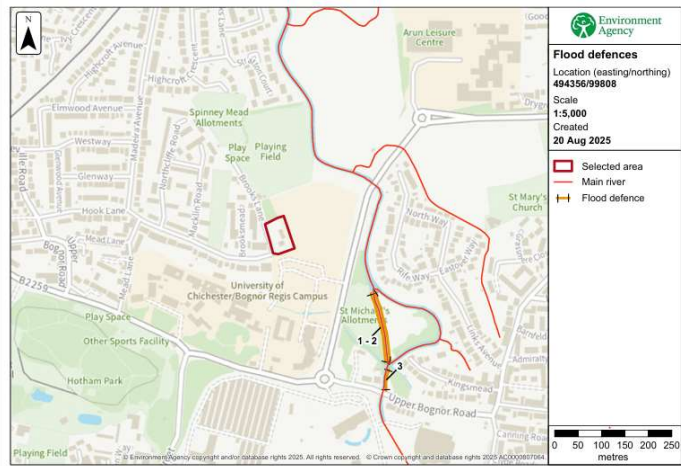
Long Term Surface Water (2040-2060)



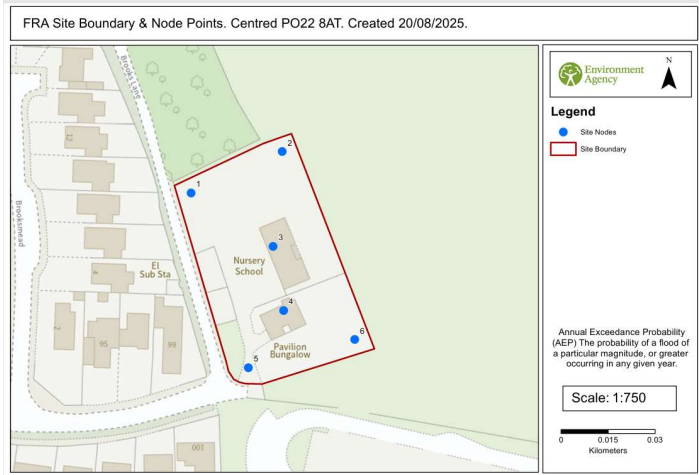
Flood Warning Area Bognor Regis



Flood Defences (showing area of manufacture high ground)



Modelled Node location Map



APPENDIX C:

EA PRODUCT 4 DATA

Flood risk assessment data



Location of site: Longbrook Pavillion Bungalow, Hook Lane, Bognor Regis, PO22 8AT

Document created on: 20 August 2025

This information was previously known as a product 4.

Customer reference number: EIR2025/22920

Map showing the location that flood risk assessment data has been requested for.



How to use this information

You can use this information as part of a flood risk assessment for a planning application. To do this, you should include it in the appendix of your flood risk assessment.

We recommend that you work with a flood risk consultant to get your flood risk assessment.

Included in this document

In this document you'll find:

- how to find information about surface water and other sources of flooding
- information on the models used
- definitions for the terminology used throughout
- flood map for planning (rivers and the sea)
- flood defences and attributes
- information to help you assess if there is a reduced flood risk from rivers and the sea because of defences
- modelled data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

Information that's unavailable

This document **does not** contain:

- past floods

We do not have past flooding data for this location.

Please note that:

- flooding may have occurred that we do not have records for
- flooding can come from a range of different sources
- we can only supply flood risk data relating to flooding from rivers or the sea

You can contact your Lead Local Flood Authority or Internal Drainage Board to see if they have other relevant local flood information. Please note that some areas do not have an Internal Drainage Board.

Surface water and other sources of flooding

When using the surface water map on the [check your long term flood risk service](#) the following considerations apply:

- surface water extents are suitable for use in planning
- surface water climate change scenarios may help to inform risk assessments, but the available data fall short of what is required to assess planned development
- surface water depth information should not be used for planning purposes

To find out about other factors that might affect the flood risk of this location, you should also check:

- [reservoir flood risk](#)
- groundwater flood risk - you could use the [British Geological Survey groundwater flooding data](#), [groundwater: current status and flood risk](#) and the guide on [mining and groundwater constraints for development](#) - further information may be available from the lead local flood authority (LLFA)
- your local planning authority's SFRA, which includes future flood risk

Your Lead Local Flood Authority is West Sussex County.

For information about sewer flooding, contact the relevant water company for the area.

About the models used

Model name: Aldingbourne Catchment Modelling
Scenario(s): Defended fluvial, Undefined fluvial
Date: 11 September 2015

Model name: Aldingbourne Updated Climate Change Allowances
Scenario(s): Defended climate change fluvial, Undefined climate change fluvial
Date: 2016

Model name: Emsworth to Littlehampton Model - Arun to East Head (2016)
Scenario(s): Defended tidal, Undefined tidal
Date: 9 April 2016

These models contain the most relevant data for your area of interest.

Terminology used

Annual exceedance probability (AEP)

This refers to the probability of a flood event occurring in any year. The probability is expressed as a percentage. For example, a large flood which is calculated to have a 1% chance of occurring in any one year, is described as 1% AEP.

Metres above ordnance datum (mAOD)

All flood levels are given in metres above ordnance datum which is defined as the mean sea level at Newlyn, Cornwall.

Flood map for planning (rivers and the sea)

Your selected location is in flood zone 3.

Flood zone 3 shows the area at risk of flooding for an undefended flood event with a:

