Planning Application Reference:	**AB/187/06/**
Document Type:	**Deed of Variation**
Date of Agreement:	**14th September 2011**

NB: Above text in bold to be included in free text field.

Check thoroughly for **telephone numbers/email addresses & signatures** and block.
Check **maps** for signatures and block.

Please return original to s106 Monitoring Officer

ARUN DISTRICT COUNCIL AB/187/06/

DATED 14 September 2011

(1) MCCARTHY & STONE RENTAL INTERESTS NO.1 LIMITED

AND

(2) ARUN DISTRICT COUNCIL

DEED OF VARIATION TO S106 AGREEMENT

relating to

DEVELOPMENT AT CAEN STONE COURT, QUEEN STREET, ARUNDEL

LESTER ALDRIDGE LLP
Solicitors
Alleyn House
Carlton Crescent
Southampton
SO15 2EU

[redacted]

S3.RBA.MCC.33.846

ARUN DISTRICT COUNCIL AB/187/06/

THIS DEED is made on 14 September 2011

BETWEEN:-

(1) **"the Owner"** : **MCCARTHY & STONE RENTAL INTERESTS NO 1 LIMITED** (Company Registered Number 06897272) whose registered office is at Homelife House 26/32 Oxford Road Bournemouth Dorset BH8 8EZ

(2) **"the Council"** : **ARUN DISTRICT COUNCIL** of Arun Civic Centre Maltravers Road Littlehampton West Sussex BN17 5LF

BACKGROUND

(A) This Deed is supplemental and collateral to the S106 Agreement entered into on 26 July 2007.

(B) The Owner and the Council have agreed that the Original Agreement shall be varied in accordance with section 106A (1) (a) of the Town and Country Planning Act 1990.

AGREED TERMS

1. INTERPRETATION

1.1 The definitions in this clause apply in this Deed.

Original Agreement	:	a s106 Agreement dated 26 July 2007 made between McCarthy & Stone (Developments) Limited and Arun District Council
New Flood Risk Management Plan	:	the flood risk management plan annexed to this Deed.
Original Flood Risk Management Plan	:	the flood risk management plan set out in Schedule 2 of the Original Agreement.

ARUN DISTRICT COUNCIL AB/187/06/

1.2 A reference to the Original Agreement includes any deed, agreement, licence, consent, approval or other instrument supplemental to it.

1.3 A reference to laws in general is to all local, national and directly applicable supra-national laws in force for the time being, taking account of any amendment, extension, application or re-enactment and includes any subordinate laws for the time being in force made under them and all orders, notices, codes of practice and guidance made under them.

1.4 A person includes a corporate or unincorporated body.

1.5 Except where a contrary intention appears, a reference to a clause or Schedule, is a reference to a clause of, or Schedule to, this Deed and a reference in a Schedule to a paragraph is to a paragraph of that Schedule.

1.6 Clause, Schedule and paragraph headings do not affect the interpretation of this Deed.

1.7 Except to the extent that they are inconsistent with the definitions and interpretations in clause 1 of this Deed, the definitions and interpretations in clause 1 of the Original Undertaking shall apply to this Deed.

2. VARIATION OF THE ORIGINAL AGREEMENT

The Owner and the Council agree that the Original Agreement is varied as is set out in the provisions below:

2.1 The Original Flood Management Plan shall be replaced by the New Flood Risk management Plan.

3. ORIGINAL AGREEMENT REMAINS IN FORCE

The Owner and the Council confirm that the covenants and conditions contained in the Original Agreement except as varied by this Deed are to continue in full force and effect.

4. REGISTRATION

This Deed shall be registered as a local land charge.

5. EXECUTION

This Deed has been executed as a deed and is delivered and takes effect on the date stated at the beginning of it.

ARUN DISTRICT COUNCIL AB/187/06/

6. COUNCIL'S LEGAL COSTS

The Owner agrees to pay on completion of this agreement to the Council the sum of £592.00 (five hundred and ninety two pounds) towards the reasonable legal and administrative costs incurred in preparing and entering into this Agreement.

7. APPLICABLE LAW

This Deed shall be governed by and construed in accordance with the law of England.

8. CONTRACTUAL RIGHTS OF THIRD PARTIES

No term of this Agreement shall be enforceable under the Contracts (Rights of Third Parties) Act 1999 by a third party but this does not affect any right or remedy of a third party which exists or is available apart from under that Act.

IN WITNESS whereof the Developer the Owner and the Council have executed this Deed the day and year first before written

SIGNED as a deed by MCCARTHY & STONE RENTAL INTERESTS NO. 1 LIMITED acting by one director)

[redacted]

Director

Name: [redacted]

in the presence of

Witness Signature..... [redacted]

Name..... [redacted]

Address. [redacted]

.....

.....

Occupation.... [redacted]

THE COMMON SEAL OF ARUN DISTRICT COUNCIL was hereunto affixed in the pres[redacted]

Attesting

[redacted]

Seal Book No: 194/2011

ARUN DISTRICT COUNCIL
9 - JUN 2011
RECEIVED

McCarthy & Stone Retirement Lifestyles Ltd

Caen Stone Court, Queen Street, Arundel, West Sussex BN18 9JG

Flood Risk Management Plan

Revision 4

Project Ref: 18199/001

May 2011

Peter Brett Associates LLP
Caversham Bridge House
Waterman Place
Reading
Berkshire
RG1 8DN

[redacted]

pba peterbrett

ARUN DISTRICT COUNCIL AB/187/06/

We print on 100% recycled paper from sustainable suppliers accredited to ISO 14001.

