

**RIFE COTTAGE
1 STATION ROAD
FORD
WEST SUSSEX
BN18 0BJ**

FLOOD RISK ASSESSMENT

**CONVERSION OF EXISTING ANCILLARY BUILDING IN
TO A TOURIST UNIT.**

NOVEMBER 2017

REVISION B

Consulting Civil Engineers

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Registration No: 08364133 England & Wales VAT No: GB 156337110



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1. INTRODUCTION

Baker & Associates Ltd have been appointed to provide a Flood Risk Assessment (FRA) for the conversion of an existing ancillary building at Rife Cottage, 1 Station Road, Ford, West Sussex.

This Flood Risk Assessment is to be submitted as part of the planning application for the development of the site.

This Flood Risk Assessment has been prepared in accordance with Communities & Local Government, National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG).

2. SITE DESCRIPTION

2.1 SITE LOCATION AND SURROUNDING AREA

The site is located in Ford, 3.5 km south west of Arundel, off of Station Road, see figures 2.1.1 to 2.1.4.

The existing site is 8,885m² in size and consists of a 85m² semi-detached dwelling, 48m² ancillary building and 78m² agricultural building.



FIGURE 2.1.1 SITE LOCATION





FIGURE 2.1.2 SITE LOCATION



FIGURE 2.1.3 AERIAL IMAGE OF SITE LOCATION





FIGURE 2.1.4 SITE BOUNDARY

2.2 GEOLOGY

British Geological Survey maps indicate that the substrata beneath the site is Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation and Culver Chalk Formation with superficial raised beach deposits consisting of Sand And Gravel.

A historic borehole, BGS ID: 434415 : BGS Reference: SU90SE37, located 400m south west of the site, recorded 1.1m of clay upon chalk to 6m below ground level.

The existing ground water table is unknown, but likely to run within the chalk beneath the clay. A historic borehole, BGS ID: 569763 : BGS Reference: TQ00SW39, located 440m north of the site record ground water at 3.3m below ground level.



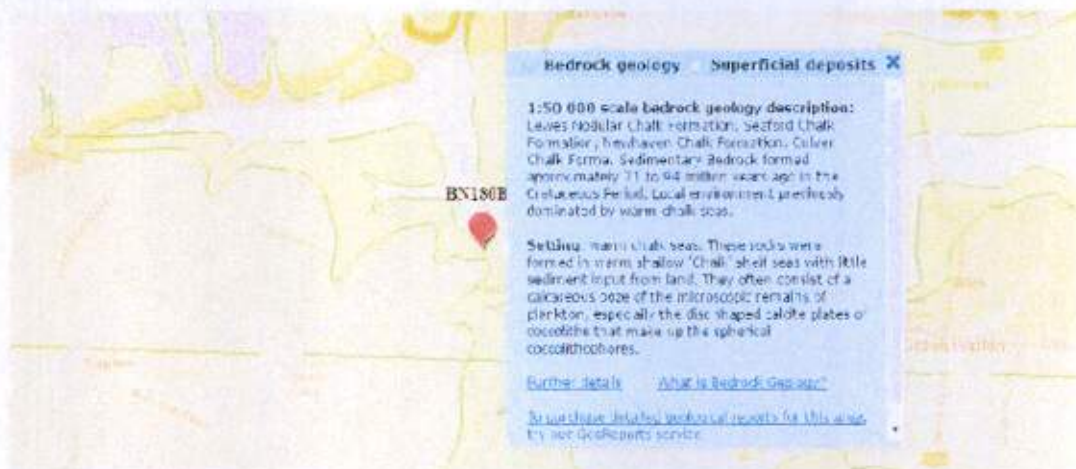


FIGURE 2.2.1 British Geological Survey Map
(www.bgs.co.uk)

2.3 TOPOGRAPHY

The area of the site surrounding the existing semi-detached dwelling and ancillary building is relatively flat, with levels ranging from 2.61mAOD to 3.71mAOD, refer to Appendix A, modelled flood levels and node locations. The area surrounding the site is flat with an approximate ground level of 5mAOD, figure 2.3.1.



FIGURE 2.3.1 OS Map
(www.bing.com/maps)





3. POTENTIAL SOURCES OF EXTERNAL FLOODING

3.1. TIDAL

The site is located 3 km north of the English Channel and is not shown to be at any direct risk of tidal flooding, however the site is located adjacent to the River Arun that discharges to the sea and water levels are influenced by tide levels.

3.2. FLUVIAL (RIVERS)

The EA produces floodplain maps for the UK, which show the areas at risk of fluvial and tidal flooding. The magnitudes of the flooding events considered are defined in terms of their return period. Generally, when determining the impact of any development within the floodplain of a fluvial reach, the design standard against which the EA will consider the feasibility of any scheme is typically the 1% AEP (1 in 100 year return period flood) for sites within the floodplain, or the effects of a 1 in 100 year storm if outside the floodplain.

The EA flood zone maps identify undefended floodplain, giving the horizontal extent of low (Zone 1), medium (Zone 2) and high risk flood zones (Zones 3a and 3b) depending on the severity of the flood event.

The site is located 250m west of the River Arun, with a tributary watercourse to the River Arun running through the site, situated adjacent to the ancillary building and is shown to be within Flood Zone 3 as indicated on the Environment Agency's Risk of Flooding from Rivers & Sea Map (Figure 3.2.1).



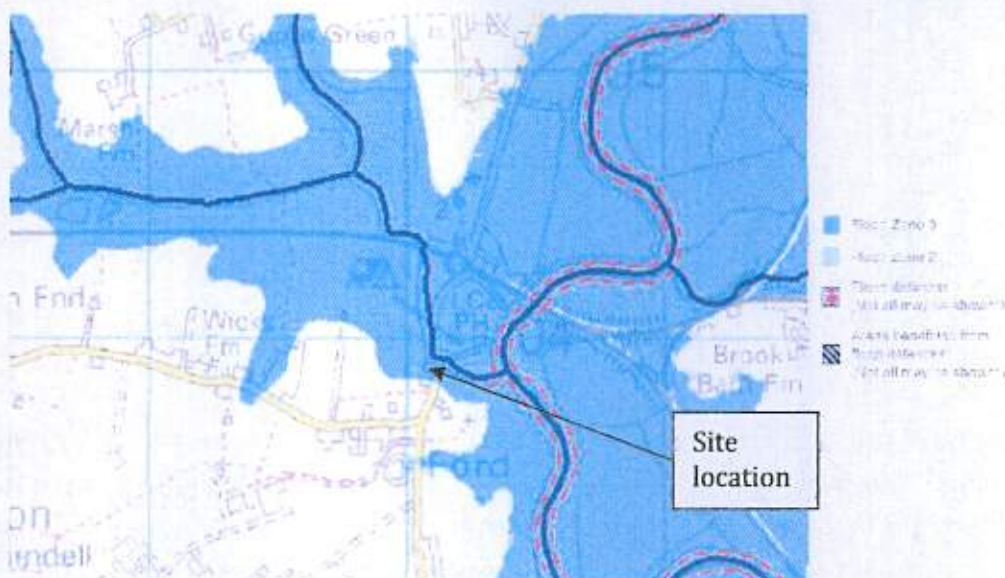


FIGURE 3.2.1 ENVIRONMENT AGENCY FLUVIAL FLOOD RISK MAP (UNDEFENDED)

The Environment Agency have been consulted and have provided flood outlines, depths and levels taken from the River Arun to East Head 2016 (2D) flood model completed by JBA Consulting, Appendix A.

The Environment Agency have confirmed that there are embankments along both sides of the River Arun, east of the site, that provide protection up to the 1:200 year storm return period.

The model confirms that the current defended 0.5% tidal flood level up to 2115 does not encroach on the dwellings on the southern part of the site, south of the watercourse that joins the River Arun, figure 3.2.2.



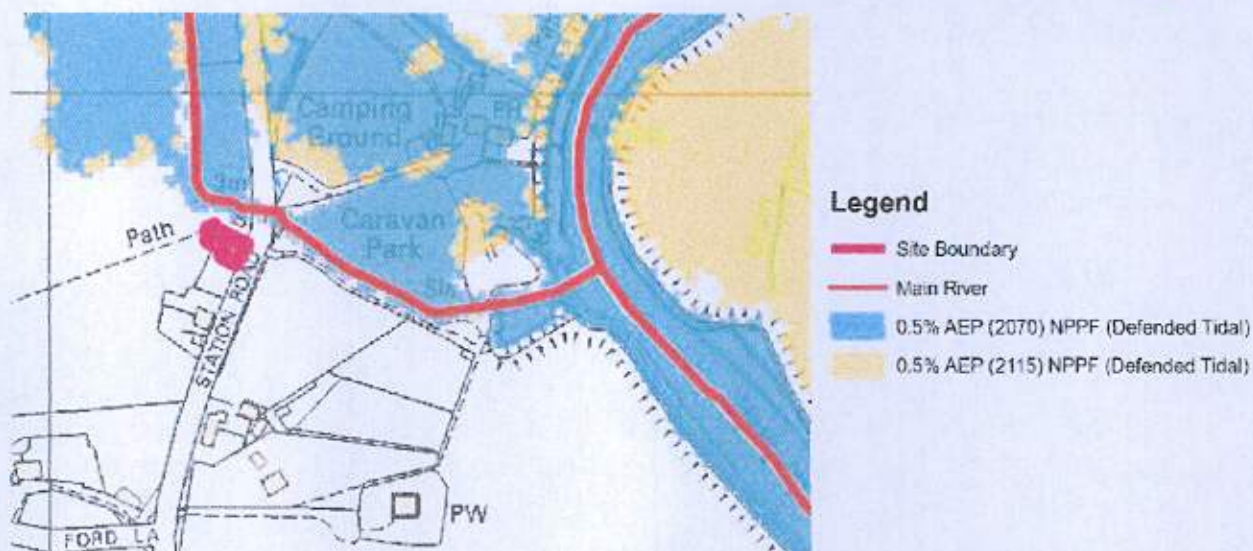


FIGURE 3.2.2 MODELLED DEFENDED FLOOD MAP

The model confirms that the current undefended 0.5% tidal flood level up to 2115, adjacent to the ancillary building (Node 1) 4.04mAOD, figure 3.2.3.