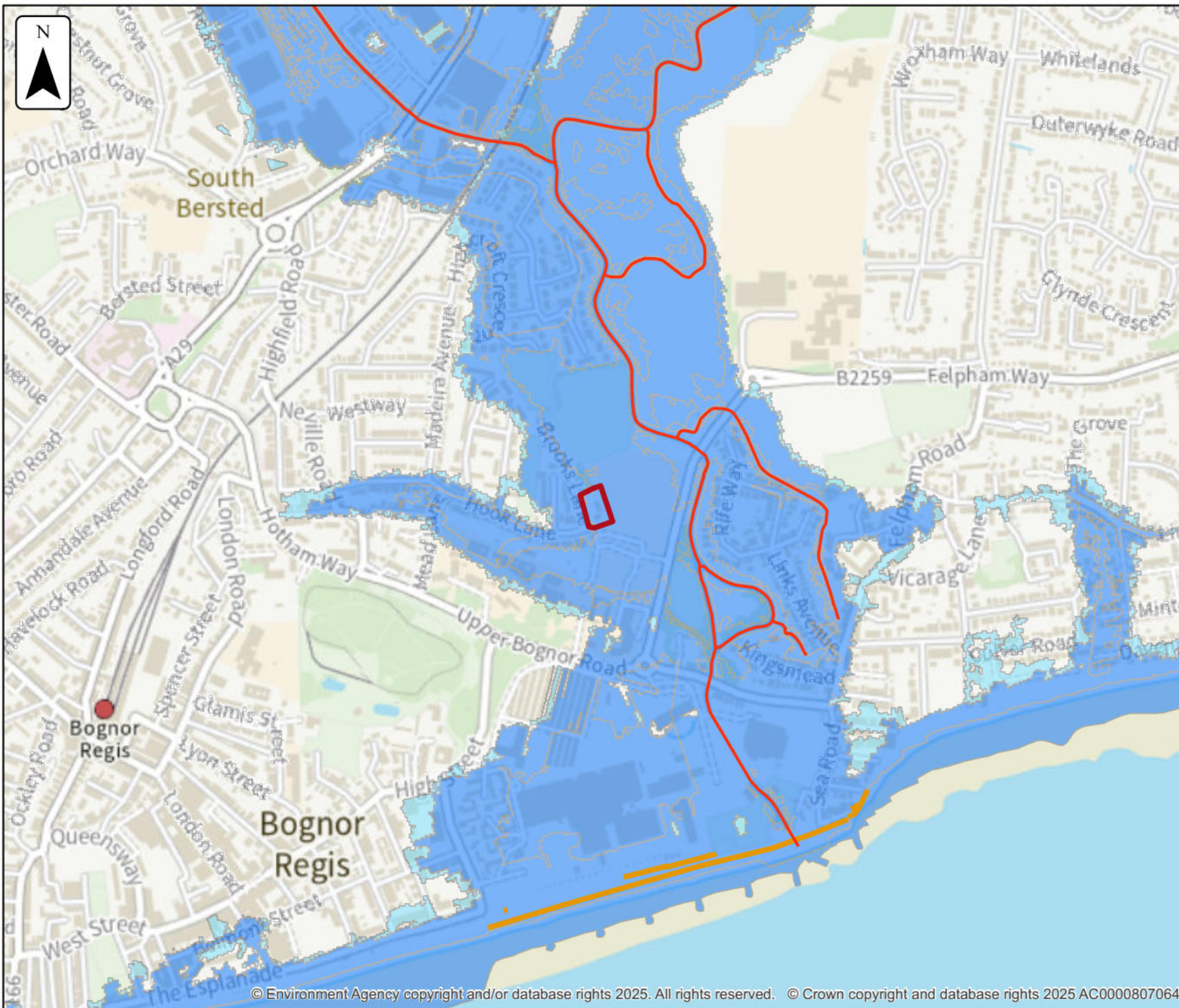
- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- between a 0.1% and 0.5% probability of occurring in any year for flooding from the sea
- between a 0.1% and 1% probability of occurring in any year for fluvial (river) flooding

It's important to remember that the flood zones on this map:

- refer to the land at risk of flooding and do not refer to individual properties
- refer to the probability of river and sea flooding, ignoring the presence of defences
- do not take into account potential impacts of climate change



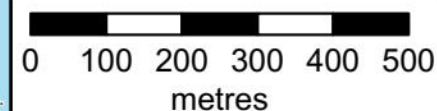
Flood map for planning

Location (easting/northing)
494356/99808

Scale
1:10,000

Created
20 Aug 2025

-  Selected area
-  Main river
-  Flood defence
-  Water storage area
- Flood Zones 2 and 3
Rivers and Sea
-  Flood Zone 2
-  Flood Zone 3



Flood defences and attributes

The flood defences map shows the location of the flood defences present.

The flood defences data table shows the type of defences, their condition and the standard of protection. It shows the height above sea level of the top of the flood defence (crest level). The height is in mAOD which is the metres above the mean sea level at Newlyn, Cornwall.

It's important to remember that flood defence data may not be updated on a regular basis. The information here is based on the best available data.

Use this information:

- to help you assess if there is a reduced flood risk for this location because of defences
- with any information in the modelled data section to find out the impact of defences on flood risk



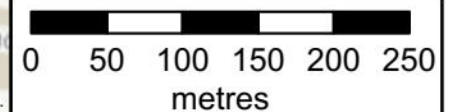
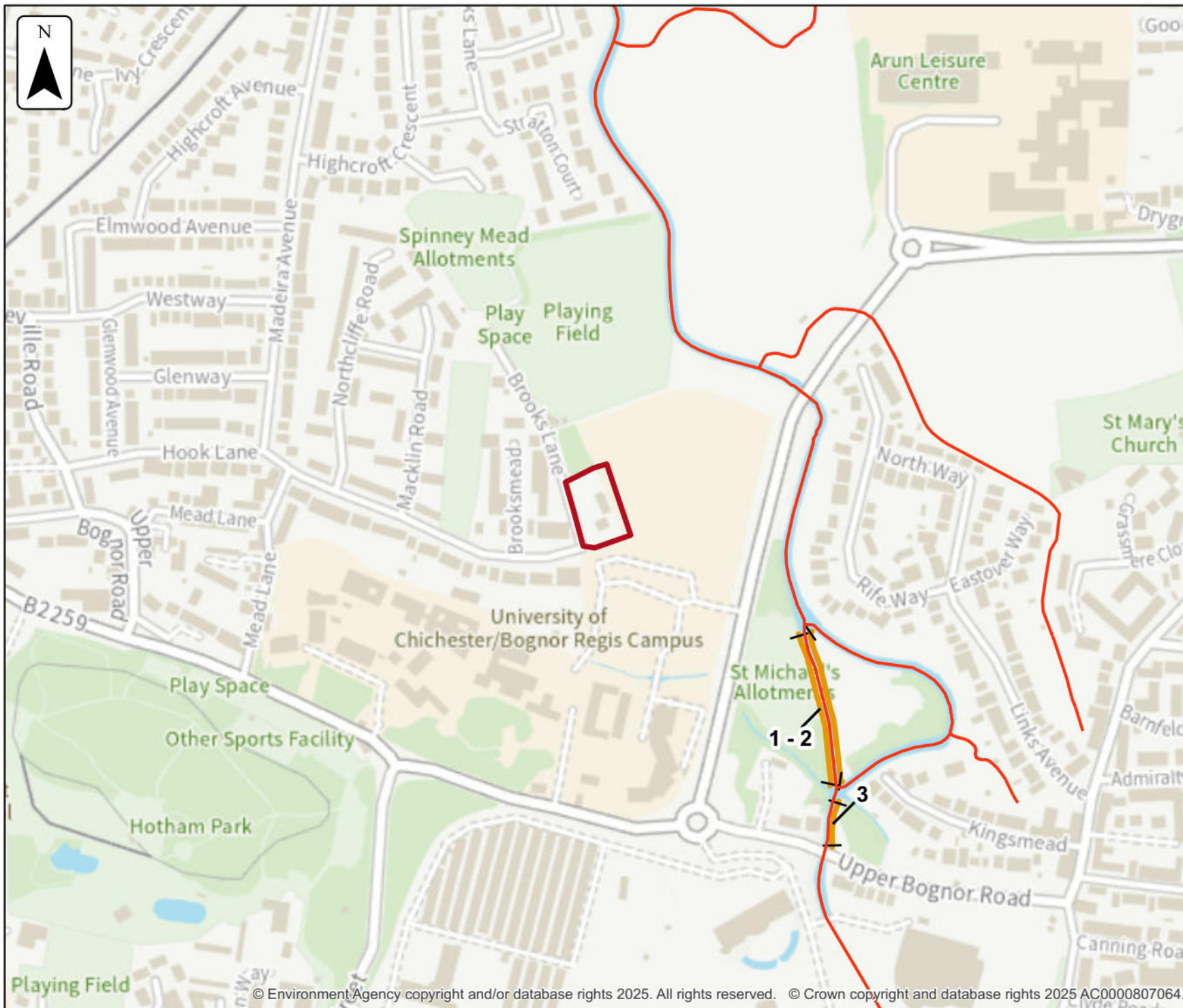
Flood defences