ARUN DISTRICT COUNCIL AB/187/06/

Document Control Sheet

Project Name: **Caen Stone Court, Queen Street, Arundel, West Sussex**

Project Ref: **18199/001**

Report Title: **Flood Risk Management Plan**

Date: **May 2011**

	Name	Position	Signature	Date
Prepared by:	*Andy Robertson BSc CEng MICE MCIWEM C.WEM*	*Principal Engineer*	*A. Robertson*	*12/05/11*
Reviewed by:	*Andy Robertson BSc CEng MICE MCIWEM C.WEM*	*Principal Engineer*	*A. Robertson*	*12/05/11*
Approved by:	*Steve Capel-Davies BSc CEng FICE FCIWEM C.WEM*	*Partner*	*S. Capel-Davies*	*12/05/11*

For and on behalf of Peter Brett Associates LLP

Revision	Date	Description	Prepared	Reviewed	Approved
1	*27/06/07*	*Draft issue for consultation*	*I. Pate*	*R. Fisher*	*A. Robertson*
2	*12/08/09*	*In support of S106 Agreement*	*J. Heptonstall*	*A. Robertson*	*A. Robertson*
3	*01/11/10*	*Revised to incorporate amendments to building design and details of training of allocated flood wardens*	*K. Waters*	*S. Capel-Davies*	*S. Capel-Davies*
4	*12/05/11*	*Updated with building construction features and flood warden information*	*A. Robertson*	*A. Robertson*	*S. Capel-Davies*

Peter Brett Associates LLP disclaims any responsibility to the Client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence within the terms of the Contract with the Client and generally in accordance with the appropriate ACE Agreement and taking account of the manpower, resources, investigations and testing devoted to it by agreement with the Client. This report is confidential to the Client and Peter Brett Associates LLP accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

© Peter Brett Associates LLP 2011

ARUN DISTRICT COUNCIL AB/187/06/

ARUN DISTRICT COUNCIL AB/187/06/

Contents

1 **Introduction** 1
2 **Flood Data** 2
3 **The Role & Responsibilities of the Flood Warden** 3
3.1 Flood Warden Knowledge 3
3.2 Responsibilities of the Flood Wardens 3
4 **Flood Action Points** 5
4.1 Flood Warnings 5
4.2 Action Required 5
5 **The Role of Other Bodies** 7
6 **Building Design** 9
7 **Contacts** 10
8 **Updating** 11

Tables

Table 2-1: Modelled Flood Data at Site 2
Table 7-1: Main Points of Contact 10
Table 8-1: Plan Reviews 11

Appendices

Appendix 1: Figures & Environment Agency Information Sheets

ARUN DISTRICT COUNCIL AB/187/06/

1 Introduction

This Flood Risk Management Plan (FRMP) has been prepared for McCarthy & Stone Retirement Lifestyles Ltd in relation to Caen Stone Court, Queen Street, Arundel, West Sussex.

The FRMP sets out the flood data relevant to Caen Stone Court, identifies the roles and responsibility of the Flood Warden, provides details of proposed actions before, during and after a flood event, and sets out the roles and responsibilities of other bodies as well as providing contact details.

Peverel Management Services Ltd (PMSL), who manage Caen Stone Court, have compiled a specific folder containing this Flood Risk Management Plan (FRMP). The folder also contains a list of care and nursing homes, hotels and guest houses in the locality, together with telephone numbers of all the taxi companies in the area.

PMSL keep the FRMP in the House Manager's office, and there is a copy in the communal areas for perusal by all residents.

The current House Manager has received training from the Environment Agency as a Flood Warden. She, with support from two House Managers from the nearest PMSL developments, both also trained as Flood Wardens, provide the Flood Warden service to Caen Stone Court.

The advice of the emergency services should be followed at all times and on the ground decisions will supersede plans within the report. Where information is not available from the relevant authorities this report is intended to provide action points to protect property and provide advice for residents sheltering during a flood event in the area.

ARUN DISTRICT COUNCIL AB/187/06/

2 Flood Data

The site is located within an area identified as susceptible to flooding. However, the site benefits from the presence of flood defences along the coast and on the River Arun, which is tidally influenced at Arundel and flows past the site to discharge into the sea. All of the defences are operated and maintained by the Environment Agency.

Despite the presence of the defences, there are extreme events which could result in defences being breached or overtopped. The maximum flood levels predicted from such situations are summarised below. The full details are included in the site specific Flood Risk Assessment.

Condition	Maximum Predicted Flood Levels (m AOD)	Predicted Depth of Standing Water at Pedestrian Entrance
Flooding from River Arun 1 in 100 annual probability, worst combination of river flow and tide level to 2060 (modelled by the Environment Agency).	*3.3[1]*	*Flow contained in banks*
Flooding from River Arun 1 in 100 annual probability, worst combination of river flow and tide level in 2115 (modelled by Monson Engineering Ltd)	*3.97[2,3]*	*Pavement above flood level*
Tidal flooding from River Arun 1 in 200 annual probability to 2060 (modelled by the Environment Agency)	*3.4[1]*	*Flow contained in banks*
Tidal flooding from River Arun 200 year in 2115 (modelled by Monson Engineering Ltd)	*5.27[2,4]*	*Approx 1 m[2]*

Table 2-1: Modelled Flood Data at Site

[1] If the tidal embankments are maintained at the design level, there should be no flooding under this condition. Survey data suggests that at present, the defences are between 3.7 and 4.2m AOD.

[2] Assumes tidal defences are not raised in the interim.

[3] Results in a flood level of 3.0m AOD at the site

[4] Results in a flood level of 4.0m AOD at the site

The mechanism of flooding will vary depending on whether the flooding occurs from a tidal or fluvial event on the River Arun.

Tidal flooding could occur as a result of overtopping or breaching of the existing defences. If the defences were overtopped or significantly breached, rapid inundation of the surrounding area could occur. It should be noted that flooding of surrounding areas will be of relatively short duration (a few hours) around the peak tide level. When tide levels drop from their peak, the flood water will drain back into the River Arun.

For a fluvial flood event, rising water levels in the river channel adjacent to the site would become evident with overspilling from the river channel at various locations, potentially both upstream and downstream of the site. Given the relatively flat gradients and the flow routes involved, it is likely that flow velocities will be relatively slow on the roads associated during a fluvial flood.

The ground floor level of the building is set at 4.1m AOD, which is 100mm above the 1 in 200 annual probability modelled flood level at the site in the year 2115 (currently in excess of the assumed 100 year lifespan of the development) and 700mm above the present day condition. External levels of the car parking and landscaping are also generally raised above the predicted fluvial flood levels.

Predicted depths for each of the flood scenarios are set out in Table 2-1 above.

ARUN DISTRICT COUNCIL AB/187/06/

3 The Role & Responsibilities of the Flood Warden

The management of Caen Stone Court is undertaken by Peverel Management Services Ltd (PMSL) who specialise in the estate management of sheltered homes for the elderly.

