

DESIGN AND ACCESS STATEMENT
SITE ADDRESS

10 Harbour Road, Pagham PO21 4TG

BRIEF DESCRIPTION

The Demolition of the existing structures and the building of new modern family home

APRIL 2019



MITZMAN architects llp

Unit 1 Primrose Mews,
Sharpleshall Street,
London NW1 8YW

1.0 INTRODUCTION

- a. This Design & Access has been prepared to accompany the planning application at **10 Harbour Road, Pagham, PO21 4TG**
- b. In summary the application is for the following works;
 - 1 - The Demolition and removal from site of all the existing propped up railway carriages, removal of all associated wall/roof structures, sheds and railway timber sleepers from the ground.
 - 2 - The Construction of a new build modern family home

1.1 RELEVANT AREA HISTORY

No 10 Harbour Road, is one of the sites in this area, made available to park redundant railway carriage and used as habitable spaces as a result of Dr Beeching's curtailment and restructuring of the railway network in the 60s.

Nowadays several bungalows with planted gardens and off street parking have been constructed in most of the nearby - West Front, Harbour and Lagoon, Roads - as well as sea front. Nearly all with off street parking.

Consequently there is a striking visual comparison between the well kept residential buildings and the remnant of the past at 10 Harbour Road, Pagham PO21 4TG.

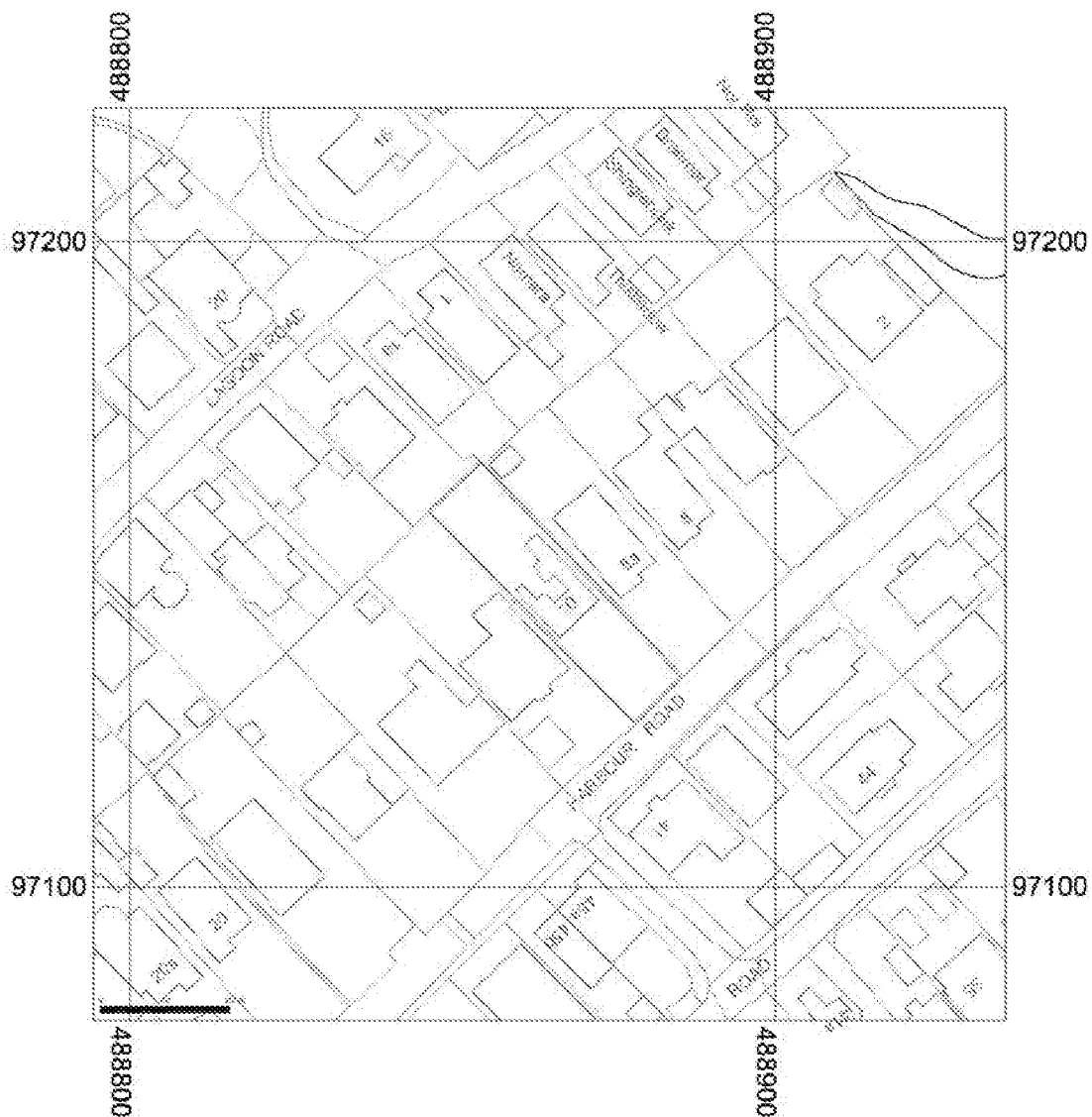
2.0 EXISTING SITE

10 Harbour Road, is located between two very well kept bungalows one of which (No 8) was constructed within the last 5 years.