Location (easting/northing)
494356/99808

Scale
1:5,000

Created
20 Aug 2025

-  Selected area
-  Main river
-  Flood defence



Flood defences data

Label	Asset ID	Asset Type	Standard of protection (years)	Current condition	Downstream actual crest level (mAOD)	Upstream actual crest level (mAOD)	Effective crest level (mAOD)
1	19551	Engineered High Ground	5				
2	19550	Engineered High Ground	5				
3	436039	Engineered High Ground					

Any blank cells show where a particular value has not been recorded for an asset.

Modelled data

This section provides details of different scenarios we have modelled and includes the following (where available):

- outline maps showing the area at risk from flooding in different modelled scenarios
- modelled node point map(s) showing the points used to get the data to model the scenarios and table(s) providing details of the flood risk for different return periods
- map(s) showing the approximate water levels for the return period with the largest flood extent for a scenario and table(s) of sample points providing details of the flood risk for different return periods

Climate change

The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

Modelled scenarios

The following scenarios are included:

- Defended modelled fluvial: risk of flooding from rivers where there are flood defences
- Defences removed modelled fluvial: risk of flooding from rivers where flood defences have been removed
- Defended modelled tidal: risk of flooding from the sea where there are flood defences
- Defences removed modelled tidal: risk of flooding from the sea where flood defences have been removed
- Defended climate change modelled fluvial: risk of flooding from rivers where there are flood defences, including estimated impact of climate change
- Defences removed climate change modelled fluvial: risk of flooding from rivers where flood defences have been removed, including estimated impact of climate change

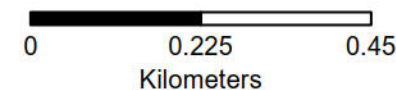


Legend

-  Site Boundary
-  5% AEP (Defended Fluvial)
-  1% AEP (Defended Fluvial)
-  0.1% AEP (Defended Fluvial)

Annual Exceedance Probability
(AEP) The probability of a flood of
a particular magnitude, or greater
occurring in any given year.

Scale: 1:10,000







Environment
Agency



N

Legend

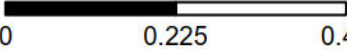
 Site Boundary

 1% AEP (Undefended Fluvial)

 0.1% AEP (Undefended Fluvial)

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

Scale: 1:10,000



00.2250.45
Kilometers

Modelled Flood Outlines (Climate Change Defended). Centred PO22 8AT. Created 20/08/2025.



Legend

- Site Boundary
- 1% AEP +CC 35% Defended Fluvial
- 1% AEP +CC 45% Defended Fluvial
- 1% AEP +CC 105% Defended Fluvial

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

Scale: 1:10,000



Modelled Flood Outlines (Climate Change Undefended). Centred PO22 8AT. Created 20/08/2025.