The current House Manager, Nicole Leeds, has been appointed the Flood Warden. Nicole is supported in her role as Flood Warden, by the nearest two other PMSL House Managers who are also Flood Wardens, one at Martlets Court, Queen St, Arundel, Hazel Stone, and the second at Buckingham Court, Middleton on Sea, Valarie Allen.

All three of the House Managers have on the 14th May 2010, received their Flood Warden training from the Environment Agency.

All three Flood Wardens are registered with the Environment Agency's Flood Warning Service at their individual developments where they are House Managers, at their own homes and on their mobiles.

PMSL's Area Manager for Caen Stone Court, currently Vicki Brown, is to be contacted by the Caen Stone Court House Manager & Flood Warden, should they receive any grade of flood warning from the Environment Agency's Flood Warning Service, this will be recorded in the FRMP folder. The folder will be checked and signed off by PMSL's Area Manager at their regular visits to Caen Stone Court.

3.1 Flood Warden Knowledge

The Flood Warden will use the information in this document alongside the guidance they can seek from the Environment Agency to be aware of the up to date following information:

- the flood warning codes and what they mean;
- how to be informed about a flood warning ;
- what to do when a flood warning is received;
- flood dangers and safety tips;
- location of safe communal area, (in event of extreme flooding);
- how and when to use flood protection products.

3.2 Responsibilities of the Flood Warden

Key responsibilities of the Flood Warden are as follows:

- Inform residents of the existence of the FRMP and ensure that they are updated on an annual basis and provided with an information pack.
- Ensure that they are registered with Flood Warnings Direct (see Section 4.1).
- Keep a check on flood warnings and be ready to notify the residents.
- Ensure that flood protection equipment, if required, is installed and maintained as required.
- Co-ordinate with the emergency services.

ARUN DISTRICT COUNCIL AB/187/06/

- Identify equipment or possessions that require special protective measures, and co-ordinate the action required to prevent their damage in the event of a flood.
- Monitor flood levels and keep residents informed.
- Review of the FRMP annually.

ARUN DISTRICT COUNCIL AB/187/06/

4 Flood Action Points

4.1 Flood Warnings

The Environment Agency (EA) provides flood warnings as follows:



A Flood Alerts means that flooding is possible and that you need to be prepared



Means that flooding is expected and that you should take immediate action. You should take action when a flood warning is issued and not wait for a severe flood warning



Means that there is severe flooding and danger to life. These are issued when flooding is posing **significant** risk to life or disruption to communities

Warnings no longer in force

No further flooding is currently expected in your area. River and sea conditions begin to return to normal. Be careful. Flood water may still be around for several days

The general warnings are found on the EA's 24-hour 7-day Flood Line service, on 0845 988 1188. For the River Arun through Arundel the specific code number is 0123223, which should be entered at the prompt.

The Flood Warden has registered to receive flood alerts through the Environment Agency Flood Warnings Direct service. This is a free service which provides vital information in the event of a flood.

The Flood Warden receives the flood warnings at Caen Stone Court, at their home and on their mobile telephone.

In addition Arun District Council has a 24 hour, seven day a week emergency line on 07733 125 689.

4.2 Action Required

Whilst the ground floor level has a freeboard above the EA advised hydraulically modelled 1 in 200 tidal flood event with climate change to the year 2115, other parts of Arundel, including the surrounding roads and properties, may nonetheless be flooded for short durations at and near the peak of the tide.

Arun District Council, the Environment Agency and West Sussex Fire and Rescue were consulted during the preparation of this report. West Sussex Fire and Rescue indicated that a 'sheltering strategy' would be preferred for the development.

It is therefore recommended that no evacuation of the building takes place as long as the building provides a safe environment.

ARUN DISTRICT COUNCIL AB/187/06/

By optimising the security of service supplies, the building will remain functional throughout the flood duration. Given that the car parking area is also raised there should be no requirement to move cars; they should be left in place.

The River Arun is not subject to significant flash flooding but could respond quickly to intense storms. Local knowledge and a general awareness of the river levels will suggest when there is a potential flood risk, and therefore indicate the need to listen to the radio or contact the Environment Agency. Country wide *'flood watch'* warnings will be given in advance of flooding conditions.

If a flood event greater than the design event happens then evacuation may be necessary. The relevant emergency service personnel on the ground will make the decision as to whether this is necessary and their advice should be followed in the event that evacuation is required.

Actions required are outlined below.

- Advise residents of EA specific warnings for the Arundel area so that they are aware of possible flooding in the town which may affect local movements. The House Manager/Flood Warden will be available and will remain on site until the flood risk is over.
- Provide advice to residents that in circumstances where they are away from the building (but in Arundel) and floodwaters start to rise, they should not seek to return but should immediately move to higher ground, following instruction from emergency services (if present) and seek temporary refuge for the short duration until floods subside. Report back to the House Manager/Flood Warden by phone if possible.
- The House Manager/Flood Warden to maintain a list of temporary accommodation sites (temporary refuges as above) including care and nursing homes, together with lists of local taxi companies.
- For residents in the building, consider collecting them together, perhaps in a first floor communal room. All staff will be advised via the House Manager/Flood Warden and mapped signs throughout the building on the location of the communal area which will be a point of safe refuge. The Flood Warden will coordinate the relocation of residents through the allocation of staff to specific areas of the building. Also consider moving valuable goods to higher areas of the building where practicable.

ARUN DISTRICT COUNCIL AB/187/06/

5 The Role of Other Bodies

The response to a major flood event will involve a number of organisations working together at a local level, including the emergency services, the local authority, utilities companies and the Environment Agency. Other bodies which may play a major role in the response are communications media, voluntary organisations and the public.

The roles of the main bodies in relation to a major flood event are summarised as follows:-

Police

- Co-ordination of the emergency services at a major flood event, as well as helping to save lives and protect property.
- Establish cordons where practicable to facilitate the work of the other emergency services in saving lives, protecting the public and caring for the vulnerable.

Fire Service

- 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.
- Assist other relevant agencies, particularly the local authority, to minimise the effects of major flooding on the community.

Local Authority

- Emergency care, if necessary, including feeding, accommodation and welfare.
- Emergency transport for people, equipment and material such as sandbags, and if necessary evacuation.
- Information services for liaison with the media on the local authority response and for information to the public and to relatives of evacuees.
- Flood alleviation – for flood prevention, the clearing of blocked culverts; for dealing with flooded roads, diversions; and other assistance to the public such as drying-out facilities.
- Emergency environmental health advice for action relating to environmental problems caused by flooding.
- Co-ordination of the voluntary response.