The site surface was shaped to accommodate and support the railway carriage units, with only one street faced brick wall shielding the non residential items on site.

2.1 Location OS Map 1:1250



Area satellite view



2.2 EXISTING SITE PHOTOGRAPHS



No 8

10

12

Facing South East - View from the back of the site
Facing the rear boundary (North West) - from the middle of the site



showing the existing trees to be retained. Also the Lagoon Rd houses.

Existing site structures



**Existing Timber
structures on
Pagham sea front**



**The proposed
Timber
frame & clad
building at
10 Harbour Road
Pagham**



3.0 THE PROPOSAL

Proposal is for the complete demolition and removal of all the existing elements from site, and construct a single storey family building with internal garden and large parking area in the front.

The single storey family house - even with its front roof garden - is designed to be well below the roof levels of either side bungalows.

The house is sited to be within a building line between connecting the two adjoining properties.

3.1 LAYOUT

The new building has been designed to provide an open plan family living but separate from the sleeping accommodation. Furthermore it is designed for a two generation family. The older generation, accommodated into a "granny annex" near the back of the site and the younger generation into an open plan family living areas with separate sleeping accommodation.

A new front door on the side of the Entrance Hall connects the living spaces in the front with the private inner garden and provides a link with the end part of the project that is designed to provide privacy and quietness for the elderly members of the family.

The inner garden in the centre of the plan is visually and physically connected to Bedroom 1 as well to Study Room and Bedroom 4. In addition it is accessed via the link corridor.

3.2 SITE COVER

The site area is 518.69 m²

The proposed building covers an area of 190.04 m²

Therefore the site coverage area is 36.63% well below the permissible 45%.

3.3 APPEARANCE/ DETAILING

All design decisions were taken not only with the aim of ensuring that the house blends-in with the appearance of the prevailing area, but also, to identify with the contemporary visual and environmental expectations of a modern family house by the sea.

Careful consideration has been also given to the variety of structures in the wider location of sea side accommodation. Timber framed construction has been considered as optimum for this scheme. All the relevant elements of the building such as the materials for the external walls, the sliding windows and their surrounds, as well as the doors and frames will all be in timber .

A small courtyard is located between the rear of the living room/kitchen and bedroom 1&2 that provides light and access to the roof timber decked area via a metal staircase.

The single storey - bedroom 1, 2 and the entrance hall - will have green roofs

The sloping, toward the site, roof - over bedroom 4, toilet and study rm - will have photovoltaic and solar panels to provide "green energy" for the building.

4.0 ENVIRONMENTAL STATEMENT

- i. "Passive House" principles have been used when considering the design of the house aiming to achieve level 4 or equivalent in the 'Code for Sustainable Homes'.

As new build house it will conform to the highest standard of environmental sustainability and the building fabric will exceed the requirements of part L.

Green Energy solutions will be used throughout the building as appropriate. There will be a solar thermal water heating system as well as flush mounted photo voltaic panels on the roof to provide additional electrical energy.

Space heating will be provided by an electric boiler and hot water via a solar thermal.

Low energy lighting will be installed externally and internally. Heat recovery will be installed using MVHR ventilation system

In addition the design employs passive strategies, for example ventilation will be provided by opening windows throughout the house in the summer

- ii. Construction uses a factory-prefabricated off-site manufacturing (OSM) process to achieve a high standard of airtightness.

Sustainability was a prime goal guiding, design, construction and choice of materials, appliances and fittings. Hence the highly insulated and airtight, factory prefabricated construction in a low-embodied energy and renewable material – timber from sustainably managed forests.

4.1 FLOOD RISK

10 Harbour Road, Pagham, site appears to be within the area of very low risk for river or sea flooding as the Government Agency's maps indicate.

Long term flood risk information

BETA This is a new service – your feedback will help us to improve it.