FIGURE 3.2.3 MODELLED UNDEFENDED FLOOD MAP

The Environment Agency have confirmed that they have no record of historic flooding in this area.





3.3. PLUVIAL (SURFACE WATER)

The Environment Agency also produce maps which highlight the risk of flooding from surface water flows illustrating when the capacity of existing surface water drainage networks and channels are exceeded in extreme rainfall events.

The Environment Agency's risk of flooding from surface water map (below) shows that the site is not at risk of Pluvial flooding.

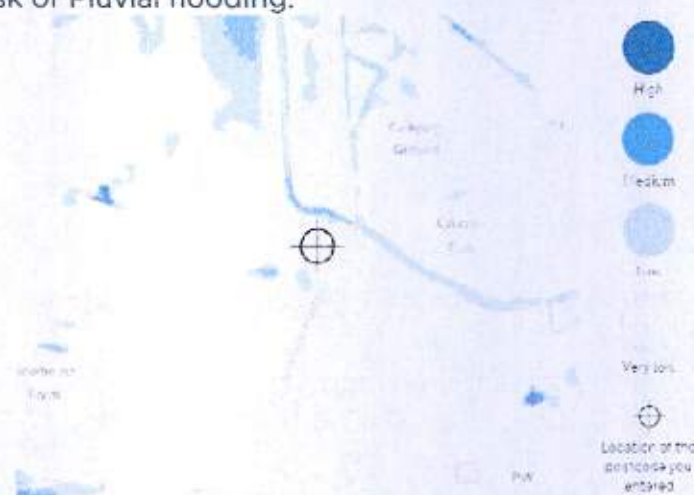


FIGURE 3.3 ENVIRONMENT AGENCY PLUVIAL FLOOD RISK MAP

3.4. FOUL/SURFACE WATER SEWERS

There are no surface or foul water sewers located within the vicinity of the site, therefore the risk of flooding from this source is deemed as low.

3.5. GROUND WATER

The site is not within a ground water Source Protection Zone. There have been no reports of groundwater flooding taking place within the catchment of the site. A historic borehole located in closed proximity to the site recorded ground water at 3m below ground level. There have been no historic reported incidents of flooding from this source therefore the risk of flooding is deemed as low.

3.6. RESERVOIRS/CANALS AND OTHER ARTIFICIAL SOURCES

There are no Reservoirs, Canals or Artificial sources surrounding the site and therefore the site is not at risk of flooding from these sources.





4. STRATEGIC FLOOD RISK ASSESSMENT

A Strategic Flood Risk Assessment (SFRA) was carried out in January 2010 by Capita Symonds, the SFRA was produced for West Sussex County Council.

The purpose of the SFRA was to assess and map flood risk from groundwater, surface water, sewer, tidal and river sources taking into account climate change predications.

The SFRA confirms the flood risk associated with the River Arun but does not highlight the site as being at risk of flooding from any other source.

5. DEVELOPMENT PROPOSALS

The existing site is 8,885 m² in size and consists of a 85m² semi-detached dwelling, 48m² ancillary building and 78m² agricultural building.

It is proposed to convert the ancillary building in to a tourist unit with a sleeping and living area and create a 60m² raised timber deck area (Appendix B).

The building to be converted and decking area are less than 250m² and therefore fall under standing advice for minor development, householder development, with regards to Flood Risk.

5.1 EXISTING SITE DRAINAGE

The existing ancillary building has no foul water connections and discharges surface water to the nearby watercourse.

5.2 PROPOSED SITE SURFACE WATER DRAINAGE STRATEGY

It is not intended to make any alterations to the existing surface water drainage system already in place for the ancillary building.

5.3 PROPOSED SITE FOUL WATER DRAINAGE STRATEGY

Any new foul water drainage connection from the ancillary building will be connected to the existing on site foul water drainage system.





6. FLOOD RISK MANAGEMENT MEASURES

The proposed tourist unit falls within Flood Zone 3, therefore mitigation measures are to be put into place to reduce the risk to persons living/staying at the dwelling and to the dwelling itself.

6.1 FINISHED FLOOR LEVELS

The tourist unit is to be located within a defended flood zone. The existing floor level is 2.52mAOD, it is proposed to lift the floor level 600mm above ground level to 3.12mAOD, 920mm below the 1:200-year flood level. The floor will be solid filled rather than suspended so to not create any additional loadings on the existing walls.

6.1 FLOOD RESILIENT CONSTRUCTION

The tourist unit is shown to be within a defended flood zone, however if these defences were to be breached or the 0.5% AEP was to be exceeded, it would put the building at risk of flooding as indicated in figure 3.2.3.

The undefended 0.5% flood level has been modelled as 4.04mAOD, 1.43m above the outside ground levels of the tourist unit.

To mitigate against the potential fluvial flood risk to the tourist unit flood resilient construction needs to be incorporated into the renovation design and construction of the tourist unit. Figure 6.1.3 indicates the potential routes for entry of flood water into a dwelling.



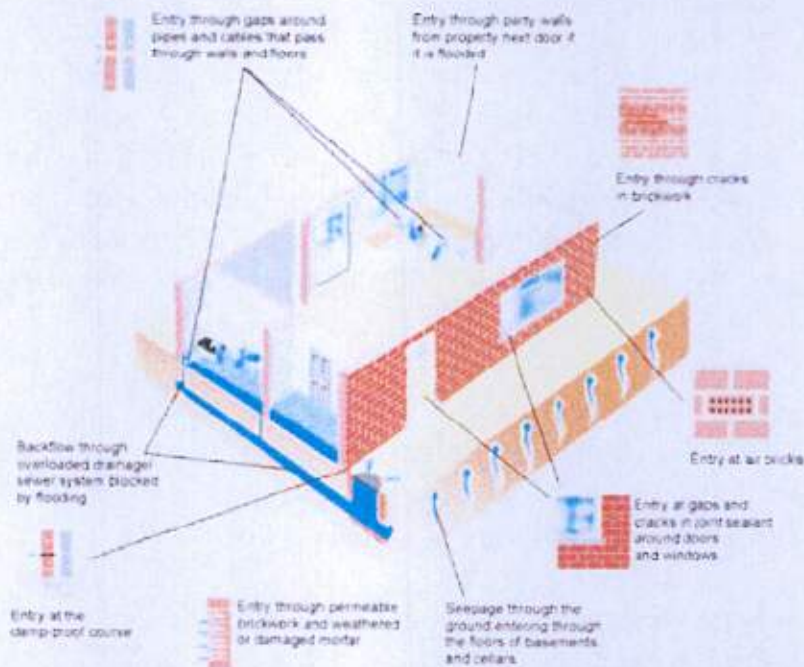


FIGURE 6.1.3 CIRIA POTENTIAL ROUTES FOR ENTRY OF FLOOD WATER INTO A DWELLING

The architect, structural engineer and builder should review and incorporate the recommendations outlined in Communities and Local Government, Improving the Flood Performance of New Buildings, Floor Resilient Constructions.

In particular the following should be incorporated into the new dwellings:

- Flood resilient doors and windows.
- Flood resilient construction methods and materials for floors and walls.
- Anti-flood air bricks or vent covers.
- Back flow valves for foul water drainage.
- Sealed entry points for services.
- Demountable flood water gates as a secondary measure.

6.3 FLOOD WARNING SYSTEM & ACCESS & EGREES

Following comments from the Environment Agency, the tourist unit will only be used between the 1st April to the 30th September. A Flood Management Plan (FMP) has been prepared to summarise the information related to potential flooding in the Ford area and to the tourist unit proposed to be constructed at 1 Station Road.





The document outlines the potential flood risk that may impact on the development and provides guidance to ensure residual risks are communicated to the occupiers of the development.

It is advised that the FMP is provided to all occupants of the proposed site to ensure that they are aware of the risk of flooding and that the appropriate response to the flood risk can be actioned, if required. The FMP is included within Appendix C

7. SUMMARY AND CONCLUSIONS

The proposed new tourist unit and 1 Station Road are shown to be within the defended 0.5% AEP Flood Zone. However, should the defences fail or the 1:200 year storm be exceeded, the site could fall within the undefended flood zone.

Following comments from the Environment Agency, the tourist unit will only be used between the 1st April to the 30th September.

The finished floor level of the dwelling will be set 600mm above ground level.

The tourist unit will be renovated using resilient construction methods to prevent flood water entering the building.

It is recommended that flood protection measures, such as demountable flood water gates and anti-flood air vent covers are applied to 1 Station Road.

The owner/occupiers of the site will be connected to the Environment Agency's floodline and a Flood Water Management plan has been prepared advising on the risk and procedures to undertake during a flood event.

If a flood warning is issued all bookings to the tourist unit will be cancelled and the building will remain unoccupied unit warnings are no longer in force.