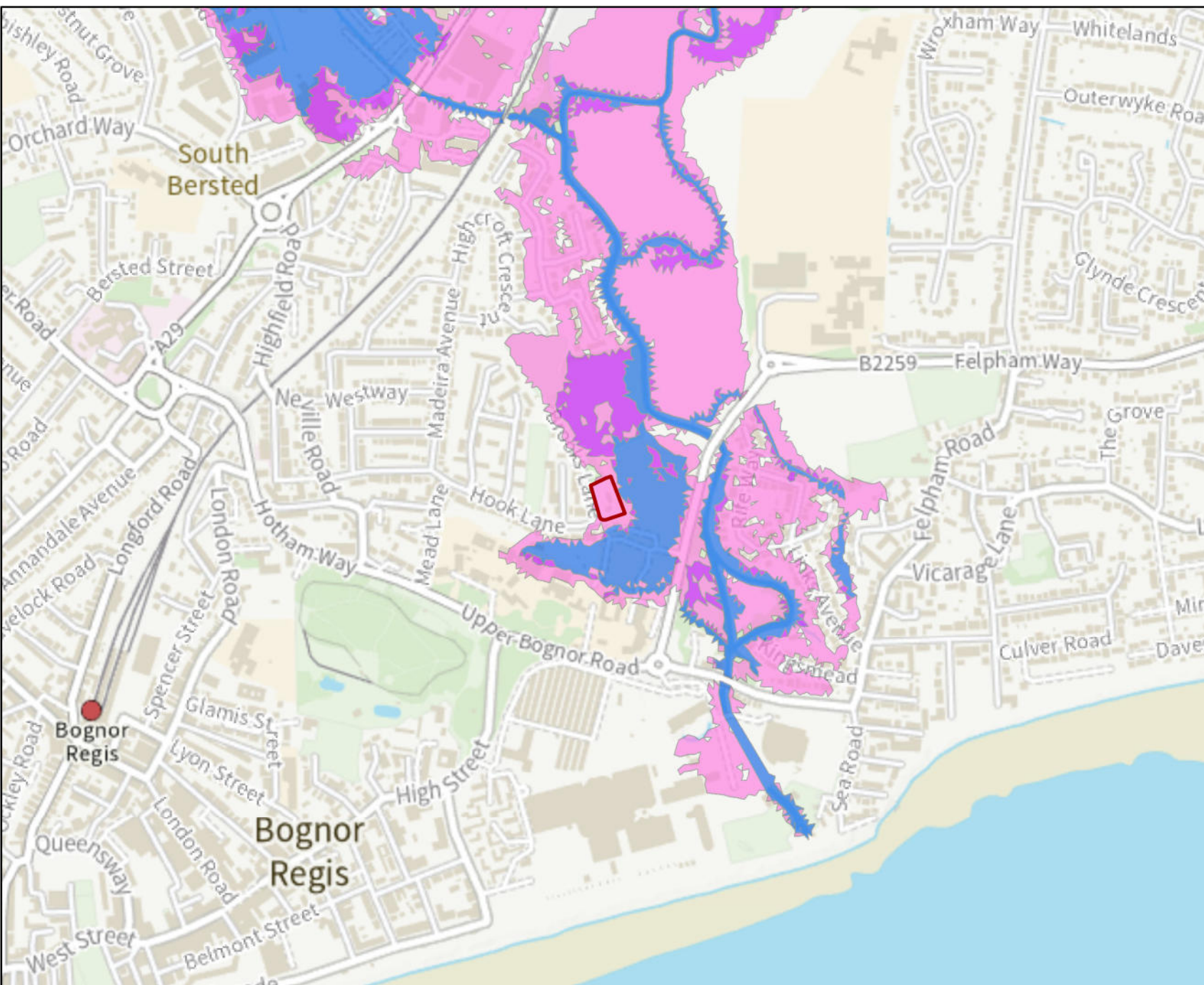


Legend

-  Site Boundary
-  1% AEP +CC 35% Undefended Fluvial
-  1% AEP +CC 45% Undefended Fluvial
-  1% AEP +CC 105% Undefended Fluvial

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

Scale: 1:10,000



Modelled Flood Outlines (Defended Tidal). Centred PO22 8AT. Created 20/08/2025.

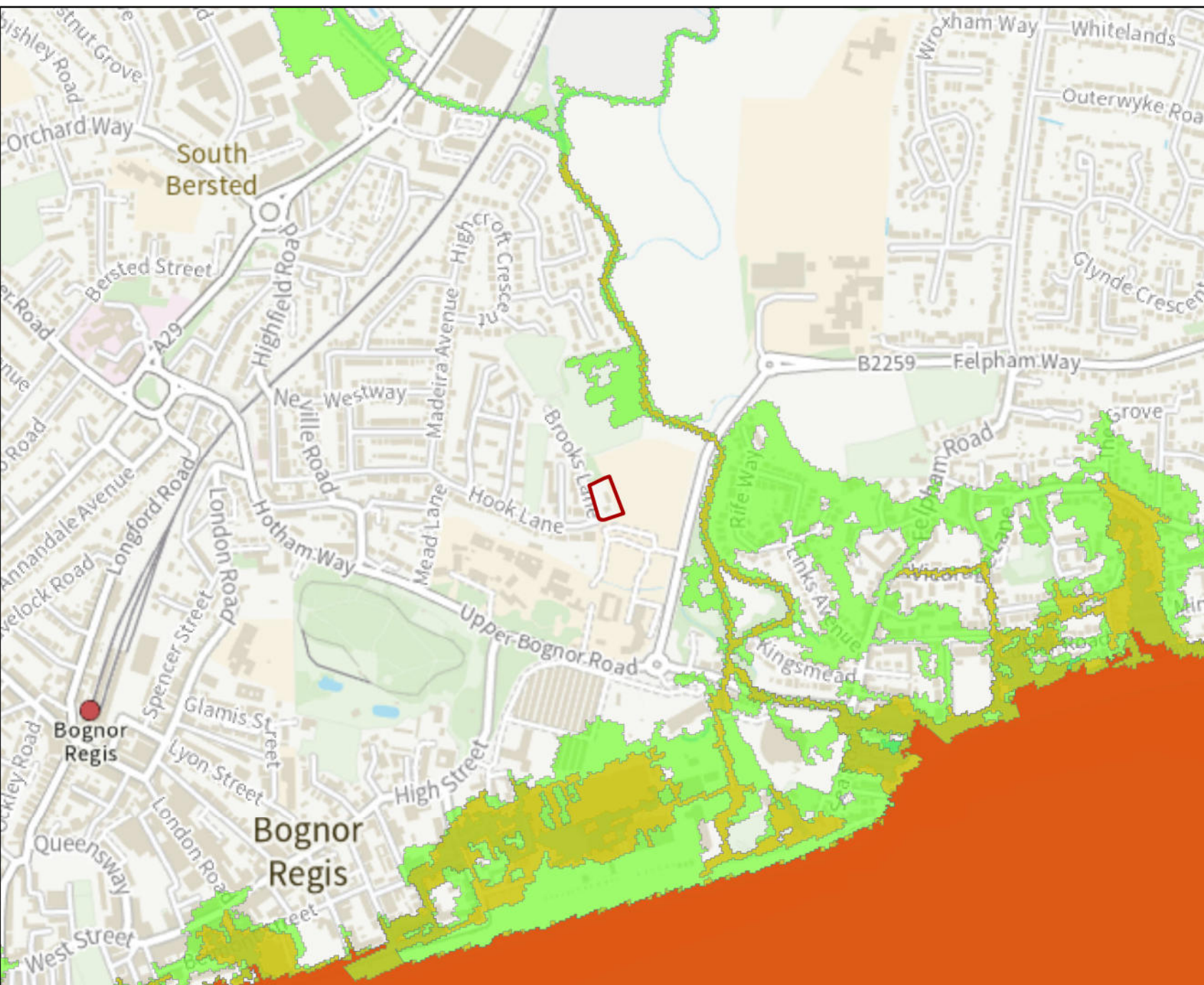
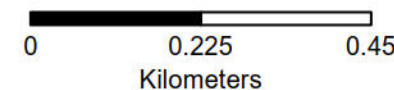