10
HARBOUR ROAD
BOGNOR REGIS
PO21 4TG

This location is in an area at very low risk of flooding

Even if flooding doesn't threaten your location directly, it may still affect:

- transport
- power
- communications networks

All information, particularly the likelihood of surface water flooding, is a general indicator of an area's flood risk. As such it is not suitable for identifying whether an individual property will flood. This service uses computer models to assess an area's long term flood risk from rivers, the sea, surface water and some groundwater. It does not include flood risk from sources such as blocked drains and burst pipes.

Further information

[View maps showing the potential extent of flooding in this location](#)

[View detailed flood risk information for this area](#)

► [Other ways of getting this information](#)

[View the flood risk information for another location](#)

03 April 2019

 [Print](#)

We however sought further advise and we hereby attach in the appendix the SSD Environmental Agency's report.

Please see appendix for the full documents

4.2 IMPACT OF CONSTRUCTION MATERIALS & METHODS

Materials of low embodied energy or low environmental impact will be used where a substitution can be made without technical or visual penalty. This extends to insulation materials, structural and finishing softwood, hardwood species, metalwork, roof coverings and concrete specification.

Consideration will be given to materials of low embodied energy in preference to high. It is also the intention that materials with low environmental impact will be chosen generally throughout. Insulation products to be 0 ODP and <5 GWP.

Carpentry timbers will be from FSC certified sources.

Concrete will use cement replacement, either PFA or BFS depending on engineering specification.

In addition we have been researching the possibility of constructing the house in a prefabricated manner that would reduce on-site time and disruption for the neighbours.

4.3 RECYCLING & REFUSE

Space has been provided at the end of the garden for a bin and recycling store and will provide storage in accordance with Arun District Council guidelines

4.4 AMENITY / LANDSCAPING

The new proposal is aimed to increase the visual amenity of the surrounding area,.

We aim to ensure that the existing trees at the rear end of the garden will remain and will be protected throughout the works.

4.5 ACCESS STATEMENT/ LIFE TIME HOMES

The new house will be compliant with Part M throughout. The bedroom on the ground floor allows for lifetime homes compliance and all other aspects of the design will ensure this standard is met.

5.0 PRE-PLANNING CONSULTATION

We had a pre-planning telephone discussion with the Duty Planner of the Arun District Council in order to ensure that we have taken on board the required guidance.

Milton Miliadiadou
Mitzman Architects
Unit 1
Primrose Mews
Sharpleshall Street
Primrose Hill
London
NW1 8YW

Our ref: SSD120970
Date: 03/04/2019

Dear Milton Miliadiadou,

Enquiry Regarding Product 4 for Flood Risk Assessment for 10 Harbour Road, West Sussex, Bognor Regis, PO21 4TG.

Thank you for your enquiry which was received on 24 March 2019.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004. The information is attached.

The information on Flood Zones in the area relating to this address is as follows:

The site is in an area located within Flood Zone 1 as shown on our Flood Map for Planning (Rivers and Sea).

Note - This information relates to the area that the above named property is in and is not specific to the property itself as it is influenced by factors such as the height of door steps, air bricks or the height of surrounding walls. We do not have access to this information and is not currently used in our flood modelling.

Flood Zone definitions can be found at www.gov.uk/guidance/flood-risk-and-coastal-change#Table-1-Flood-Zones

Flood Defences

There are no formal raised flood defences in the vicinity of the site.

Model Information

The model used was the River Arun to East Head (2D) which was completed by JBA Consulting in 2016.

Flood History

We hold no record of previous flooding events affecting this site.

Please note our records are not comprehensive and may not include all events. I recommend contacting the Lead Local Flood Authority, **West Sussex County**

Use of Environment Agency Information for Flood Risk Assessments

Important

The Environment Agency are keen to work with partners to enable development which is resilient to flooding for its lifetime and provides wider benefits to communities. If you have requested this information to help inform a development proposal, then we recommend engaging with us as early as possible by using the pre-application form available from our website:

<https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion>

We recognise the value of early engagement in development planning decisions. This allows complex issues to be discussed, innovative solutions to be developed that both enables new development and protects existing communities. Such engagement can often avoid delays in the planning process following planning application submission, by reaching agreements up-front. We offer a charged pre-application advice service for applicants who wish to discuss a development proposal.

We can also provide a preliminary opinion for free which will identify environmental constraints related to our responsibilities including flooding, waste, land contamination, water quality, biodiversity, navigation, pollution, water resources, foul drainage or Environmental Impact Assessment.

In preparing your planning application submission, you should refer to the Environment Agency's Flood Risk Standing Advice and the Planning Practice Guidance for information about what flood risk assessment is needed for new development in the different Flood Zones. This information can be accessed via:

<https://www.gov.uk/flood-risk-assessment-standing-advice>
<http://planningguidance.planningportal.gov.uk/>

You should also consult the Strategic Flood Risk Assessment or other relevant materials produced by your local planning authority.