Simon Baker
Via Email

Our ref: SSD/34835

Date: 26/01/2017

Dear Simon

Provision of Product 4 for address: Rife Cottage, 1 Station Road, BN18 0BJ

Thank you for your request of 18/07/2017 to use Environment Agency data, Product 4. The information is attached.

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

The property is in an area located within Flood Zone 3 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.

Please find attached a copy of the Flood Map for Planning (Rivers and Sea) for the area relating to your address.

Further details about the Environment Agency information supplied can be found on the GOV.UK website:

<https://www.gov.uk/browse/environment-countryside/flooding-extreme-weather>

If you have requested this information to help inform a development proposal, then you should note the information on GOV.UK on the use of Environment Agency Information for Flood Risk Assessments

<https://www.gov.uk/planning-applications-assessing-flood-risk>

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

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Email: enquiries@environment-agency.gov.uk
www.environment-agency.gov.uk
98_07_SD01

Supporting Information

Flood Defences

Our records show there are embankments along both sides of the River Arun (to the East of the site). These defences have an estimated Designed Standard of Protection of 1 in 200. The overall condition of the current flood defences is fair (based on a visual inspection). Please see the attached map for the line of defences.

Model Information

The levels, depths and flood outlines are taken from the River Arun to East Head 2016 (2D) model completed by JBA Consulting.

Flood History

We do not have any records of previous flood events affecting this site. I would suggest contacting Arun District Council for a more comprehensive flood history check.

Please note our records are not comprehensive and may not include all events, you can contact your Local Authority to check if they hold any relevant information regarding your application.

You are encouraged to use and re-use this information freely and flexibly, with only a few conditions. Details of which can be found here:

<http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

We respond to requests for recorded information that we hold under the Freedom of Information Act 2000 (FOIA) and the associated Environmental Information Regulations 2004 (EIR).

If you are not satisfied with our response to your request for information you can contact us within 2 calendar months to ask for our decision to be reviewed.

If you have any queries or would like to discuss the content of this letter further please call us on 03708 506506.

Yours faithfully

Freddie Fielding
PSO West Sussex

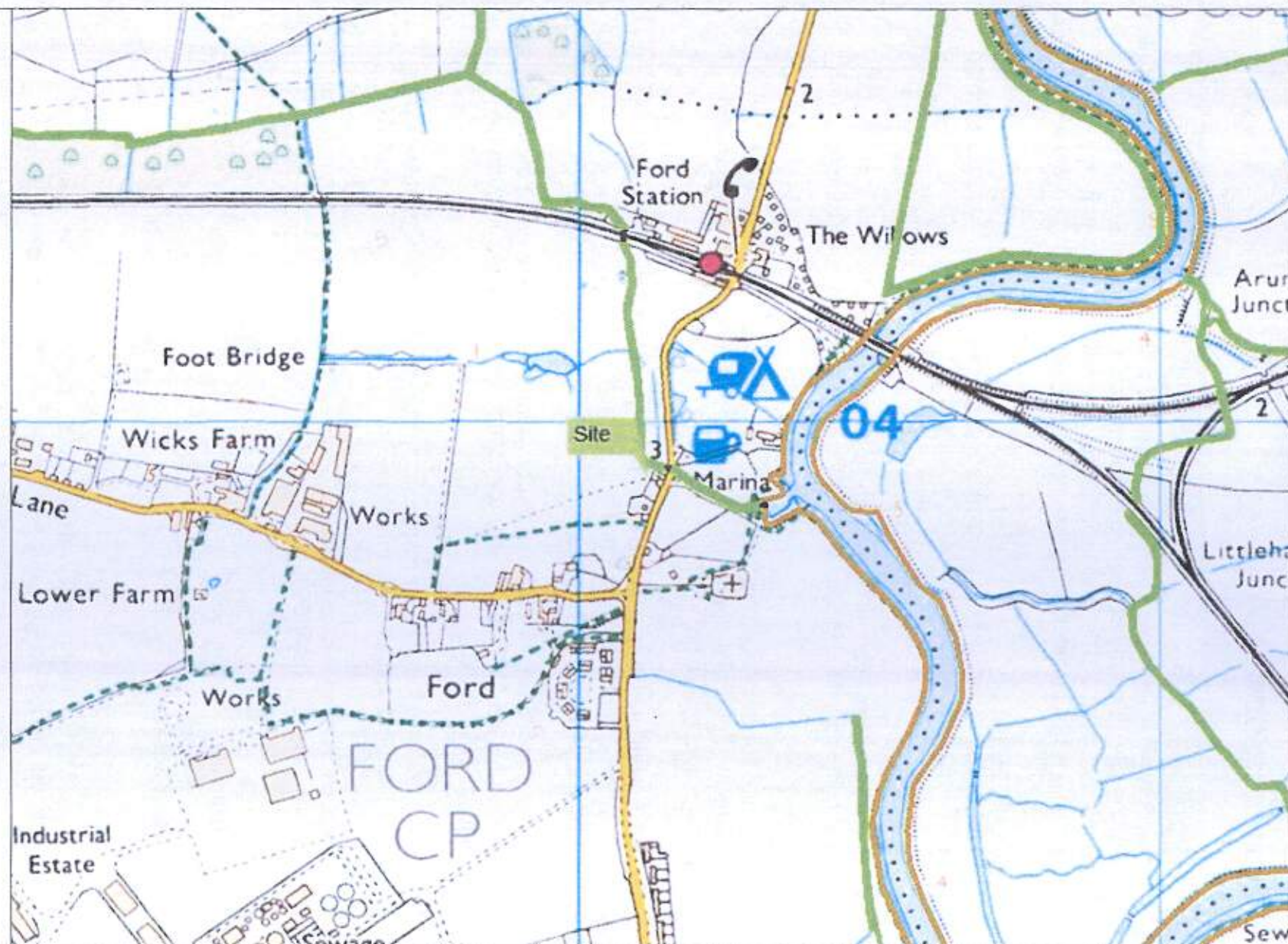
Enc. Flood Map for Planning (Rivers and Sea) / Node point locations / Flood levels/depths / Modelled flood outlines / Flood Defence Locations

Flood Defence Location. Centred BN18 0BJ. Created 26/01/2017

Legend

Defences

- Embankment
- Wall
- Flood Gate
- Demountable Defence
- Bridge Abutment
- High Ground
- Beach
- Barrier Beach
- Promenade
- Quay
- Cliff
- Dunes
- Culvert



0 100 200 300
Metres



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Flood Map for Planning (Rivers and Sea). Centred BN18 0BJ. Created 26/01/2017.



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)

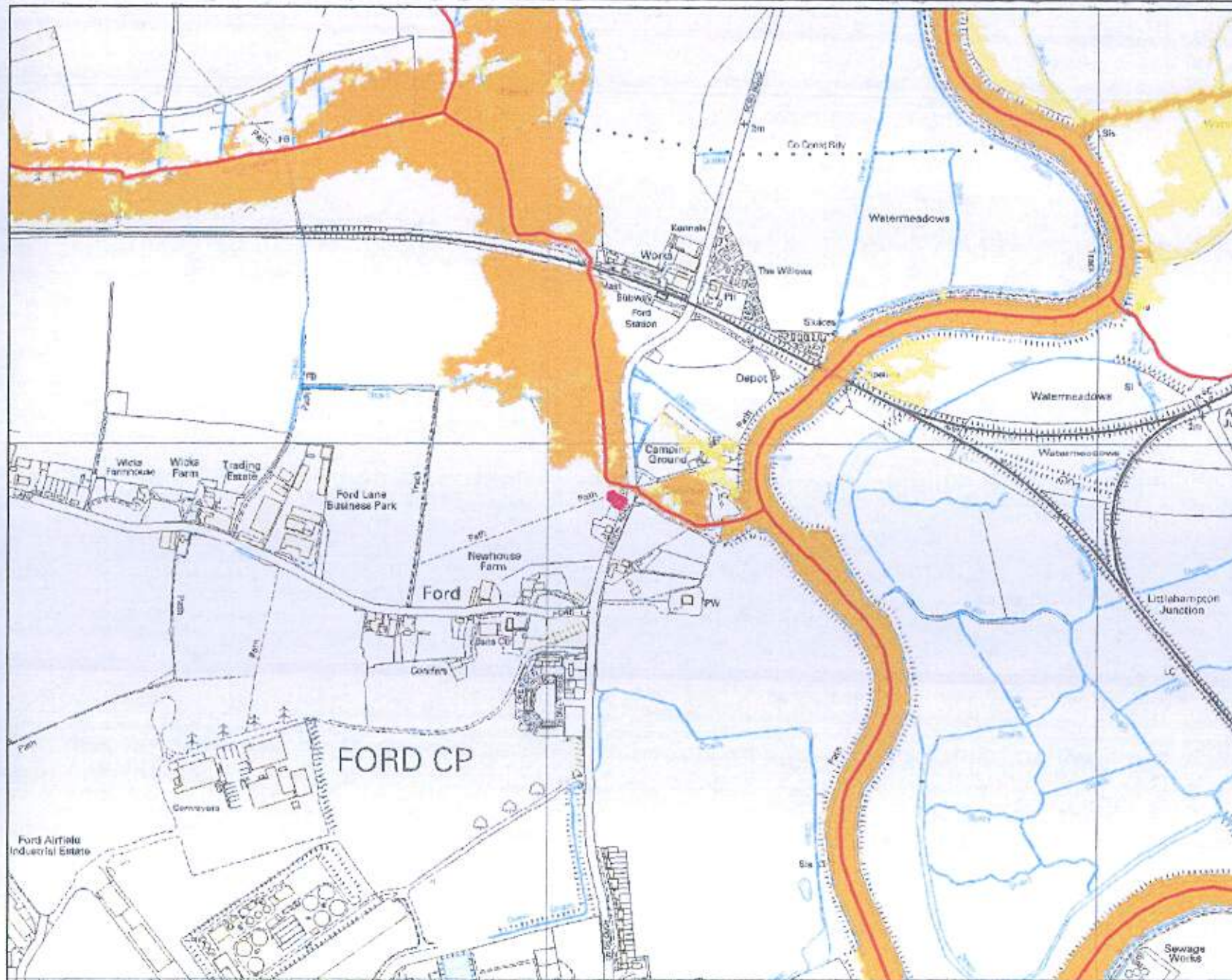
Flood Zone 3 shows the area that could be affected by flooding:

- 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.