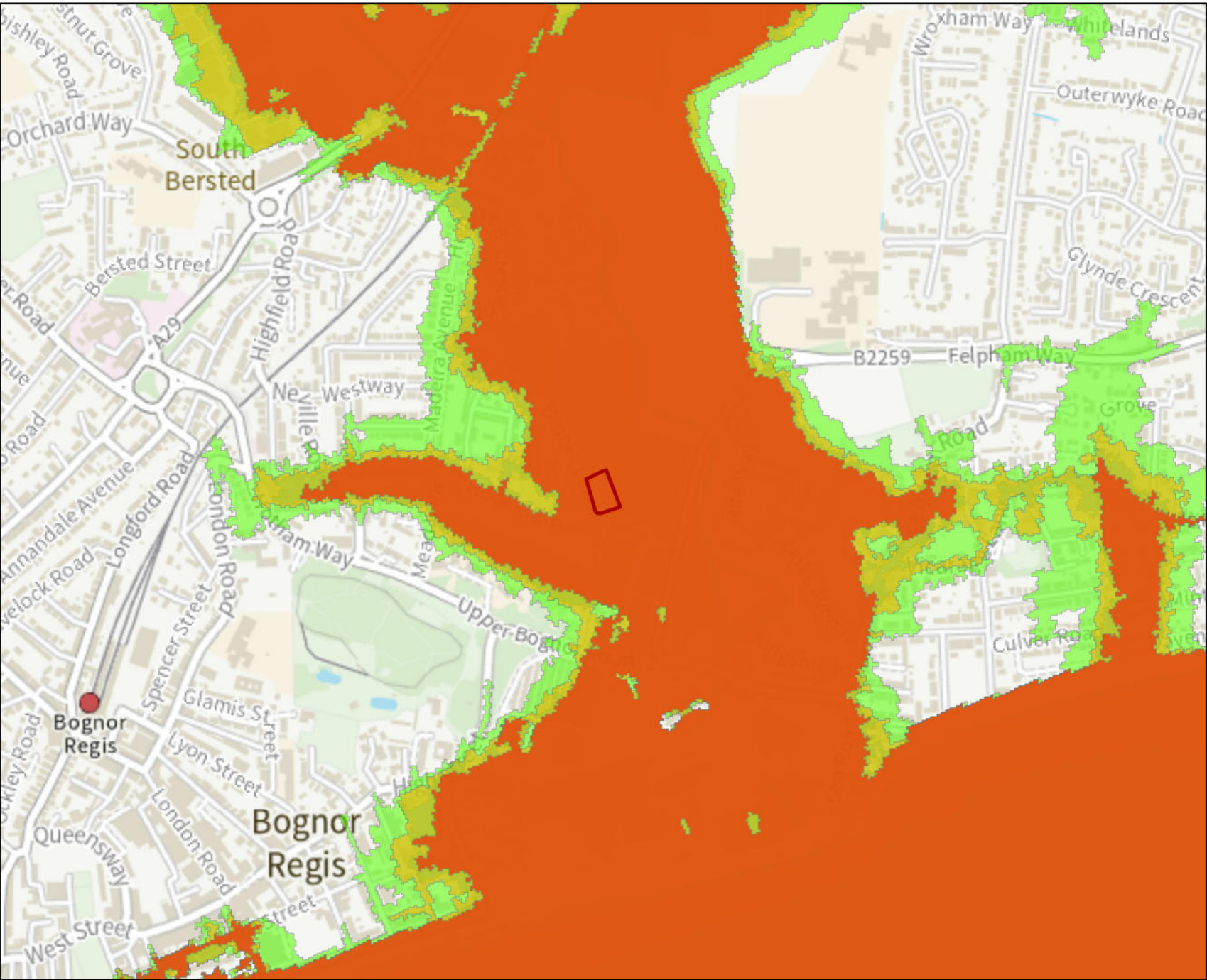
Legend

- Site Boundary
- 0.5% AEP (Defended Tidal)
- 0.5% AEP (2070) NPPF (Defended Tidal)
- 0.5% AEP (2115) NPPF (Defended Tidal)
- 0.1% AEP (Defended Tidal)

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

Scale: 1:10,000







Environment
Agency



N

Legend

-  Site Boundary
-  0.5% AEP (Undefended Tidal)
-  0.5% AEP (2070) NPPF (Undefended Tidal)
-  0.5% AEP (2115) NPPF (Undefended Tidal)
-  0.1% AEP (Undefended Tidal)

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

Scale: 1:10,000



00.2250.45
Kilometers

Product 4 Flood Risk Data Requested by: Xanthe Lyford
Site: Longbrook Pavillion Bungalow, Hook Lane, Bognor Regis, PO22 8AT

Table 1: Water Levels: Fluvial Undefended

Node Ref	NGR		Modelled Flood Levels in Metres AOD					
			Undefended Annual Exceedance Probability					
	Eastings	Northings	5%	1%	1% +CC (35%)	1% +CC (45%)	1% +CC (105%)	0.1%
1	494331	99832	-	-	-	-	2.19	-
2	494361	99845	-	-	-	-	2.19	-
3	494358	99815	-	-	-	-	2.19	-
4	494361	99794	-	-	-	-	2.19	-
5	494350	99776	-	-	-	-	2.19	-
6	494384	99785	-	-	-	-	2.19	-

Table 2: Water Levels: Fluvial Defended

Node Ref	NGR		Modelled Flood Levels in Metres AOD					
			Defended Annual Exceedance Probability					
	Eastings	Northings	5%	1%	1% +CC (35%)	1% +CC (45%)	1% +CC (105%)	0.1%
1	494331	99832	-	-	-	-	-	-
2	494361	99845	-	-	-	-	1.93	1.93
3	494358	99815	-	-	-	-	1.93	1.93
4	494361	99794	-	-	-	-	1.93	1.93
5	494350	99776	-	-	-	-	-	-
6	494384	99785	-	-	-	-	1.93	1.93

Table 3: Water Levels: Tidal Undefended

Node Ref	NGR		Modelled Flood Levels in Metres AOD			
			Undefended Annual Exceedance Probability			
	Eastings	Northings	0.5%	0.5% (2070)*	0.5% (2115)*	0.1%
1	494331	99832	3.00	3.59	4.23	3.26
2	494361	99845	2.99	3.59	4.22	3.25
3	494358	99815	3.00	3.60	4.24	3.26
4	494361	99794	3.01	3.61	4.25	3.27
5	494350	99776	3.02	3.62	4.26	3.28
6	494384	99785	3.02	3.62	4.26	3.28

Table 4: Water Levels: Tidal Defended

Node Ref	NGR		Modelled Flood Levels in Metres AOD			
			Defended Annual Exceedance Probability			
	Eastings	Northings	0.5%	0.5% (2070)*	0.5% (2115)*	0.1%
1	494331	99832	-	-	-	-
2	494361	99845	-	-	-	-
3	494358	99815	-	-	-	-
4	494361	99794	-	-	-	-
5	494350	99776	-	-	-	-
6	494384	99785	-	-	-	-

Table 5: Water Depths: Fluvial Undefended

Node Ref	NGR		Modelled Flood Depths in Metres					
			Undefended Annual Exceedance Probability					
	Eastings	Northings	5%	1%	1% +CC (35%)	1% +CC (45%)	1% +CC (105%)	0.1%
1	494331	99832	-	-	-	-	0.35	-
2	494361	99845	-	-	-	-	0.57	-
3	494358	99815	-	-	-	-	0.45	-
4	494361	99794	-	-	-	-	0.53	-
5	494350	99776	-	-	-	-	0.25	-
6	494384	99785	-	-	-	-	0.44	-