You should note that:

1. Information supplied by the Environment Agency may be used to assist in producing a Flood Risk Assessment (FRA) where one is required, but does not constitute such an assessment on its own.
2. This information covers flood risk from main rivers and the sea, and you will need to consider other potential sources of flooding, such as groundwater or surface water runoff. Information produced by the local planning authority referred to above may assist here.
3. Where a planning application requires an FRA and this is not submitted or is deficient, the Environment Agency may raise an objection.

Council or the Local Authority, **Arun District Council** for a more comprehensive flood history check.

FRA advisory text

Name	Product 4
Description	Detailed Flood Risk Assessment Map for 10 Harbour Road, West Sussex, Bognor Regis, PO21 4TG.
Licence	<u>Open Government Licence</u>
Information Warning - OS background mapping	<i>The mapping of features provided as a background in this product is © Ordnance Survey. It is provided to give context to this product. The Open Government Licence does not apply to this background mapping. You are granted a non-exclusive, royalty free, revocable licence solely to view the Licensed Data for non-commercial purposes for the period during which the Environment Agency makes it available. You are not permitted to copy, sub-license, distribute, sell or otherwise make available the Licensed Data to third parties in any form. Third party rights to enforce the terms of this licence shall be reserved to OS.</i>
Attribution	Contains Environment Agency information © Environment Agency and/or database rights. Contains Ordnance Survey data © Crown copyright 2018 Ordnance Survey 100024198.

Data Available Online

Many of our flood datasets are available online:

- Flood Map For Planning ([Flood Zone 2](#), [Flood Zone 3](#), [Flood Storage Areas](#), [Flood Defences](#), [Areas Benefiting from Defences](#))
- [Risk of Flooding from Rivers and Sea](#)
- [Historic Flood Map](#)
- [Current Flood Warnings](#)

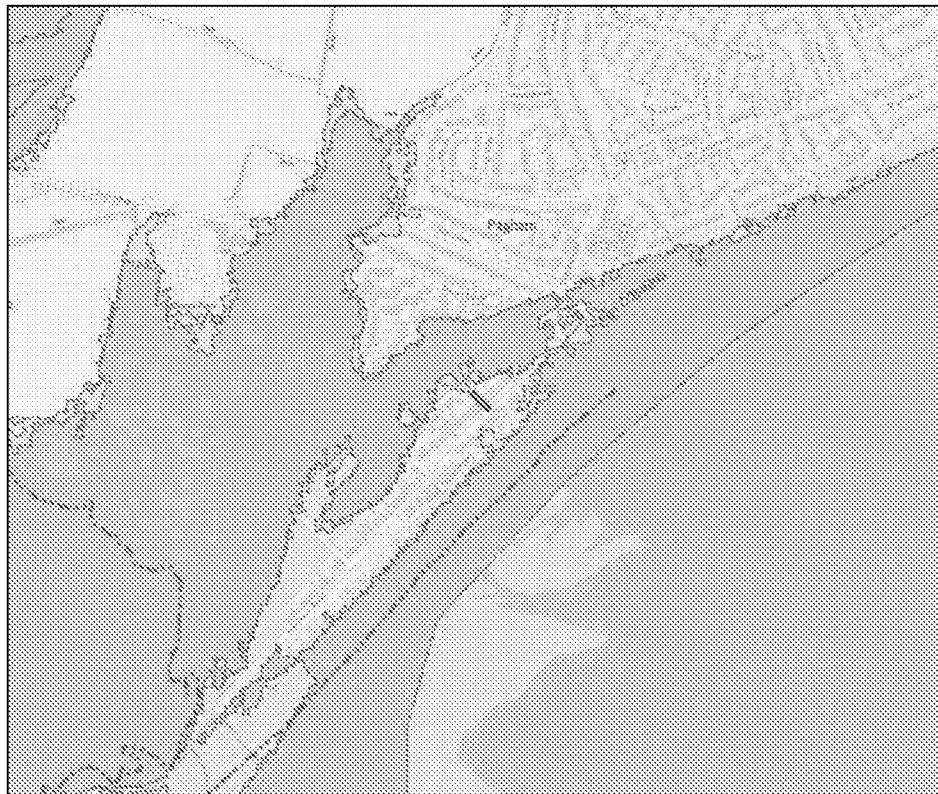
Please get in touch if you have any further queries or contact us within two months if you'd like us to review the information we have sent.

Yours sincerely,

Tom Lamboo

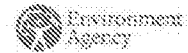
**FCRM Officer, PSO West Sussex | Solent and South Downs
Environment Agency | Guildbourne House, Chatsworth Road, Worthing, West
Sussex, BN11 1LD**

Flood Map for Planning (Rivers and Sea). Centred on PO21 4TG. Created 03/04/2019.