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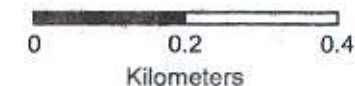
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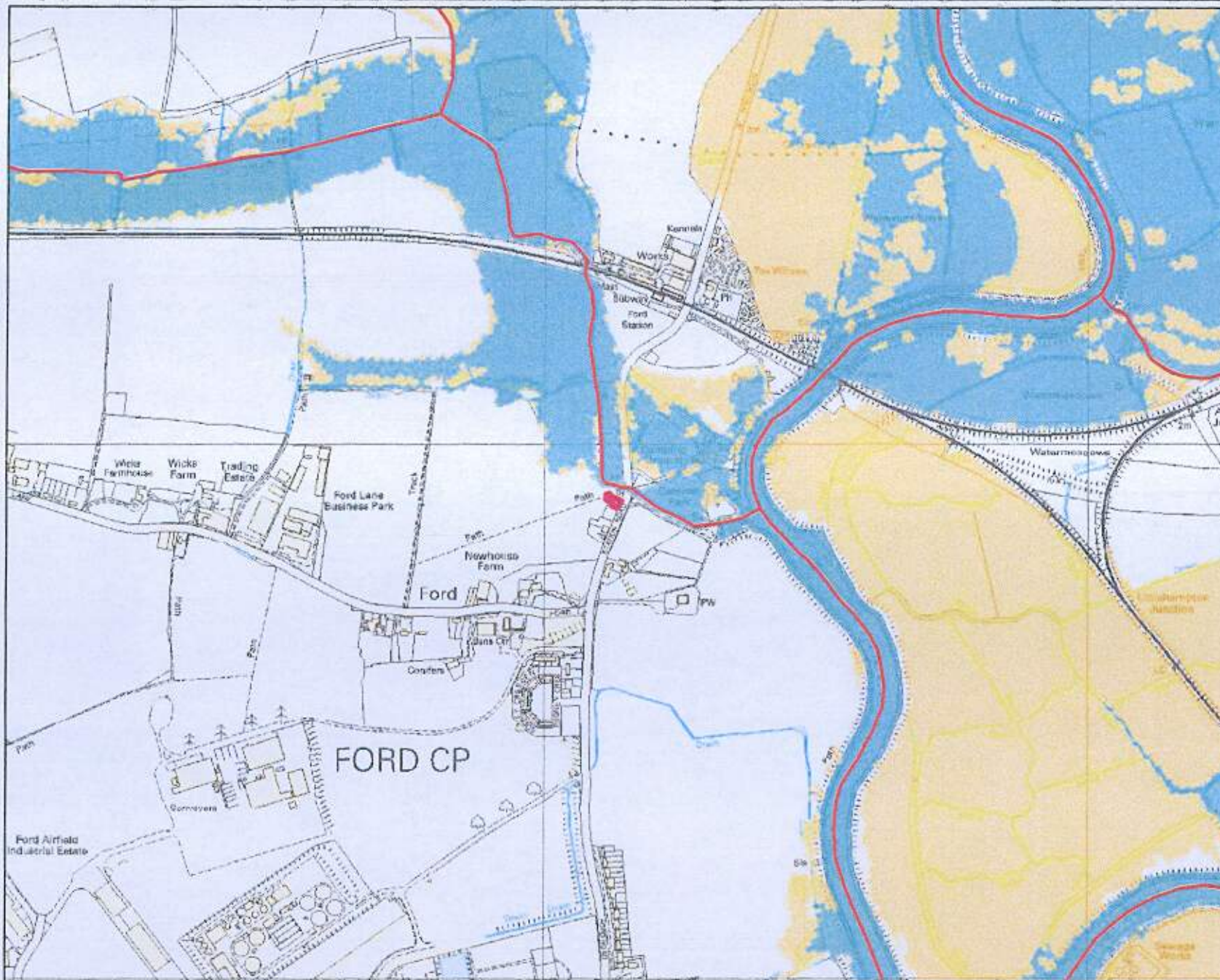


Legend

- Site Boundary
- Main River
- 5% AEP (Defended Tidal)
- 0.5% AEP (Defended Tidal)