Environment Agency

- Responsibility for maintenance and operation of flood defences in the Arundel area. Checking defences and undertake essential repairs and maintenance as required.
- Monitor water levels, assessing the risk and advising the emergency services and local authority.
- Monitor and clear blockages of culverts and breaches of defences.

ARUN DISTRICT COUNCIL AB/187/06/

- Support police and local authority by providing materials, equipment and manpower as far as resources and other duties permit.

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 health risks are identified.

ARUN DISTRICT COUNCIL AB/187/06/

6 Building Design

The ground finished floor level (4.1m AOD) of the building is set above the 1 in 200 year tidal flood level at the site, projected forward to the year 2115 (1 in 200 2215), of 4.0m AOD.

The building has been constructed so that potential flood damage would be minimised and the security of the electrical and communication services optimised, in the event of an extremely rare flood (in excess of 1 in 200 2115 year event). Such measures include:

- Concrete floor with waterproof membrane - a flexible damp proof membrane covers the ground floor slab and sealed service ducts. Also a polythene membrane is laid between the flood insulation and screed.
- Electrical and other service installation have been provided in the ground floor plant room, with the exception of the lift motor equipment. All services have been mounted in the ground floor plant room 1m off the floor, this provides an adequate freeboard of 1.1m above the 1m 200 year flood level with an allowance for climate change to 2115.
- Emergency lighting, power, and BT services are run within the ceiling void in the communal corridors and within the ceiling voids to apartments.
- Electric sockets as a standard are a minimum of 500mm above the finished floor level.
- Block pavings have been laid to the car park area and walkways, and they are set above the 1 in 100 year flood level with an allowance for climate change to 2115.
- Mapped signs to locate the first floor communal area for safe refuge.

ARUN DISTRICT COUNCIL AB/187/06/

7 Contacts

The following are the main points of contact:

Body	Name	Number	Contact Hours
Environment Agency	Flood Line	[redacted]	24 hours
	General Incident	[redacted]	24 hours
Local Authority	Arun District Council	[redacted]	working hours, Monday to Friday
		[redacted]	24 hrs emergency
Fire	West Sussex Fire and Rescue	[redacted]	working hours
Medical	Sussex Ambulance Service NHS Trust EMERGENCY ONLY	[redacted]	24 Hour
	NHS Direct NON-EMERGENCY	[redacted]	24 Hours
Police	Sussex Police NON-EMERGENCY	[redacted]	24 Hours
	Sussex Police EMERGENCY ONLY	[redacted]	24 Hours
Updates on Local Radio and TV	Updates on local radio: Capital Gold Sussex, Southern FM, Spirit Fm, Virgin (AM) Updates on local TV: BBC South, ITV Meridian - South	-	broadcast hours
County Council	West Sussex County Council	[redacted]	working hours

Table 7-1: Main Points of Contact

ARUN DISTRICT COUNCIL AB/187/06/

8 Updating

This plan should be reviewed at least annually, and the updated plan circulated to all contacts.

The Chief Planning Officer of Arun District Council, and through him also the Environment Agency, shall be kept informed of the outcome of the annual review and any changes that are made.

Date of Review	Changes to Plan	Issued To

Table 8-1: Plan Reviews

ARUN DISTRICT COUNCIL AB/187/06/

APPENDIX 1

pba

ARUN DISTRICT COUNCIL AB/187/06/

ARUN DISTRICT COUNCIL AB/187/06/

Appendix 1: Figure & Environment Agency Information Sheets

Figure 1: Site Location Plan

EA Flood Warning Information Extract from [redacted]

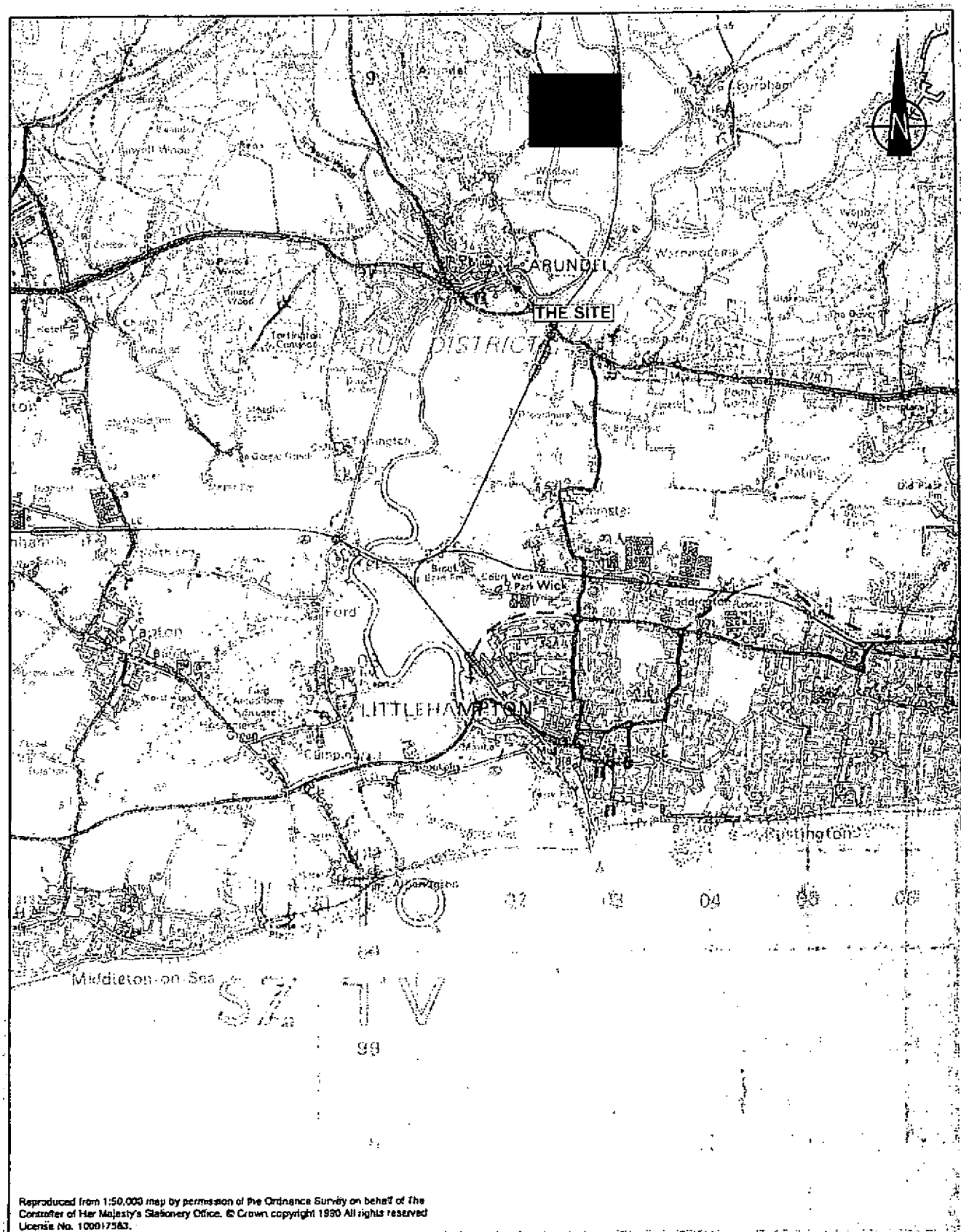
Environment Agency document 'What to do before, during and after a flood'