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Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk



Scale 1: 10,000



Flood Map for Planning (Rivers & Sea)

- Defences
- Flood Storage Areas
- Areas benefiting from flood defences
- Flood Zone 3
- Flood Zone 2

Flood Map Areas (assuming no defences)

Flood Zone 3 shows the area that could be affected by flooding:

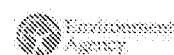
- from the sea with a 1 in 200 or greater chance of happening each year
- or from a river with a 1 in 100 or greater chance of happening each year.

Flood Zone 2 shows the extent of an extreme flood from rivers or the sea with up to a 1 in 1000 chance of occurring each year.

FRA Site Boundary & Node Points. Centred PO21 4TG. Created 03/04/2019.



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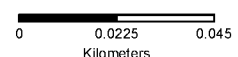


Legend

- Site_Nodes
- Site_Boundary

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

Scale: 1:1,000





Product 4 Flood Risk Data Requested by: Mitzman Architects

Site: 10 Harbour Road, West Sussex, Bognor Regis, PO21 4TG

Table 1: Water Levels: Tidal Undefended

Node Ref	NGR		Modelled Flood Levels in Metres AOD			
	Eastings	Northings	Undefended Annual Exceedance Probability			
			0.5%	0.5% (2070)	0.5% (2115)	0.1%
1	488855	97157	N/A	N/A	4.76	N/A
2	488878	97134	N/A	N/A	4.81	N/A

Table 2: Water Levels: Tidal Defended

Node Ref	NGR		Modelled Flood Levels in Metres AOD			
	Eastings	Northings	Defended Annual Exceedance Probability			
			0.5%	0.5% (2070)	0.5% (2115)	0.1%
1	488855	97157	N/A	N/A	N/A	N/A
2	488878	97134	N/A	N/A	N/A	N/A

Table 3: Water Depths: Tidal Undefended

Node Ref	NGR		Modelled Flood Depths in Metres			
	Eastings	Northings	Undefended Annual Exceedance Probability			
			0.5%	0.5% (2070)	0.5% (2115)	0.1%
1	488855	97157	N/A	N/A	0.34	N/A
2	488878	97134	N/A	N/A	0.50	N/A

Table 4: 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	488855	97157	N/A	N/A	N/A	N/A
2	488878	97134	N/A	N/A	N/A	N/A

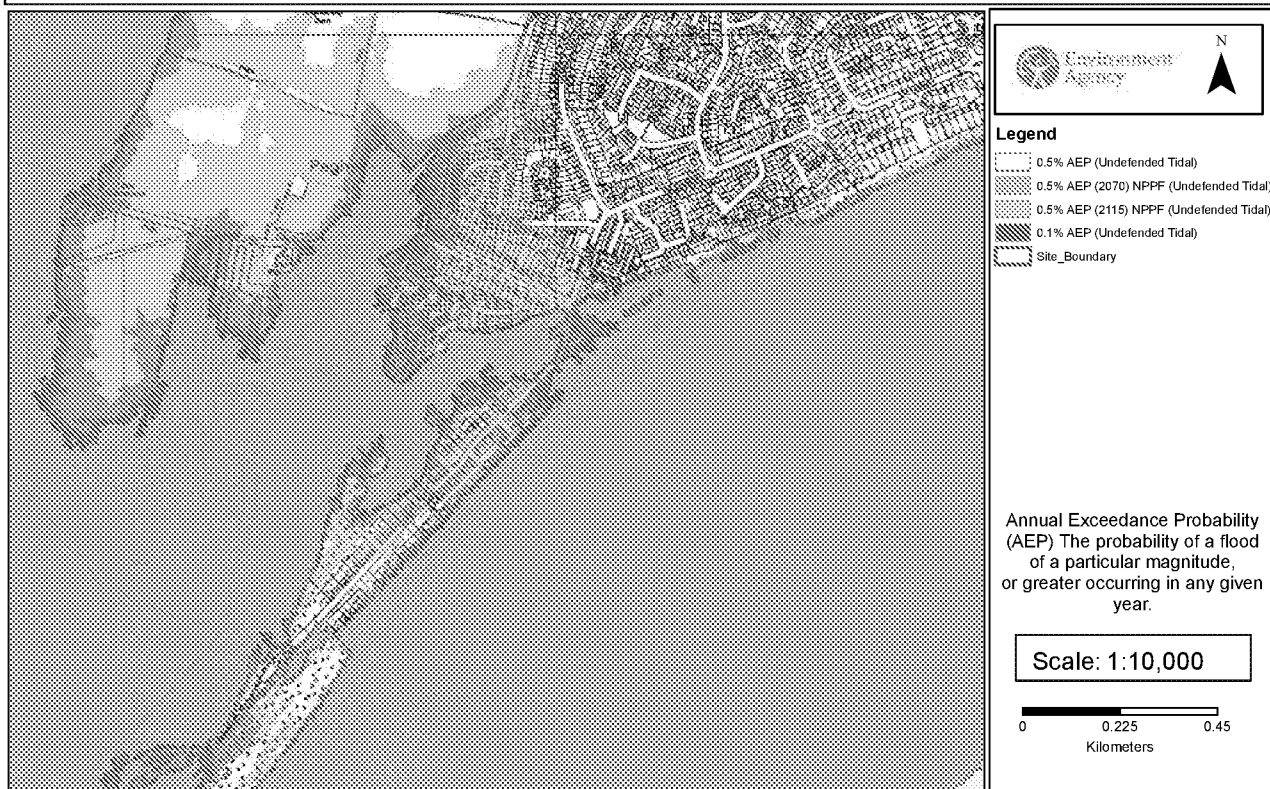
Office Address: Guildbourne House, Chatsworth Road, Worthing BN11 1LD.
 Customer services line: 03708 506 506. Email: enquiries@environment-agency.gov.uk
www.gov.uk/government/organisations/environment-agency