Scale: 1:10,000

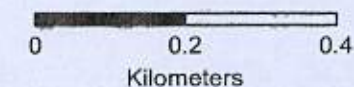




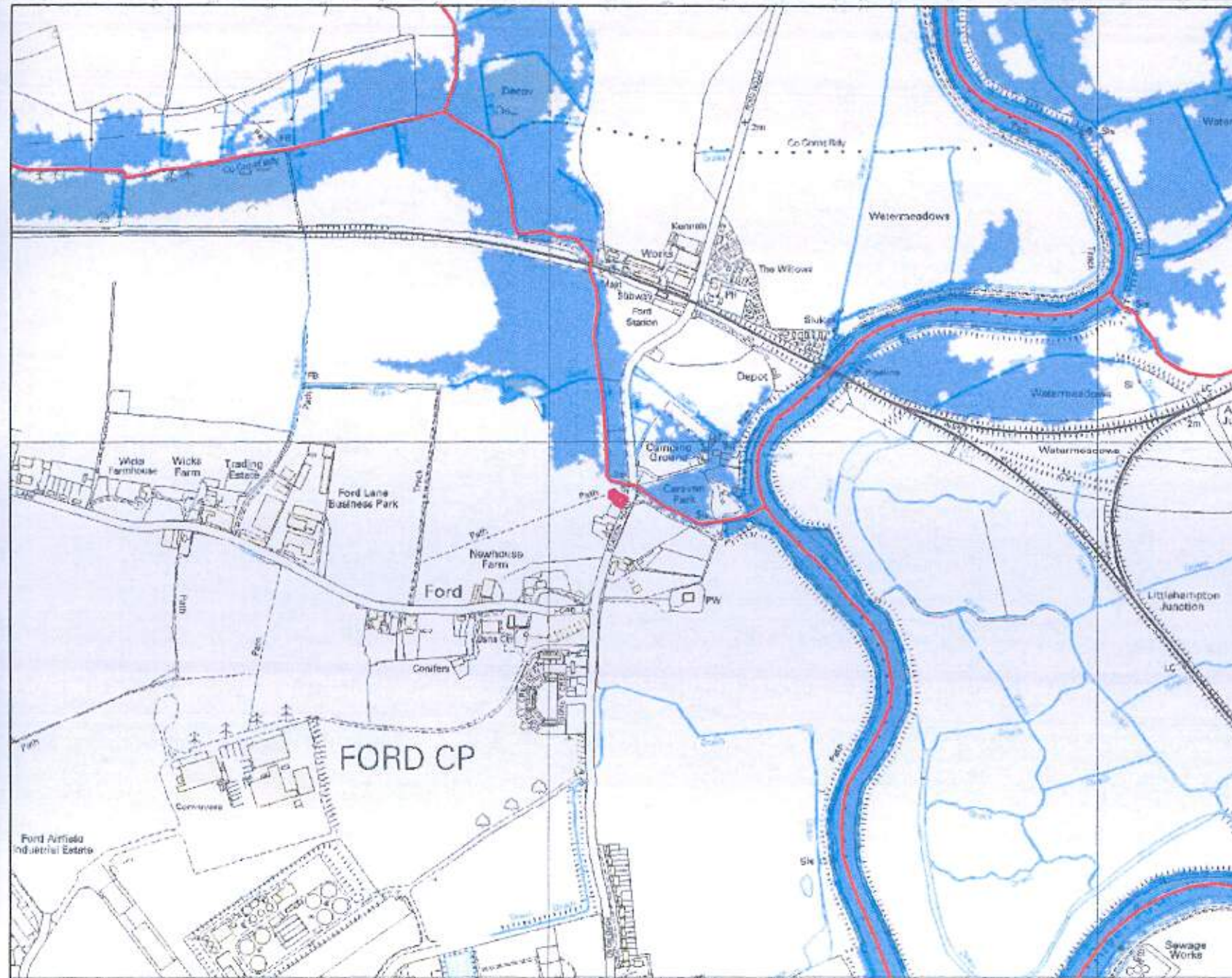
Legend

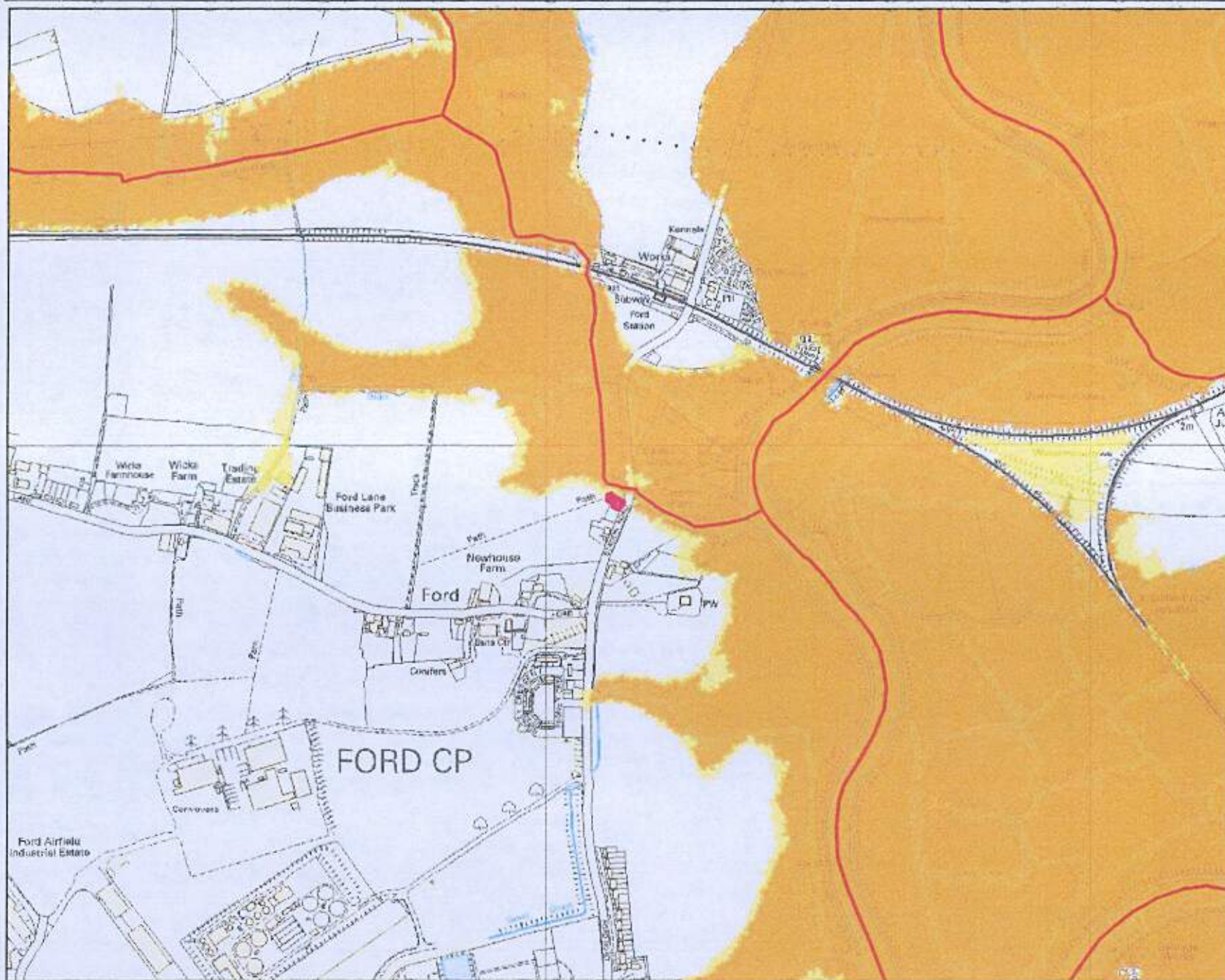
- Site Boundary
- Main River
- 0.5% AEP (2070) NPPF (Defended Tidal)
- 0.5% AEP (2115) NPPF (Defended Tidal)

Scale: 1:10,000



ARUN DISTRICT COUNCIL
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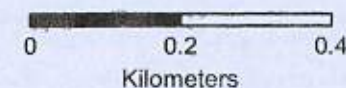


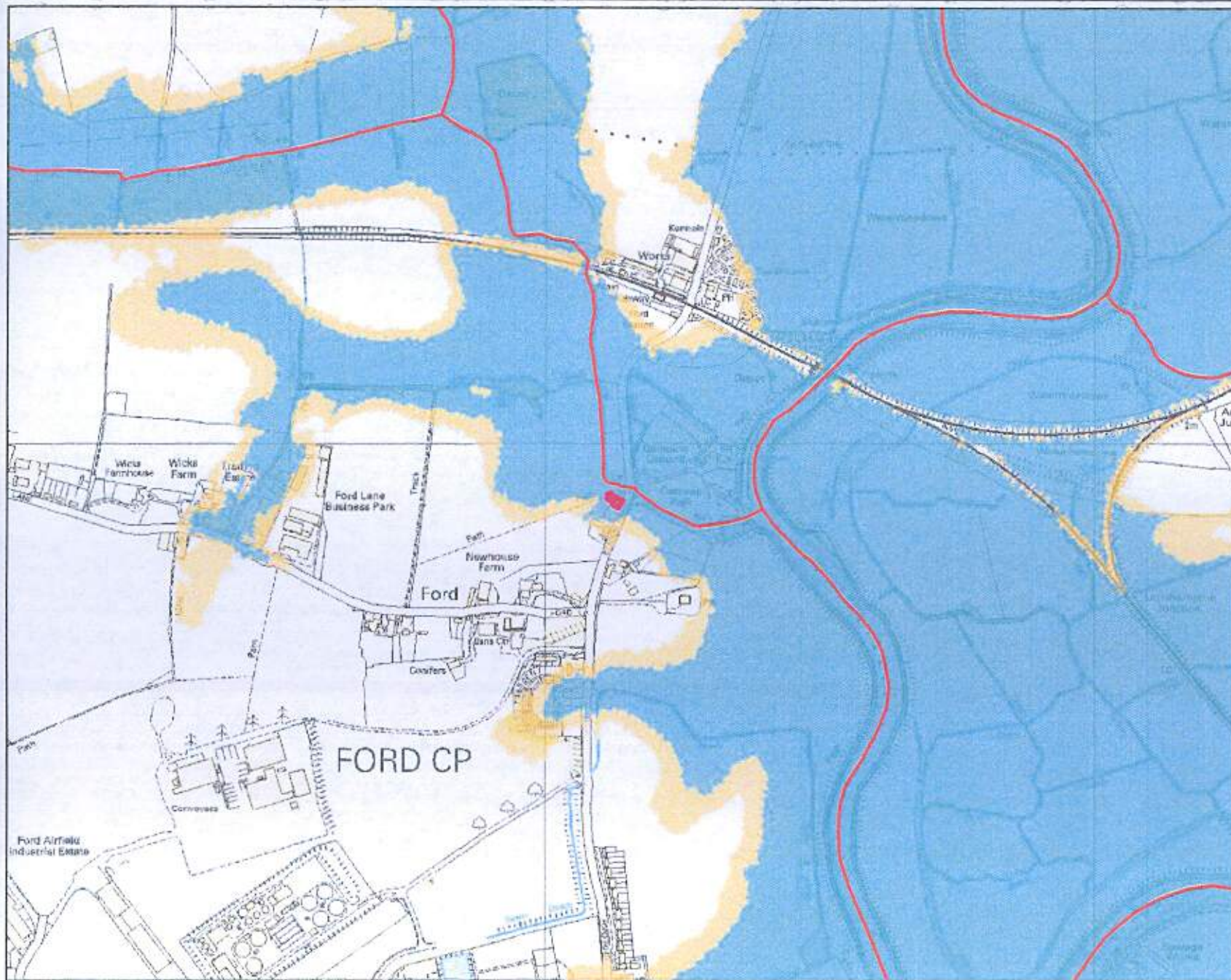


Legend

- Site Boundary
- Main River
- 5% AEP (Un defended Tidal)
- 0.5% AEP (Un defended Tidal)