Flood Resilience Diagram

ARUN DISTRICT COUNCIL AB/187/06/

pba peterbrett

ARUN DISTRICT COUNCIL AB/187/06/



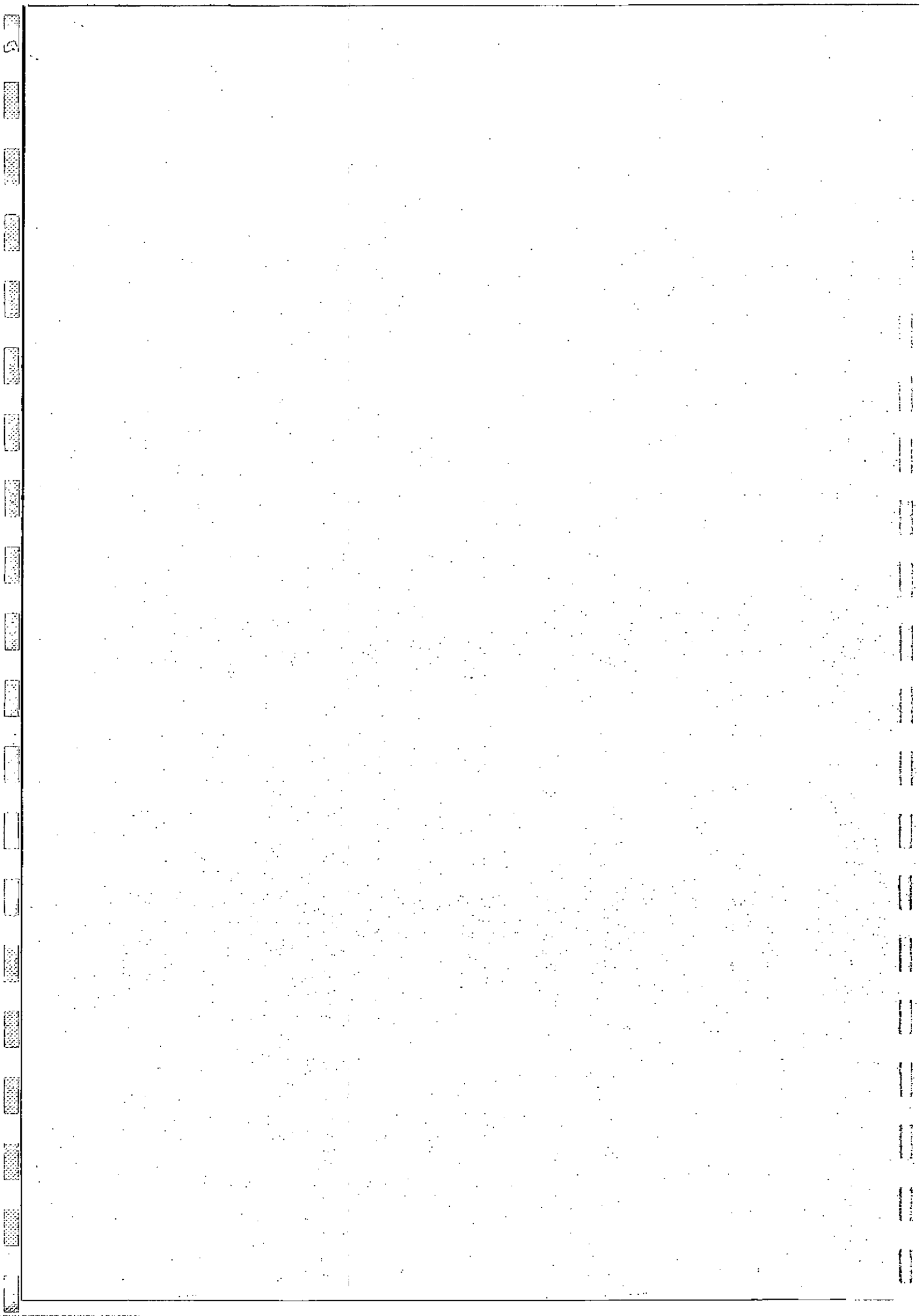
Reproduced from 1:50,000 map by permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright 1990 All rights reserved License No. 100017583.

Client: MCCARTHY AND STONE	QUEEN STREET, ARUNDEL	Date	Aug 06
		A4 Scale	1:50,000
		Drawn	MC
	SITE LOCATION PLAN	Checked	JS
		Figure Number	1

PETER BRETT ASSOCIATES
CAVERSHAM BRIDGE HOUSE WATERMAN PLACE READING BERKSHIRE RG1 8DN
Tel: 0118 950 0761 Fax: 0118 959 7498 E-mail: reading@pba.co.uk Website: www.pba.co.uk © Peter Brett Associates

J:\18000 series\18199 - Queen's Street, Arundel\Core

ARUN DISTRICT COUNCIL AB/187/06/





Flood Warnings FWA Detail

16:40 on 10 May 2011 Pages are updated every 15 minutes

Arundel on the River Arun

Current status: No warning

Flood status last changed at 19:35 on 05 Dec 2008

Location: The River Arun at Arundel, including Warningcamp, and Burpham

View map of flood warning area

Region: Southern

Floodline: Call Floodline on 0845 988 1188 and enter Quickdial number 01232223 to get more information

Related Flood Warning Areas: This Flood Warning area is also situated in a larger geographical area, where we provide a general Flood Alert early notification to possible flooding. Follow the link(s) below to check if a Flood Alert is in force for the following area(s).