Modelled Flood Outlines (Defended Tidal). Centred PO21 4TG. Created 03/04/2019.



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Modelled Flood Outlines (Un defended Tidal). Centred PO21 4TG. Created 03/04/2019.



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SPZ1s are the areas designated as most at risk from contamination and development activities and in these areas we may consider it inappropriate for development to discharge foul or surface water into the ground.

To see if your proposed development is located within a Source Protection Zone, please use our online map: <http://apps.environment-agency.gov.uk/wiyby/37833.aspx>

Contaminated Land

The NPPF takes a precautionary approach to land contamination. Before the principle of development can be determined, land contamination should be investigated to see whether it could preclude certain development due to environmental risk or cost of remediation. Where contamination is known or suspected, a desk study, site investigation, remediation and other works may be required to enable safe development.

Pollution

If the proposed development use has the potential to pollute ground or surface water receptors then an assessment to establish whether the risk of pollution is acceptable or can be mitigated will be required within any planning application.

Foul Drainage

When drawing up wastewater treatment proposals for any development, the first presumption is to provide a system of foul drainage discharging into a public sewer to be treated at a public sewage treatment works (those provided and operated by the water and sewerage companies). This should be done in consultation with the sewerage company of the area prior to the submission of a formal planning application.

If connection to a public sewage treatment plant is not feasible, a package sewage treatment plant may be considered. If you would like further advice please call 03708 506 506.

Cemeteries

The development of new cemeteries in areas where groundwater vulnerability is high should be avoided, except where the thickness and nature of the unsaturated zone, or the impermeable formations beneath the site, protect groundwater; or where the long-term risk is mitigated by appropriate engineering methods.

Main Rivers

Ecology

In accordance with the National Planning Policy Framework (NPPF), any development proposal should avoid significant harm to biodiversity and seek to protect and enhance it. Opportunities to incorporate biodiversity in and around the development will be encouraged.

Your scheme should be designed with a naturalised buffer zone of at least 8 metres from the main river to protect and enhance the conservation value of the watercourse and ensure access for flood defence maintenance.

This buffer zone should be managed for the benefit of biodiversity for example by the planting of locally appropriate, UK native species. The buffer zone should be undisturbed by development with no fencing, footpaths or other structures. This buffer zone will help provide more space for flood waters, provide improved habitat for local biodiversity and allows access for any maintenance requirements.

To identify any Main Rivers in proximity to your proposed development please see our Main Rivers Consultation Map: <http://apps.environment-agency.gov.uk/wiyby/151293.aspx>