Scale: 1:10,000

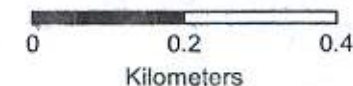




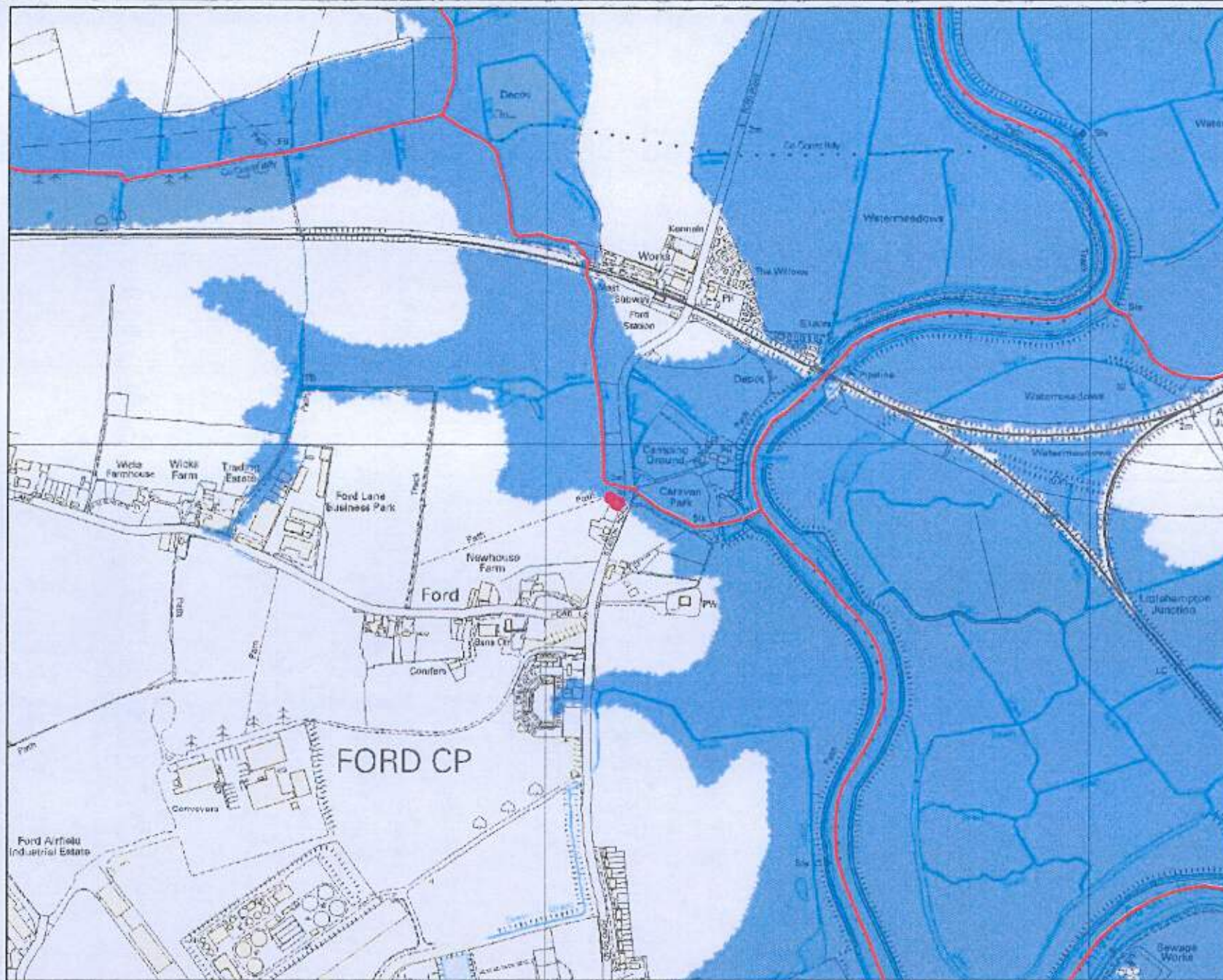
Legend

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

Scale: 1:10,000



Modelled Flood Outlines centred BN18 0BJ. Created 26/01/2017 (Ref: SSD/34835)



Legend

- Site Boundary
- Main River
- 0.1% AEP (Un defended Tidal)

Scale: 1:10,000



Product 4 Flood Risk Data Requested by: Simon Baker

Site: Rife Cottage, 1 Station Road, BN18 0BJ

Table 1: Water Levels: Tidal Undefended

Node Reference	NGR		Modelled Flood Levels in Metres				
	Eastings	Northings	Undefended Annual Exceedance Probability				
			5%	0.5%	0.5% (2070)	0.5% (2115)	0.1%
1	500131	103906	-	2.68	3.22	4.04	2.88
2	500118	103897	-	-	3.20	4.04	-
3	500134	103890	-	-	3.21	4.04	-

Table 2: Water Levels: Tidal Defended

Node Reference	NGR		Modelled Flood Levels in Metres				
	Eastings	Northings	Defended Annual Exceedance Probability				
			5%	0.5%	0.5% (2070)	0.5% (2115)	0.1%
1	500131	103906	-	-	-	-	-
2	500118	103897	-	-	-	-	-
3	500134	103890	-	-	-	-	-

Table 3: Water Depth: Tidal Undefended

Node Reference	NGR		Modelled Flood Depth in Metres				
	Eastings	Northings	Undefended Annual Exceedance Probability				
			5%	0.5%	0.5% (2070)	0.5% (2115)	0.1%
1	500131	103906	-	0.07	0.60	1.43	0.27
2	500118	103897	-	-	0.22	1.05	-
3	500134	103890	-	-	0.04	0.87	-

Table 4: Water Depth: Tidal Defended

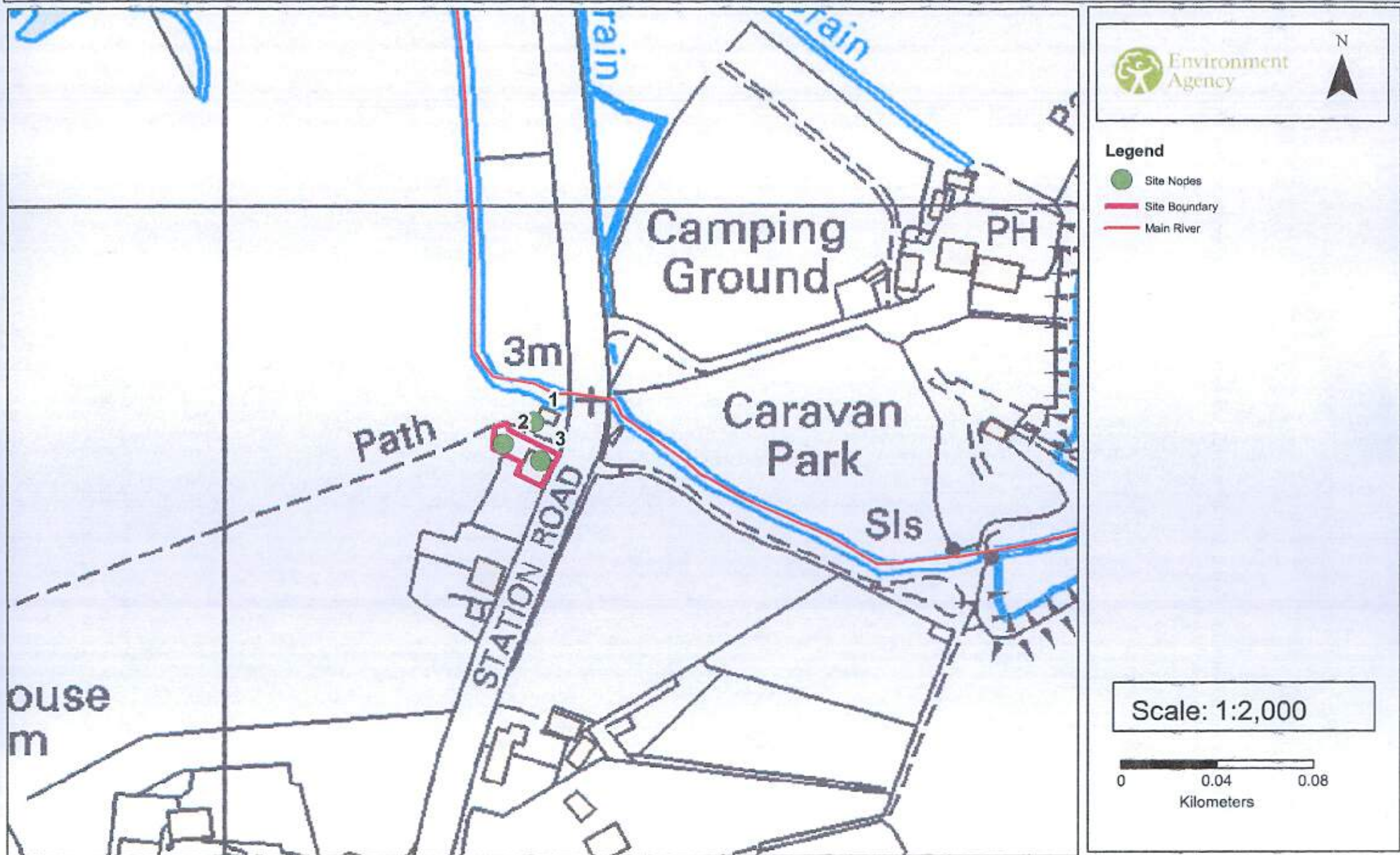
Node Reference	NGR		Modelled Flood Depth in Metres				
	Eastings	Northings	Defended Annual Exceedance Probability				
			5%	0.5%	0.5% (2070)	0.5% (2115)	0.1%
1	500131	103906	-	-	-	-	-
2	500118	103897	-	-	-	-	-
3	500134	103890	-	-	-	-	-

All levels taken from: River Arun to East Head 2016 (2D) model completed by JBA Consulting.