Table 6: Water Depths: Fluvial Defended

Node Ref	NGR		Modelled Flood Depths in Metres					
			Defended Annual Exceedance Probability					
	Eastings	Northings	5%	1%	1% +CC (35%)	1% +CC (45%)	1% +CC (105%)	0.1%
1	494331	99832	-	-	-	-	-	-
2	494361	99845	-	-	-	-	0.30	0.30
3	494358	99815	-	-	-	-	0.17	0.17
4	494361	99794	-	-	-	-	0.27	0.27
5	494350	99776	-	-	-	-	-	-
6	494384	99785	-	-	-	-	0.12	0.12

Table 7: Water Depths: Tidal Undefended

Node Ref	NGR		Modelled Flood Depths in Metres			
			Undefended Annual Exceedance Probability			
	Eastings	Northings	0.5%	0.5% (2070)*	0.5% (2115)*	0.1%
1	494331	99832	1.49	2.08	2.72	1.75
2	494361	99845	1.60	2.19	2.83	1.86
3	494358	99815	1.33	1.92	2.56	1.59
4	494361	99794	1.43	2.03	2.67	1.69
5	494350	99776	1.35	1.95	2.59	1.61
6	494384	99785	1.30	1.90	2.54	1.57

Table 8: Water Depths: Tidal Defended

Node Ref	NGR		Modelled Flood Depths in Metres			
	Eastings	Northings	Defended Annual Exceedance Probability			
			0.5%	0.5% (2070)*	0.5% (2115)*	0.1%
1	494331	99832	-	-	-	-
2	494361	99845	-	-	-	-
3	494358	99815	-	-	-	-
4	494361	99794	-	-	-	-
5	494350	99776	-	-	-	-
6	494384	99785	-	-	-	-

All levels taken from:

Fluvial: Aldingbourne Modelling Study (Defended Only) (2015) by JBA Consulting, plus updated climate change allowances (2016).

Tidal: River Arun to East Head Coastal Modelling (2016), by JBA Consulting.

Produced on: 20/08/2025

*** The flood risk data provided is based on existing EA hydraulic models with an allowance for climate change. Please note the climate change allowances provided are not up to date. These were updated on 27 July 2021.**

You should refer to ['Flood risk assessments: climate change allowances'](#) for the most up to date allowances. You will need to undertake further assessment of future flood risk using different allowances to ensure your assessment of future flood risk is based on best available evidence.

There is no additional information or health warnings for these levels/depths or the model from which they have been produced.

Strategic flood risk assessments

We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site specific flood risk assessment.

This should give you information about:

- the potential impacts of climate change in this catchment
- areas defined as functional floodplain
- flooding from other sources, such as surface water, ground water and reservoirs

Your Lead Local Flood Authority is West Sussex County.

About this data

This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

Flood risk activity permits

Under the Environmental Permitting (England and Wales) Regulations 2016 some developments may require an environmental permit for flood risk activities from the Environment Agency. This includes any permanent or temporary works that are in, over, under, or nearby a designated main river or flood defence structure.

[Find out more about flood risk activity permits](#)

Help and advice

Contact the Solent and South Downs Environment Agency team at ssdenquiries@environment-agency.gov.uk for:

- [more information about getting a product 5, 6, 7 or 8](#)
- general help and advice about the site you're requesting data for

APPENDIX D:

FLOOD WARNING AND EVACUATION PLAN TEMPLATE

FLOOD WARNING AND EVACUATION PLAN TEMPLATE (PPS 25)

Planning Application No:	
Site Address:	
Proposal:	
Detail the reason the plan is required (e.g. discharge of a planning condition? Or in order to obtain planning permission?)	
Flood Risk Assessment Attached	Yes/No* *Delete as applicable.
Applicant Contact Details:	
Agent Contact Details:	

Document Control

This Plan is owned, maintained and updated by **[insert details]**. All stakeholders of the plan are asked to inform the above of any changes in circumstances that may materially affect the plan in anyway. Details of any changes should be sent to: **[insert details]**

This plan should be reviewed

- On first occupation
- Every 3 years following first occupation or;
- As a result of lessons identified following a flood event or exercise, or;
- Following changes of ownership/use of the property or;
- Following changes to the Flood Warning process.

Signed:

Dated:

Version No:

FLOOD EMERGENCY PLAN (PPS 25)

Preface

The Emergency Management Unit, North Somerset Council, has developed this planning template from initial work undertaken by Bristol City Council to support planning applications to which PPS25 guidance and practice refers.

Disclaimer

North Somerset Council, as far as it can ascertain, acknowledges that this Flood Emergency Plan (FEP) template is suitable for the purposes set out in Planning Policy Statement 25: "Development and Flood Risks – Practice Guide". However FEP's are the sole responsibility of the applicant. North Somerset Council cannot accept responsibility for any omission or error contained in any such plan, or for loss, damage, or inconvenience, which may result from such plans' implementation. Any subsequent approval does not impute any approval of those plans from the Environment Agency or any of the emergency services.

Flood Warning & Evacuation Plan Template

1. Introduction

Required Information:

- Site Location Plan (A4, scale 1:2500 or 1:1250 with named roads)
- Site Layout Plan (to appropriate scale)
- Background/ brief history of the site, existing and proposed use.
- Details of site management post-development (if known) – name, contact arrangements (24hr)

Flood Warning & Evacuation Plan Template

2. Flood Risk					
Please insert details of the types of flooding the development is at risk from, the source of the potential flooding e.g. River name, warning systems in place (if any), the frequency/ probability of flooding, depth and estimated time from warning to onset of flooding. Attach a copy of flood risk map(s).					
Flood Risk Source	Warning System in place (Eg the EA's Flood Warnings Direct service, MET Office)	Estimated Warning Time (Hrs)	Estimated Flood Depth (m AOD)	Frequency / Probability of Flooding from this source	
Fluvial Flooding e.g. River Yeo					
Tidal Flooding (eg. Uphill)					
Ground Water Flooding					
Surface Water Flooding					
Reservoir Flooding					

Advisory - Flood Warnings

The Environment Agency (EA) operate a flood forecasting and warning service in areas at risk of flooding from rivers or the sea, which relies on direct measurements of rainfall, river levels, tide levels, in-house predictive models, rainfall radar data and information from the Met Office. This service operates 24hours a day, 365 days a year. If flooding is forecast, warnings are issued using a set of four easily recognisable codes see page 7.

3. Flood Mitigation Measures

Please detail any flood defence measures (hard and soft) that will be put into place to mitigate the developments risk from flooding; include the location and storage arrangements as appropriate.