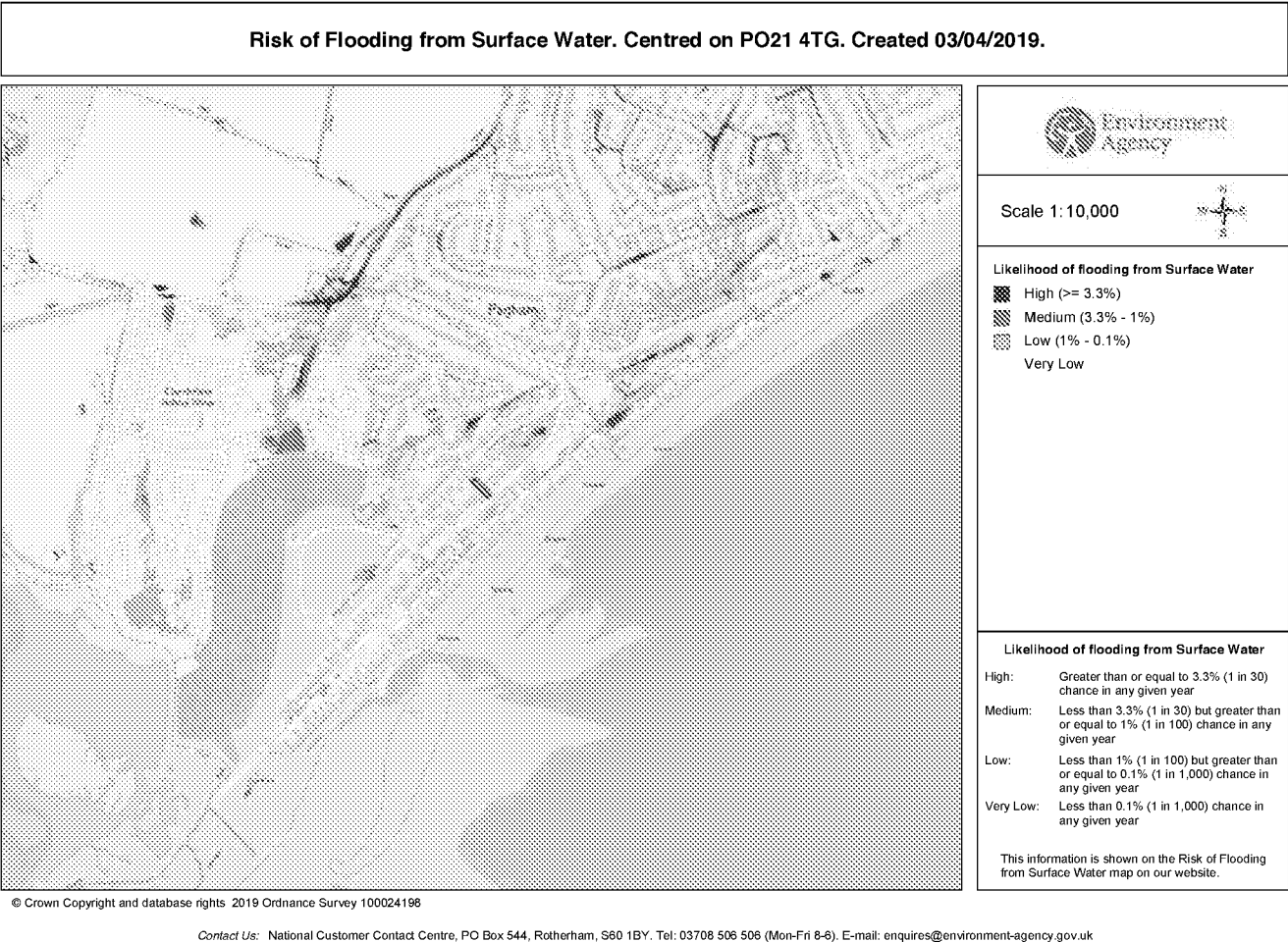
customer service line
03708 506 506

incident hotline
0800 50 70 50

floodline
0345 988 1188

www.gov.uk/environment-agency

FLOOD RISK



Solent & South Downs Area

Pre-application Advice Note

January 2019

This document sets out the environmental issues we will consider when providing our planning application consultation advice to Local Councils. It can be used by applicants, developers and consultants at the pre-planning stage.

Fluvial Flood Risk

Development must be safe and should not increase the risk of flooding.

You can view a site's flood zone on the Flood Map for Planning on our website:

<http://apps.environment-agency.gov.uk/wivby/37837.aspx>

If your proposed development is located within flood zone 2 or 3 you should consult the Flood Risk and Coastal Change pages of the National Planning Policy Guidance (NPPG)

<http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/>

Here you can determine whether the flood risk vulnerability of your proposed development and the flood zone are compatible. You can also establish if there are flood risk sequential test and exception test requirements for your proposed development. In the first instance we recommend the developer/applicant liaises with the Local Planning Authority (LPA) to undertake the Sequential Test in accordance with the National Planning Policy Framework (NPPF).

If your proposed development is located within flood zone 2 or 3 and its vulnerability and flood zone are considered acceptable under the NPPG then a site specific Flood Risk Assessment (FRA) is required to support any subsequent planning application. This is required by paragraph 163 of the NPPF:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

Guidance on the content of a site specific FRA can be found in the NPPG and online: <https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications>

More detailed flood risk modelling data is available to help you produce a FRA then contact our Customers and Engagement team at SSDenquiries@environment-agency.gov.uk.