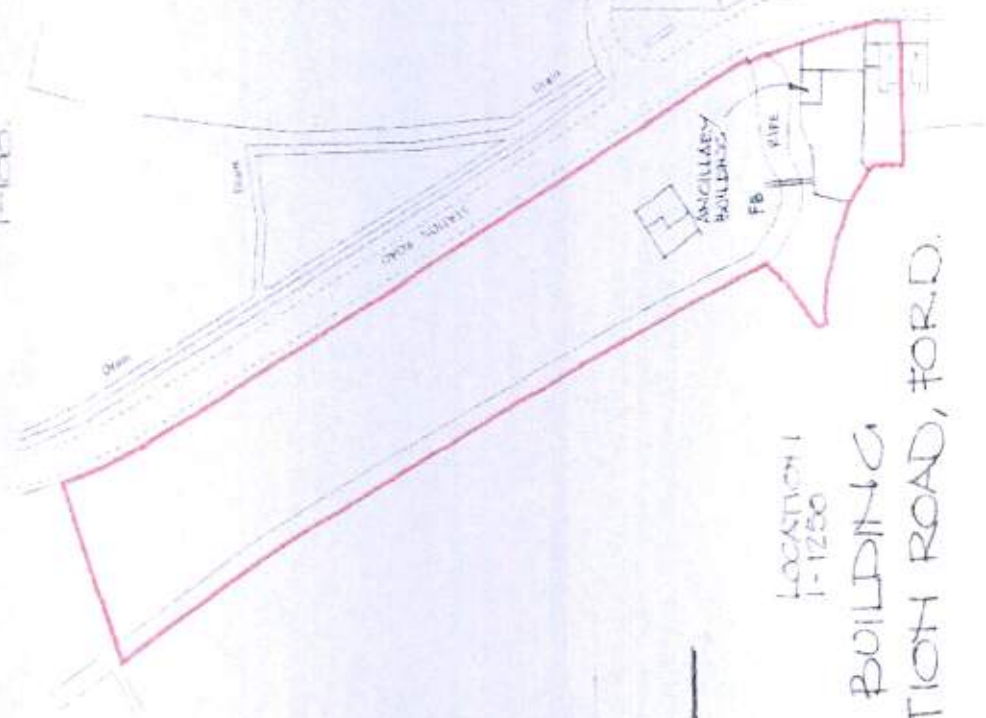
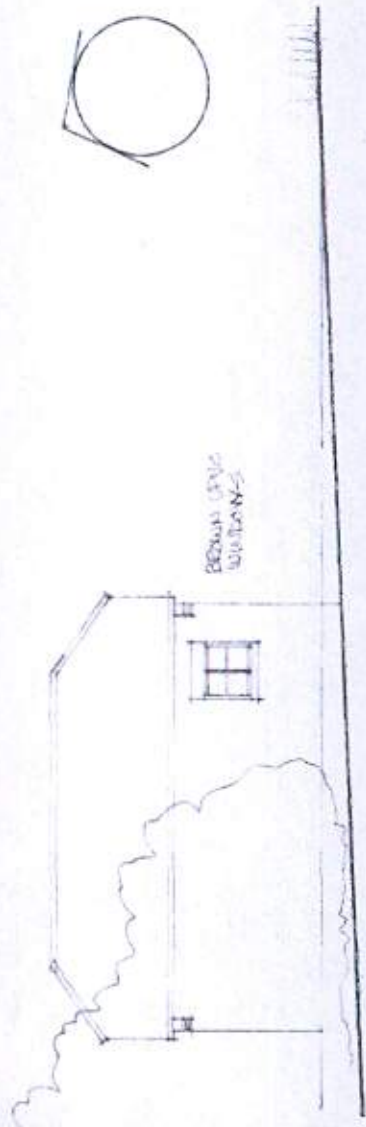
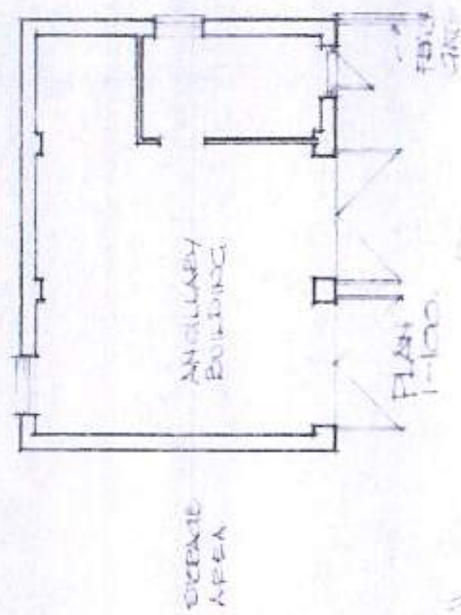
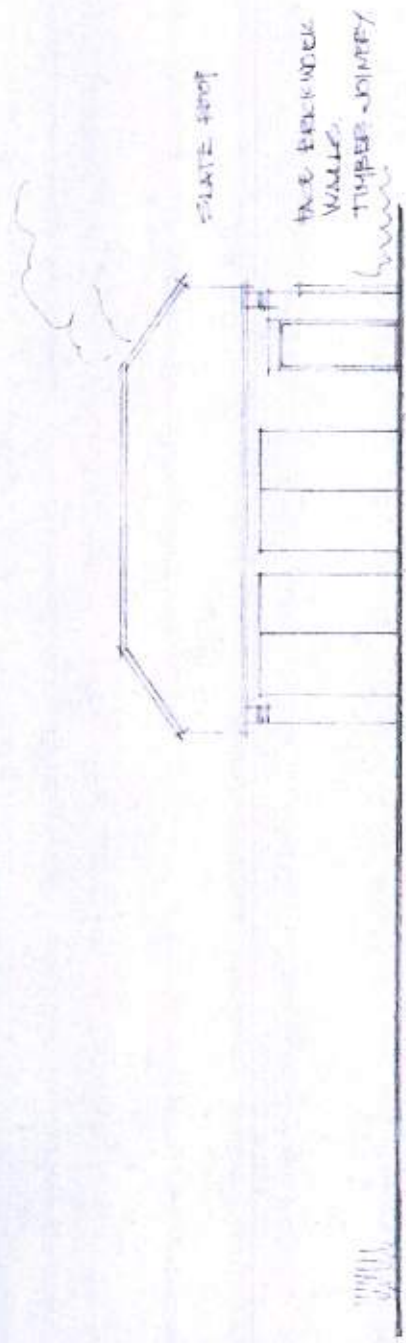
There is no additional information or health warnings for these levels/depths or the model from which they have been produced.

Produced on 26/01/2017

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Customer services line: 03708 506 506. Email: enquiries@environment-agency.gov.uk
www.gov.uk/government/organisations/environment-agency



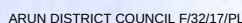




SURVEY OF ANCILLARY BUILDING
RIFE COTTAGE, 1 STATION ROAD, FORD.

LOCATION 1-1250

SEPT '16
DEC '16





**RIFE COTTAGE
1 STATION ROAD
FORD
WEST SUSSEX
BN18 0BJ**

FLOOD MANAGEMENT PLAN

NOVEMBER 2017

REVISION A

Consulting Civil Engineers

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1. INTRODUCTION

This Flood Management Plan (FMP) has been prepared to summarise the information related to potential flooding in the Ford area and to the tourist unit proposed to be constructed and Rife Cottage, 1 Station Road, Ford, West Sussex.

This document outlines the potential flood risk that may impact the site and provides guidance to ensure residual risks are communicated to the occupiers of the tourist unit and 1 Station Road.

It is advised that this FMP is provided to all occupants of 1 Station Road and the managers of the tourist unit to ensure that they are aware of the risk of flooding and that the appropriate response to the flood risk can be actioned, if required.

2. BACKGROUND

2.1 THE SITE

The site is located in Ford, 3.5 km south west of Arundel, off of Station Road, see figures 2.1.1 to 2.1.4.

The area of the site surrounding the existing semi-detached dwelling and ancillary building is relatively flat, with levels ranging across the site from 2.61mAOD to 3.71mAOD. The area surrounding the site is flat with an approximate ground level of 5mAOD

It is proposed to convert an existing ancillary building in to a tourist unit with a sleeping and living area and a raised timber deck area. This FMP has been written to accompany the planning process associated with the proposed development.

Consulting Civil Engineers

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FIGURE 2.1 SITE LOCATION

2.2 SUMMARY OF FLOOD RISK ASSESSMENT

A site specific Flood Risk Assessment was completed in November 2017 and submitted as part of the planning application process. The key information highlighted in the FRA is summarised below:

2.2.1 *Summary & Conclusions*

The proposed new tourist unit and 1 Station Road are shown to be within the defended 0.5% AEP Flood Zone. However should the defences fail or the 1:200 year storm be exceeded, the site could fall within the undefended flood zone.

Following comments from the Environment Agency, the tourist unit will only be used between the 1st April to the 30th September.

The finished floor level of the dwelling will be set 600mm above ground level.





The tourist unit will be renovated using resilient construction methods to prevent flood water entering the dwelling.

It is recommended that flood protection measures, such as demountable flood water gates and anti-flood air vent covers are applied to 1 Station Road.

The owner/occupiers of the site will be connected to the Environment Agency's floodline and a Flood Water Management plan has been prepared advising on the risk and procedures to undertake during a flood event.

2.2.2 Fluvial and Tidal Flood Risk

The tourist unit and 1 Station Road are shown to be outside of the defended tidal flood zone (Figure 2.2.2.1), however if these defences were to be breached or the 0.5% AEP was exceeded it would put the site at risk of flooding as indicated in figure 2.2.2.2.

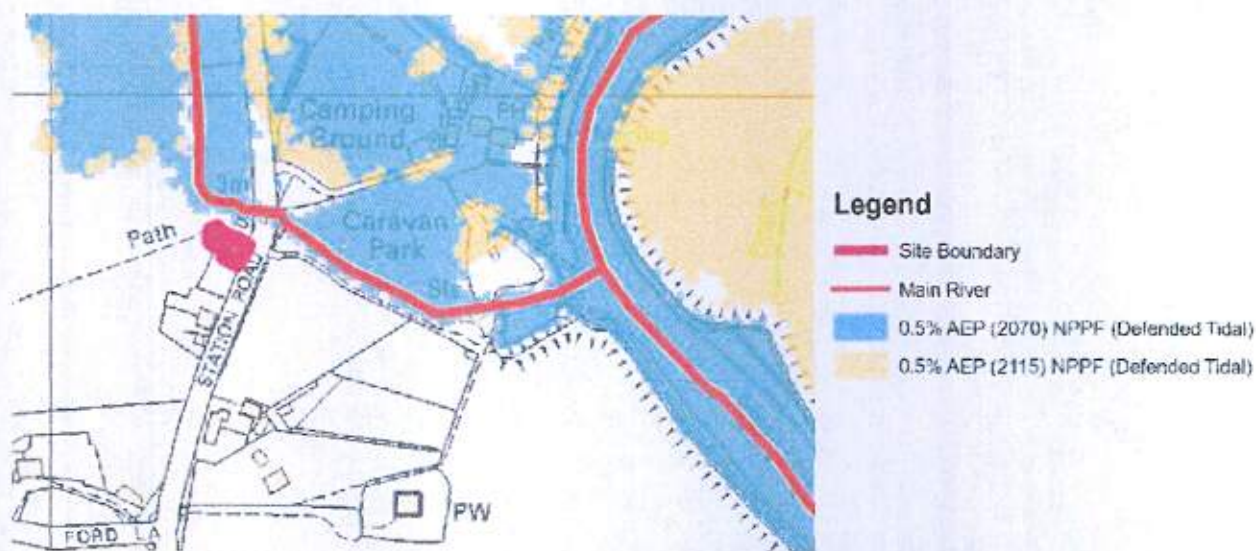


FIGURE 2.2.2.1 MODELLED FLOOD OUTLINE 0.5% AEP DEFENDED TIDAL





FIGURE 2.2.2.2 MODELLED FLOOD OUTLINE 0.5% AEP UNDEFENDED TIDAL

2.3 SUMMARY OF FLOOD LEVELS

The model confirms that the current defended 0.5% tidal flood level up to 2115 does not encroach on the dwellings on the southern part of the site, south of the watercourse that joins the River Arun.