No warning
Lower Arun

Updates on local radio: Absolute Radio 1215AM Breeze 1521

Mercury FM (Surrey & Sussex)

Updates on local TV: BBC - South

ITV - London

ITV London

South

ITV - Meridian - South

ITV - South

Previous statuses:

Act now

Sign up to receive flood warnings with our free Floodline Warnings Direct service

or phone Floodline on 0845 988 1188 to speak to someone about flooding

Page tools

Email

Print

Bookmark

Delicious
Digg
reddit
Facebook
StumbleUpon

Feedback

External links

Met Office - UK weather forecast

We are not responsible for the content of other web sites.

creating a better place

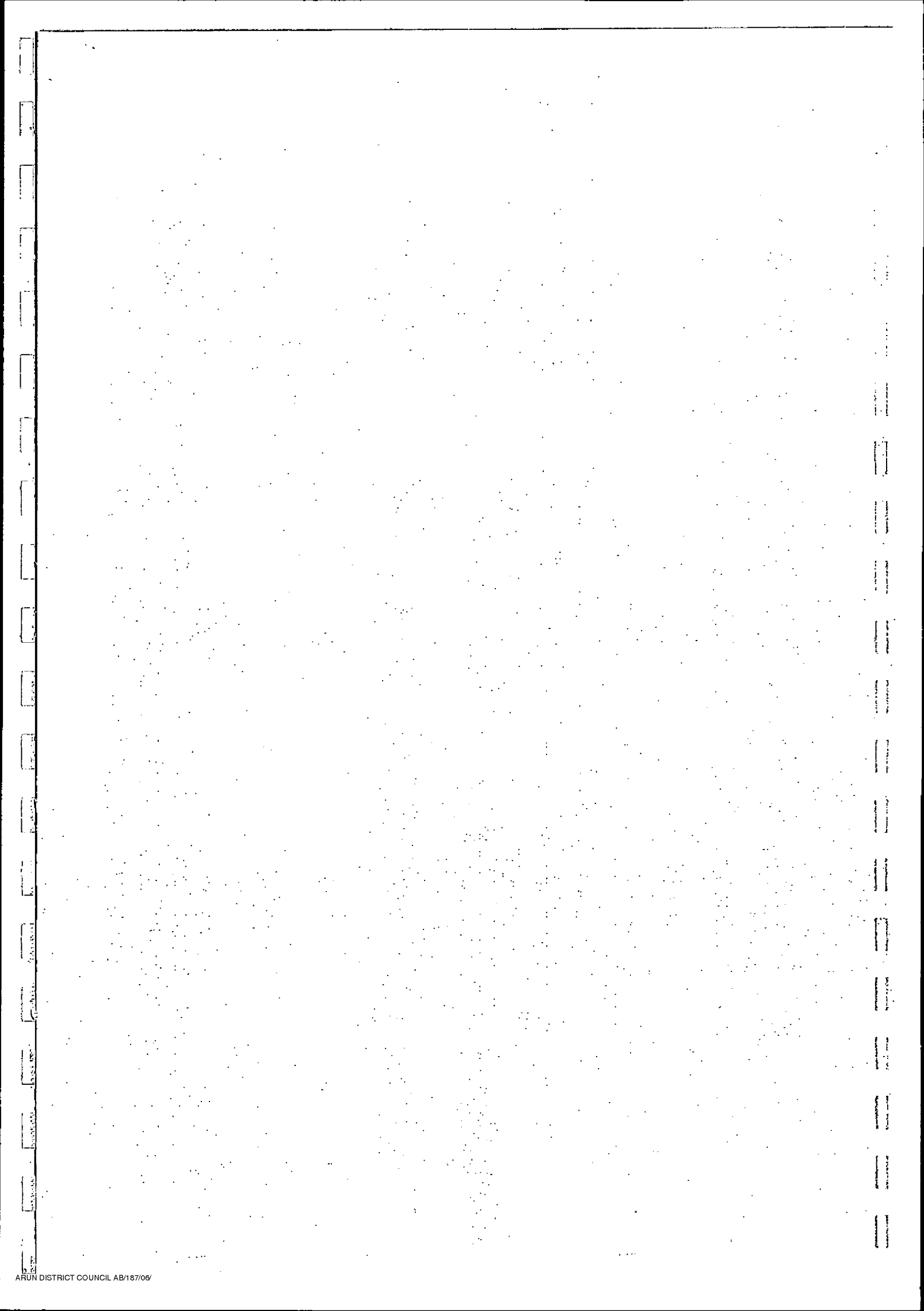
© Environment Agency 2011 | Privacy policy | Terms and conditions