Climate Change Allowances

On 19 February 2016, we published new guidance for planners and developers on how to use climate change allowances in a site-specific FRA: <https://www.gov.uk/guidance/flood-risk-assessments-climatechange-allowances>

Groundwater Quality

Development must not cause pollution to the water environment.

Source Protection Zones

We have defined Source Protection Zones (SPZs) for 2000 groundwater sources such as wells, boreholes and springs used across the country for public drinking water supply. These zones are more sensitive to contamination from activities that might cause pollution in the area. The closer the activity, the greater the risk.



Culverting

The Environment Agency is likely to oppose culverting as it is damaging to the ecological integrity of the river channel and its corridor and acts as a barrier to the movement of wildlife, including fish and may also increase flood risk.

If the proposal will impact an existing culvert the Environment Agency may oppose planning consent for development either over, or within 8 metres of an existing culvert. Wherever possible, existing culverts should be removed and the river channel and bankside habitat reinstated to restore the ecological continuity of the river channel and its corridor.

Water Framework Directive (WFD)

With any development alongside watercourses, consideration should be given to the requirements of the Water Framework Directive (WFD) <http://ec.europa.eu/environment/water/water-framework/>. This includes preventing overall deterioration in water quality and promoting improvement in the ecological status of any water body. Actions to achieve this are listed in the South East River Basin Management Plan (RBMP) <https://www.gov.uk/search?q=River+Basin+Management+Plans>.

Where appropriate, a WFD Assessment should assess any potential impacts on the watercourse and demonstrate that the required enhancements will be delivered. In some cases the requirements of a WFD assessment can be incorporated into an Environmental Impact Assessment (EIA). Any development that has the potential to cause deterioration in classification under WFD or that precludes the recommended actions from being delivered in the future is likely to be considered unacceptable to us.

Permits & Consents

Environmental Permitting Regulations

To see if your proposed development requires an Environmental Permit under the Environment Permitting Regulations please refer to our website: <https://www.gov.uk/guidance/check-if-you-need-an-environmental-permit>

From 6 April 2016 an Environmental Permit is required for any proposed works or structures, in, under, over or within 8 metres of the top of the bank of designated Main River, and within 16 metres of a tidal defence.

Ordinary Watercourse Consent

The prior written consent of the relevant Lead Local Flood Authority is required for the erection of any flow control structures, culverting or diversion of ordinary watercourses, including streams, land drains and ditches.

Marine Licence

A marine licence may be required for any activities at the mean high water spring tide up to the territorial limit. This also includes the waters of every estuary, river or channel where the tide flows at mean high water spring tide.

Any development must demonstrate how adverse impacts on migratory fish, bathing waters, shellfish waters, designated sites, protected and priority species and habitats will be avoided, minimised, mitigated and if necessary compensated for. Works within or affecting a Water Framework Directive (WFD) waterbody will need to demonstrate that compliance with WFD objectives will be achieved. 'Clearing the Waters for All' provides guidance on how the impacts on WFD should be addressed, and should be used when preparing an assessment, including the screening and scoping of activities. <https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters>

Further pre-application options

The information provided above details generic information which may or may not be applicable to your development. We are able to provide more detailed and bespoke advice and answer technical questions for a charged fee of £100 per person per hour +VAT.

If you are interested in finding out more about this service, please email:



We can explain this service and provide you with a bespoke quote for further pre-application advice that you may require please see .gov - <https://www.gov.uk/government/publications/pre-application-enquiry-form-preliminary-opinion>

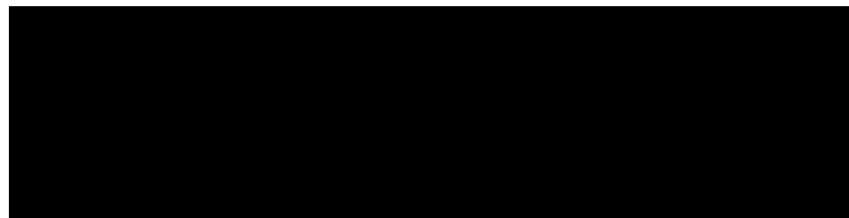
Please note

Please note that the view expressed in this letter by the Environment Agency is in response to the enquiry only and does not represent our final view in relation to any future planning application made in relation to this site.

We reserve the right to change our position in relation to any such application.

As part of this preliminary response we have not technically reviewed any documents. This opinion is based on the information submitted and current planning policy and guidance.

If you have any questions please contact the Solent & South Downs Sustainable Places team:



customer service line
03708 506 306

incident hotline
0800 80 70 60

helpline
0345 988 1188

www.gov.uk/environment-agency