Hard Defence Measures (construction) e.g. finished floor levels, SUDS, drainage and areas designed to flood etc please detail. *(If the development includes areas designed to flood these areas must contain an adequate passive flood warning system with signs highlighting the susceptibility to flooding and contain clearly signed routes to higher land. All site users should also be made aware of this risk).*

Soft Defence measures (temporary flood barriers) – sandbags, flood gates, air brick covers etc please detail:

Signing up to Flood Warning Services

Developers should actively encourage owners/ occupiers to sign up to the Environment Agency's Flood Warning Service (Flood Warnings Direct - FWD)
FWD is a free service that provides flood warnings direct to you by telephone, mobile, email, SMS text message and fax. To sign up to the service, call 0845 988 1188 or visit the EA's web pages.

4. Flood Warning Activation Procedures

WARNINGS		EA recommended actions	SITE		
			Actions	Communications	Responsible person
 FLOOD ALERT Flood Alert	What it means Flooding is possible. Be prepared.	Be prepared to act on your flood plan . Prepare a flood kit of essential items.	Detail what actions you will take e.g. Evacuation procedures? Shelter Procedures? Alternative refuge? Where? Transport? Deployment of flood mitigation products? Who? When? How?	Detail the type of communication you will use to cascade flood warnings e.g. telephone? Text? Loud hailer? Door knocking? Flood Wardens? (consider the vulnerable) Self Registration with FWD service? Contact lists?	Who will do what and when? E.g. who will deploy the use of sandbags and at what stage? Who will notify the vulnerable? Etc.
	When it's used Two hours to two days in advance of flooding.	Monitor local water levels and the flood forecast on our website.			
 FLOOD WARNING Flood Warning	What it means Flooding is expected. Immediate action required.	Move family, pets and valuables to a safe place. Turn off gas, electricity and water supplies if safe to do so.			
	When it's used Half an hour to one day in advance of flooding.	Put flood protection equipment in place.			
 SEVERE FLOOD WARNING Severe Flood Warning	What it means Severe flooding. Danger to life.	Stay in a safe place with a means of escape. Be ready should you need to evacuate from your home.			
	When it's used When flooding poses a significant threat to life.	Co-operate with the emergency services. Call 999 if you are in immediate danger.			
EA Flood Warnings No longer in force	What it means No further flooding is currently expected in your area.	Be careful. Flood water may still be around for several days.			
	When it's used When river or sea conditions begin to return to normal.	If you've been flooded, ring your insurance company as soon as possible.			
MET Office Weather Warnings	Warnings of heavy rainfall Warnings of severe winter weather e.g. hail, snow, freezing rain.	Consider the impact of this type of weather – e.g. this could lead to surface water flooding, ground water flooding, increased river and sea levels etc			

5. Safe Refuge / Rest Centre

- Please insert details of any safe refuges that you have permission to occupy in an emergency and mark on a map.

Address:

- How many people could be accommodated here?
- What resources/ equipment do you have to provide refreshments/feeding/shelter and how long could it sustain evacuees?

(Persons unable to source alternative accommodation may be provided with safe refuge at a rest centre. North Somerset Council has pre-identified rest centres across North Somerset. Appropriate refuge locations/ rest centres would be nominated at the time and widely communicated using all available media).

6. ADVISORIES

Climate Change Impacts

The nature of climate change will vary by region but current opinion suggests that the future climate change will produce more frequent short duration and high intensity rainfall events and more frequent periods of long-duration rainfall. Developers should make occupiers aware that, due to the impacts of climate change, it may not be possible to state exactly how deep the flood water will be and any flooding may be higher or lower than estimated or experienced before and this may have implications on evacuation strategies.

Decision Making/ Command & Control

Owner/occupiers are ultimately responsible for making the decision of whether to evacuate or shelter in their homes/ premises in the event of a flood incident. However owner/ occupiers should heed the advice/ warnings and follow the instructions of the emergency services. **All homes and businesses are advised to prepare an emergency kit.**

Evacuation

Evacuations should always be conducted in the dry. Flood waters contain hidden dangers and evacuation will no longer be possible but rather a rescue operation by the emergency services.

Do not plan for or assume that the emergency services will be able to assist you with evacuation. The focus of any emergency response will be to those who are immediately vulnerable

Consideration should be given to the road network around the site; evacuation routes should be sign posted

Residential Development: Household members should discuss with family members their evacuation procedures and agree meeting points in case of separation.

Developments where there will be an on-site staff presence:

The evacuation procedure should include options for the evacuation of all people on site (including those with vulnerabilities). It is assumed that visitors will not have local knowledge and will need to be guided to a safe route/ location.

Shelter

In the event that a safe evacuation is not possible or householders / premise owners/ occupiers decide to remain on site, developers should make them aware that emergency service resources will be concentrated on life saving cases and its is advisable that occupants are able to sustain themselves for up to 7days without assistance.

Flood Warning & Evacuation Plan Template

Recovery

Following a flood there may be environmental hazards, loss of utilities and other issues that need to be rectified before people are allowed back into premises. Occupiers should consider a wide range of issues in developing their Recovery Plan. Please visit the Environment Agency's website for guidance on developing your recovery plan.

Training and Exercising

All personnel who live or work at the site should be made aware of this plan and briefed/trained accordingly. It is recommended that the plan is exercised on an annual basis – this could be by means of a Table-top exercise or physical testing of the plan.

7. Roles & Responsibilities

There are many organisations that will play a part in response to a major flooding incident; emergency services, utility companies and voluntary agencies to name but a few. Below are the roles and responsibilities of some of the principal organisations that will be involved in the early stages of a response.

Environment Agency (EA)

- Predicting flooding from statutory main rivers and the sea including the location, timing and magnitude
- Issuing of Flood Warnings to partner agencies and ensuring that the public are warned and informed
- Maintenance and operation of sea and river flood defences. Check defences and undertake essential repairs as required.
- Monitor and clear blockages of culverts and repair breaches of defences
- Support the Police and Local Authority by providing materials, equipment and manpower as far as resources and other duties permit.
- Advisory role in dealing with pollution issues as a result of flooding

MET Office

The Met office issues severe weather warnings for heavy rain, snow, severe gales etc. These warnings are delivered directly to local authorities, the emergency services and the media.