Author: The Environment Agency | enquiries@environment-agency.gov.uk

Last updated: 18 January 2011

[redacted] 10/05/2011

ARUN DISTRICT COUNCIL AB/187/06/

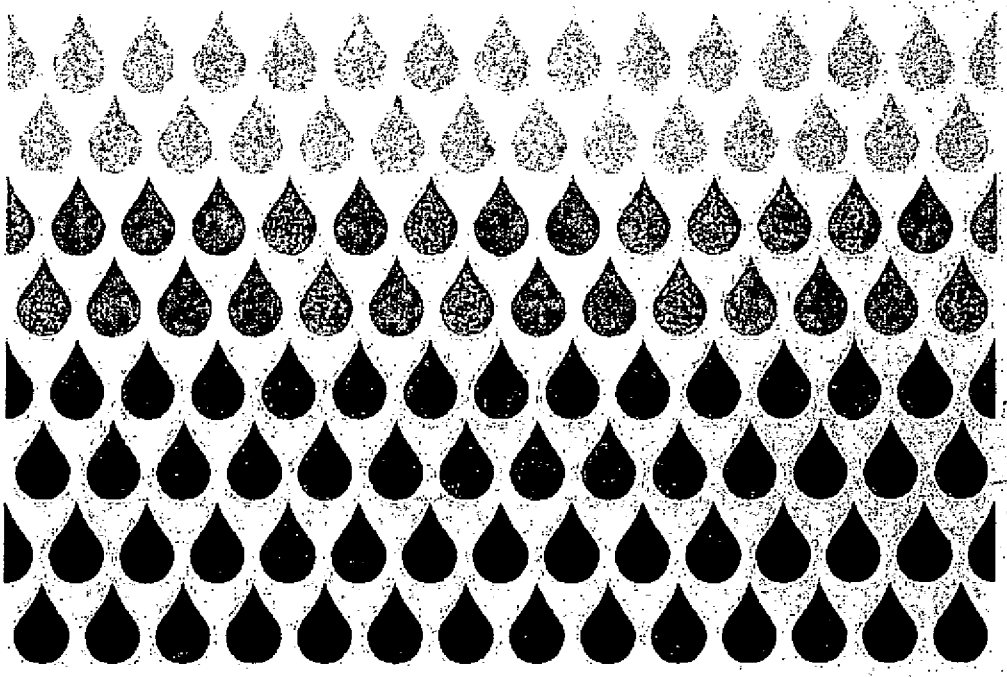


ARUN DISTRICT COUNCIL AB/187/06/

Environment Agency

What to do before, during and after a flood

Practical advice on what to do
to protect yourself and your property



ARUN DISTRICT COUNCIL AB/187/06/

We are the Environment Agency.

It's our job to make people aware of flooding from rivers and the sea, provide flood warning services and build and maintain flood defences.

This leaflet contains useful information to help you reduce the effects of flooding on you and your property.

Published by:
Environment Agency
Rio House
Waterside Drive, Aztec West
Almondsbury, Bristol BS32 4UD

[redacted]

© Environment Agency

All rights reserved. This document may be reproduced with prior permission of the Environment Agency.

November 2010

* Weekday Daytime calls cost 8p plus up to 6p/min from BT Weekend Unlimited. Mobile and other providers' charges may vary.

ARUN DISTRICT COUNCIL AB/187/06/

Your flood warning service

Get the service that's right for you

We provide a free flood warning service to many areas at risk of flooding from rivers and the sea.

Find out if you can sign up for our free 24 hour **Floodline Warnings Direct** service by visiting our website or by calling Floodline. You can select to receive warnings by phone, text, email, fax or pager.

In some areas we also warn people about flooding using:

- Sirens – usually a wailing sound only activated when a flood is about to happen.
- Loud hailers – a vehicle will drive around repeating the flood warnings.

Other places to get the latest flood update

- www.environment-agency.gov.uk/flood
- BBC Ceefax Page 419 and Digital Ceefax Page 405.
- Local weather, news and travel bulletins.

call Floodline on

0845 988 1188

Open 24 hours a day

- Find out what flood warning service is available where you live.
- Get practical advice on what to do before, during and after flooding.
- Get a Quickdial number for easy access to information on flooding in your area.

ARUN DISTRICT COUNCIL AB/187/06/

your personal flood plan

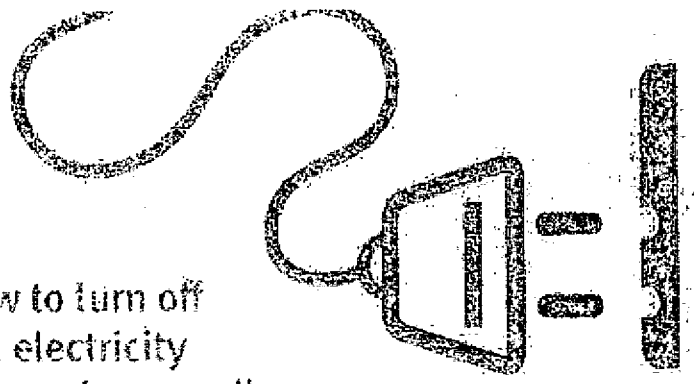
Start preparing today before a flood happens.
Use this checklist as your flood plan.

1. Know who to contact and how
   - Agree where you will go and how to contact each other.
   - Check with your council if pets are allowed at evacuation centres.
   - Keep a list with all your important contacts to hand.
2. Think about what you can move now
   - Don't wait for a flood. Move items of personal value such as photo albums, family films and treasured mementos to a safe place.
3. Think about what you would want to move to safety during a flood
   - Pets
   - Cars
   - Furniture
   - Electrical equipment
   - Garden pot plants and furniture
   - What else? .....

     .....

Think about who you could ask for help / who you could offer to help, particularly vulnerable neighbours or relatives, in a flood.

ARUN DISTRICT COUNCIL AB/187/06/



Know how to turn off your gas, electricity and water mains supplies

4. **Check your insurance cover**
   - Check your buildings and contents insurance policy.
   - Confirm you are covered for flooding.
   - Find out if the policy replaces new for old, and if it has a limit on repairs.
   - Don't underestimate the value of your contents.

5. **Know how to turn off your gas, electricity and water mains supplies**
   - Ask your supplier how to do this.
   - Mark taps or switches with stickers to help you remember.

6. **Prepare a flood kit of essential items and keep it handy**
   - Copies of your home insurance documents.
   - A torch with spare batteries.
   - A wind-up or battery radio.
   - Warm, waterproof clothing and blankets.
   - A first aid kit and prescription medication.
   - Bottled water and non-perishable foods.
   - Baby food and baby care items.

ARUN DISTRICT COUNCIL AB/187/06/

useful numbers

Your important flood telephone numbers.
Fill this out and keep this leaflet with your flood kit.

Environment Agency Floodline [redacted]

Quickdial number

Local authority emergency helpline

Insurance company 24-hour number and policy number

Local radio station frequency for news alerts and weather updates

Family and neighbours

Work phone numbers

Doctor's surgery

Local police station

Vet/kennel/cattery

Local hotel or B&B

Gas supplier and meter number

Electricity supplier and meter number

Water supplier and meter number

Electrician

Plumber

Builder

ARUN DISTRICT COUNCIL AB/187/06/

temporary flood protection equipment

Flood protection equipment can help stop flood water getting into your property. Follow manufacturer instructions to put these in place when you get a flood warning.