The undefended 0.5% (2115) tidal flood level has been modelled as 4.04mAOD, 1.43m above ground level.

3. ROLES AND RESPONSIBILITIES FOR THE MANAGEMENT OF FLOOD RISK

3.1 FLOOD MANAGEMENT PLAN PRINCIPAL PERSON

The occupier of 1 Station Road should be appointed the development key member. In the event of a flood warning or flooding within Ford, the development key member is to be alerted immediately as their role is the Principal Person of the Flood Event Procedure. The other members of the site are to assist the FMP Principal Person in applying the Flood Event Procedure, particularly in communicating with both the emergency services and other residents affected by the flood, as required.

3.2 DUTIES OF FLOOD MANAGEMENT PLAN PRINCIPAL PERSON

The Flood Management Plan Principal Person shall have the following duties:





- Ensure that regular communication is made with the key services (refer to section 3.3) to ensure that when any warning signals are received, they are disseminated to all persons within the site.
- In the event that they receive a flood warning or an observed flood locally, the person initiates the flood event procedures (refer to section 4).

3.3 INTERACTION WITH EMERGENCY SERVICES AND OTHER STAKEHOLDERS AND THEIR RESPONSIBILITIES

In the event of a flood warning, severe flood warning or flood event there would be a mobilisation of the emergency services, Southern Water and the Environment Agency as well as the Resilience & Emergency Team at West Sussex County Council. In case of emergency the vital emergency contacts are listed in Table 1.

It is recommended that this list is printed by the FMP Principal Person and disseminated to all dwellings within the development to ensure each household has key emergency contacts, if required.





Agency	Contact Details	Responsibilities
Environment Agency (Flood Warnings)	Tel: 0345 9881188	• Issuing flood warnings; • Recording details of floods; • Monitoring the situation and advising the emergency services; • Advising and assisting on pollution and waste disposal.
Hampshire Police Service	Tel: 999 or 112	• Co-ordinating the different emergency services; and • Taking a lead in the implementation of the flood event procedures.
Fire Brigade	Tel: 999 or 112	• Rescue; • Responding quickly to incidents; and • Assisting the populace wherever a need is identified using Fire Service equipment.
Ambulance Service	Tel: 999 or 112	• Communication with other emergency services to provide mass healthcare (if needed); and • To ensure they have a plan for the illnesses and health implications of a flood.
Southern Water	Tel: 0330 303 0368	• Clearing blocked sewers after the event; • Protection of property from flooding in the mains/sewers; and • Clearing up of and assistance in dealing with flood water (storm and foul).
Resilience & Emergency team (WSCC)	Tel: 033 022 22400 (contingency planning unit)	• Sharing information between different agencies and services; • Planning for civil and business continuity in the event of a flood; and • Getting the roads cleared after a flood.
Utility Providers		• Ensure the key utilities (gas, electricity etc.) are still running in the aftermath of a flood; • Ensure in the event of a flood any key infrastructure is still properly operational; and • Ensure that any damaged wiring etc. is repaired quickly.

Table 1 Key Flood Event Emergency Contacts and Responsibilities





4. FLOOD EVENT PROCEDURE

4.1 FLOOD WARNING NOTIFICATION

As part of the FMP Principal Person role, they should ensure that all dwelling owners and occupiers are signed up to the Environment Agency Flood Warning Scheme. The site owners and occupiers should sign up to the Flood Warning Scheme (<https://fwd.environment-agency.gov.uk/app/olr/register>) so that they are aware of the possible onset of flooding and can prepare for parts of Ford flooding. This is a free service which allows flood warnings to be received by phone, text or email.

Further update information can also be found during a flood event at the following locations:

Call the Environment Agency Floodline on 0345 9881188

Web site: <https://www.gov.uk/check-if-youre-at-risk-of-flooding>

When the situation is serious, flood warnings will also be broadcast on local television and radio news.

There are 4 Flood Warnings that will be issued by The Environment Agency, refer to Table 2.

	Status
	Severe Flood Warning: Severe flooding. Danger to life.
	Flood Warning: Flooding is expected. Immediate action required.
	Flood Alert: Flooding is possible. Be prepared
	Warning no longer in force: Flood warning and flood alerts that have been removed in the last 24 hours

Table 2 Environment Agency Flood Warnings





4.2 FLOOD WARNING ACTION

Where appropriate, the FMP Principal Person should coordinate the actions to ensure that each dwelling occupant is prepared for the flood warning.

The actions that should be undertaken by persons living/staying at the site for each level of flood warning are:

Flood Alert

Ensure that you are prepared for parts of Ford and the site flooding and the areas surrounding the site being unpassable. Stock up on food, bottled water and medication. Ensure that batteries for torches are charged and torches and candles are to hand.

Prepare a flood kit to be used in the event that the property needs to be evacuated which should contain a torch, warm and waterproof clothing, water, food, medication, toys for children and pets, rubber gloves and wellingtons.

Flood Warning

The site is in a defended tidal flood zone, however if the defences are breached or fail the site could become flooded.

Cancel bookings to the tourist unit, leave unoccupied and apply flood defences.

If there are ill or vulnerable persons living/staying at 1 Station Road they should be moved to another safe location outside of the flood zone (Flood Zone areas are shaded light or dark blue within Figure 4.3). No essential journeys should be attempted due to the risk of the roads and surrounding areas becoming flooded.

Severe Flood Warning

The site is in a defended tidal flood zone, however if the defences are breached or fail the site could become flooded to a level above the ground floor. It is advised to evacuate all persons at the property to an





area outside of the flood zone Immediately (Flood Zone areas are shaded light or dark blue within Figure 4.3).

If you are advised that the defences have been or looked to be breached, will fail, have failed or the 0.5% AEP will be exceeded, evacuate the site immediately to an area identified outside of the Flood Zone (Flood Zone areas are shaded light or dark blue within Figure 4.3.

The flood resilient construction is designed to protect the building, not to protect occupants, if the flood resilient construction fails water could enter the property and flood the ground floor, it is strongly advised not to stay at the property during a severe flood warning.

If the occupiers of the site opt to remain and the undefended scenario was to occur flood water levels could restrict exit at ground floor level and no attempt should be made to exit from the ground floor, the emergency services should be called to attend.

Warning no longer in force

Check that roads are passible before returning to the property. If the property has been flooded internally, do not enter until the flood waters have subsided and it is safe to do so.

4.3 ACCESS & EGRESS

The development is at risk of flooding, during an evacuation vehicles should ingress and egress from and to the site via the south towards Yapton which is an area outside of the Flood Zone, Flood Zone areas are shaded light or dark blue within Figure 4.3.





FIGURE 4.3 WIDER FLOOD ZONE

Roads within the Flood Zone should only be used by vehicles until such time as there is a risk of:

- The presence of water stopping the engine functioning;
- The vehicle floating; or
- The vehicle becoming difficult to control.

Cars will stop and/or float in water as shallow as 0.5m, whilst some emergency vehicles may survive in water of 1m. A fire engine remains controllable in depths of 0.5m up to a flow velocity of 5 m/sec, due to high-level air intakes/exhausts.

The risk to persons whilst staying in the property is High, by leaving the property during a Severe Flood Warning the risk remains high and persons living/staying at the property should contact emergency services if there are ill or vulnerable persons that need evacuating or if anyone requires medical attention. If persons become trapped in the building or Kingsmead becomes flooded, contact the emergency services.





Extreme care must be taken whilst accessing and egressing the site during a flood event. If In doubt, contact the emergency services direct or via the FMP principal person to arrange for emergency assistance during a flood event.

5. REVIEW OF THE PLAN

5.1 ANNUAL REVIEW

This Flood Management Plan is a live document. This means it must be reviewed yearly by the FMP Principal Person.

This review should involve the following steps:

- Check the emergency contacts (refer to section 3.3) are up to date and that any other details are updated.
- Confer with the Environment Agency that the flood risk on the proposed development has not changed.
- Ensure registration to receive Floodline direct flood warnings has been renewed by any new occupants within the development (this should be completed when occupiers of the development change throughout the year).
- Re-familiarise any necessary residents with this Flood Management Plan.
- Review that the evacuation procedures are still correct.
- Review this plan once a flooding incident has taken place.

The outcomes of any review must be recorded in the plan and an updated copy distributed to all residents and the Emergency planning officer of WSCC, as required.

This document should also be reviewed upon construction of the dwelling prior to occupation.