Avon & Somerset Police

- Co-ordination of the emergency services at a major flood event, as well as helping to save lives and protect property
- Establishment of cordons where practical to facilitate the work of the emergency services
- In conjunction with other emergency services, to evacuate people from properties at risk, if necessary
- Collation and dissemination of casualty information

Avon Fire & Rescue

- Saving life and rescuing trapped persons
- Provide monitoring procedures in respect of health and safety of those persons operating within an established cordon
- Carry out essential damage control measures including pumping out flood water and salvage work
- Rendering humanitarian services in support of the local authority

Local Authority

- Providing support to the emergency services
- Mitigation of the effects of an emergency on people, including emergency feeding, accommodation and welfare.
- Co-ordination of the voluntary sector response
- Information services to the public and media
- Flood alleviation measures where possible
- Environmental health advice

Flood Warning & Evacuation Plan Template

- Rehabilitation of the community and restoration of the environment

Utility Companies

- In the event of a flood, will secure their services and equipment to ensure continuity of supply
- Repair services disrupted by flood
- Provide alternative means of supply during service disruption if life and death health risks are identified

8. Sources of useful information

Am I at risk of Flooding?

<http://www.environment-agency.gov.uk/homeandleisure/floods/31650.aspx>

EA Flood Warning Codes

<http://www.environment-agency.gov.uk/homeandleisure/floods/31620.aspx>

Flood Warnings Direct

<http://www.environment-agency.gov.uk/homeandleisure/floods/38289.aspx>

Business Flood Checklist

<http://www.environment-agency.gov.uk/business/topics/flooding/32358.aspx>

Make an Emergency Flood Plan for your Home

<http://www.environment-agency.gov.uk/homeandleisure/floods/38329.aspx>

Preparing your home or business for flooding

<http://www.environment-agency.gov.uk/homeandleisure/floods/31644.aspx>

Before, During and After a Flood – Advice Guides

<http://www.environment-agency.gov.uk/homeandleisure/floods/114724.aspx>

Flood Protection Association

<http://www.floodprotectionassoc.co.uk/>

North Somerset Council Emergency Management Team Contact us at

emu@n-somerset.gov.uk

Direct Gov Preparing for Emergencies

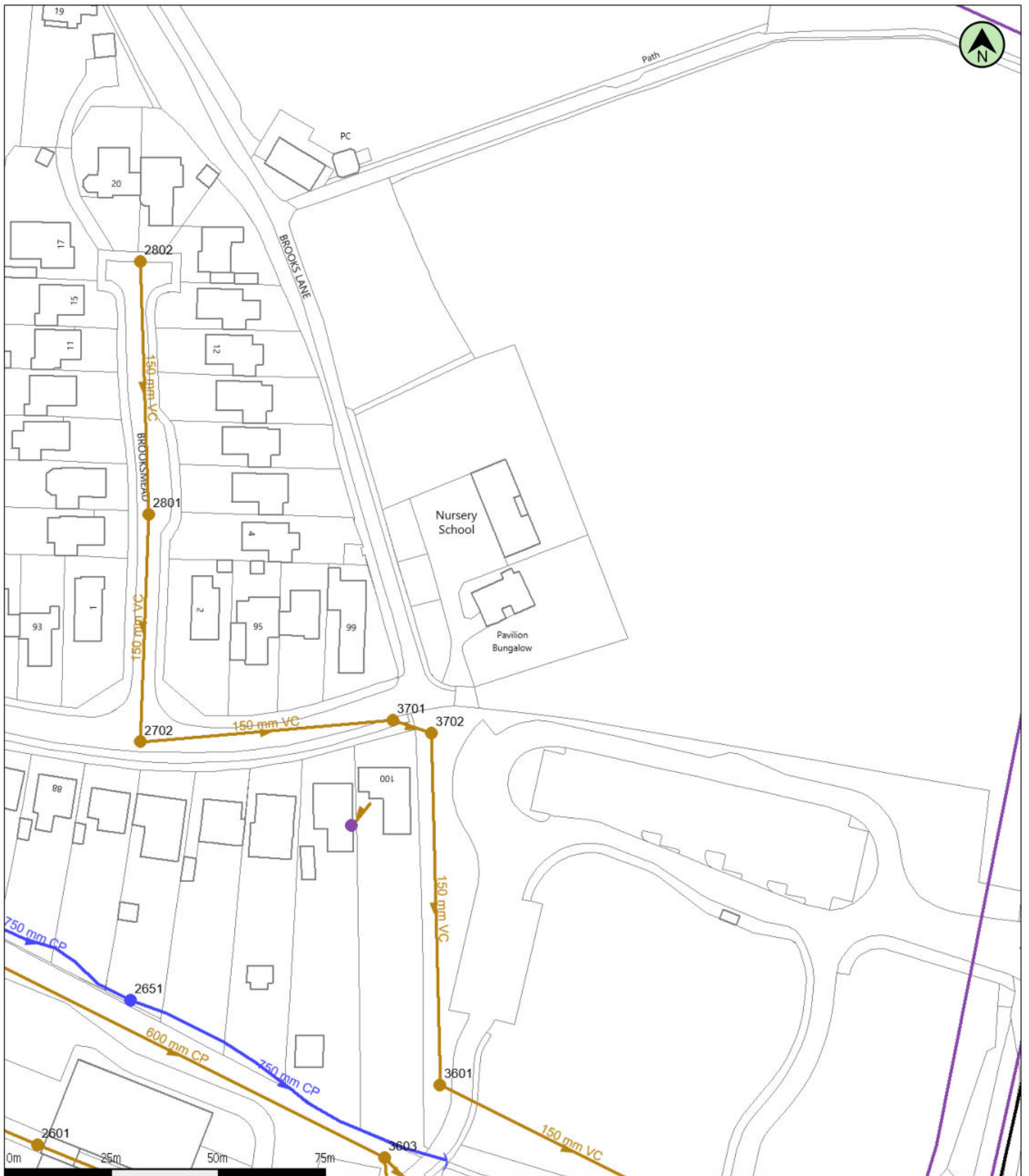
<http://www.direct.gov.uk/en/Governmentcitizensandrights/Dealingwithemergencies/Preparingforemergencies/index.htm>

UK Resilience

<http://interim.cabinetoffice.gov.uk/ukresilience.aspx>

APPENDIX E:

SOUTHERN WATER SEWER MAPS

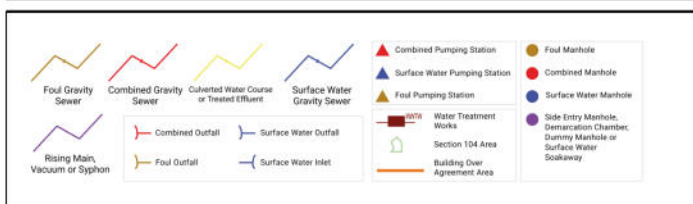


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Data updated: 21/08/25

Scale: 1:1250
Map Centre: 494363,99793

Date: 26/08/25
Our Ref: 1860579 - 1

Wastewater Plan A4
Powered by digdat



malcolm@easltd.co.uk

Pavillion Bungalow



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

WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

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

[illegible]



eas ltd

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