You can get more information about flood protection equipment in our 'prepare your property for flooding' leaflet on our website.

Floodboards

These fix to frames around windows and doors. They can be washed, stored and used again.

Always remove flood protection equipment once the flood water has gone. This will help your property dry out.

Plastic covers to seal airbricks

These can stop flood water coming in through your airbricks.

Sandbags

Your local council may provide these during a flood, but they may be scarce. You can buy your own sand and bags, or fill pillowcases and plastic bags with earth. Be aware that following a flood they will be contaminated by sewage in the water.

You can get more informtion about using sandbags on our website.

Further steps to protect your property

There are things you can do to your property that will make it easier and cheaper to clean up after a flood. See list on page 22 of this booklet.

ARUN DISTRICT COUNCIL AB/187/06/

Know your flood



FLOOD ALERT

What it means
Flooding is possible.
Be prepared.

What to do

- Be prepared to act on your flood plan.
- Prepare a flood kit of essential items.
- Monitor local water levels on our website.



FLOOD WARNING

What it means
Flooding is expected.
Immediate action required

What to do

- Protect yourself, your family and help others.
- Move family, pets and valuables to a safe place.
- Keep a flood kit ready.
- Turn off gas, electricity and water supplies if safe to do so.
- Put flood protection equipment in place.

ARUN DISTRICT COUNCIL AB/187/06/

warning codes



SEVERE FLOOD WARNING

What it means
Severe flooding.
Danger to life.

What to do

- Stay in a safe place with a means of escape.
- Be ready should you need to evacuate from your home.
- Co-operate with the emergency services.
- Call 999 if you are in immediate danger.

You need to be aware of flooding and keep an eye on the water levels and weather situation at all times. You can do this by checking the flood forecasts and the river and sea levels on our website or by listening to local news and weather forecasts.

You can get get up-to-date information about flooding in your area by checking our website or by registering for our FREE Floodline Warnings Direct service.

ARUN DISTRICT COUNCIL AB/187/06/

during a flood



ARUN DISTRICT COUNCIL AB/187/06/

What to do to stay safe in a flood.

In the event of a flood focus on the safety of you and your family

- Cooperate with the emergency services if they tell you to evacuate during flooding.
- Be prepared to act quickly and get yourself to safety.

We use our flood warning services to warn you of flooding from rivers and the sea as soon as we can. But there are some types of flooding we can't predict.

Stay alert to localised flooding

Also known as 'surface water flooding'. This usually happens where drainage systems are unable to cope with heavy spells of rainfall. We cannot give you a direct warning for this type of flooding. Instead we forecast where it might be a problem in certain counties and put a daily flood risk forecast on our website.

You can also find out about the possibility of 'surface water' flooding in your area by checking local weather forecasts.

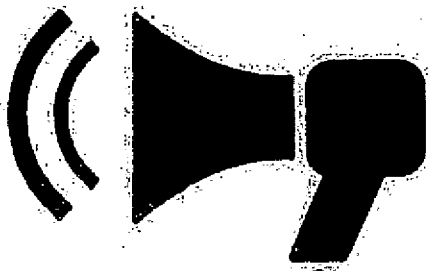
ARUN DISTRICT COUNCIL AB/187/06/

What to do in an emergency

Follow these simple steps to stay safe:

1. Check in with other people in your household - if they are not at home make sure they are somewhere safe.
2. Gather essential items together either upstairs or in a high place.
3. Fill jugs and saucepans with clean water.
4. Move your family and pets upstairs, or to a high place with a means of escape.
5. Turn off gas, electricity and water supplies when flood water is about to enter your home if safe to do so. DO NOT touch sources of electricity when standing in flood water.
6. Keep listening to local radio for updates or call floodline 0845 988 1188.
7. Check in with vulnerable neighbours or relatives.
8. Flood water can rise quickly, stay calm and reassure those around you. Call 999 if you are in danger.

ARUN DISTRICT COUNCIL AB/187/06/



Important! Flood water is dangerous

- Six inches of fast-flowing water can knock over an adult and two feet of water can move a car.
- Avoid walking or driving through it.
- Keep children and vulnerable people away from it.
- Wash your hands thoroughly if you touch it.

Listen to the advice of the emergency services

ARUN DISTRICT COUNCIL AB/187/06/

protect what you can...

Move important items to safety and put flood protection equipment in place when there is a flood warning. Follow manufacturers' instructions carefully to help stop or reduce the flood water entering your property.

Take items upstairs or to a safe place in your property

- Safely store important documents such as insurance papers.
- Move items of personal value such as photos, family films or treasured mementos.
- Move lightweight household belongings you can pick up easily and quickly.
- Move items of furniture that are expensive or harder to repair before cheaper ones.

If possible, move your outside belongings to higher ground

- If the flood water hasn't reached you, move your car to higher ground and move outdoor pets to safety.

Help stop water entering your home

- Put plugs in sinks and baths. Weigh them down with a sandbag, a pillowcase or plastic bag filled with garden soil, or a heavy object.

If you do not have non-return valves fitted

- Plug water inlet pipes with towels or cloths.
- Disconnect any equipment that uses water (like washing machines and dishwashers).

ARUN DISTRICT COUNCIL AB/187/06/

...but evacuate when told

Stay safe, always listen to the advice of the emergency services and evacuate when told to do so.

- Leave your home if the emergency services say so. Refusing to leave on their advice will put you, your family and those trying to help you at risk.
- When you are evacuated you will be taken to an evacuation centre run by your local council. Free food and bedding is provided. Bring spare clothing, essential medication and babycare items if you have an infant.
- Most evacuation centres will let you bring your pets. Take their food. Put cats and small animals in a pet carrier or secure box.
- People running the centres are trained to give you support and advice. They will help you through the stress of a flood and prepare you for what to do afterwards.

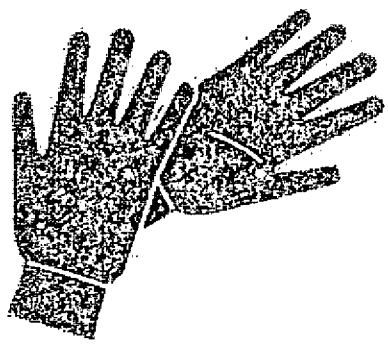
ARUN DISTRICT COUNCIL AB/187/06/

after a flood

Recovering from a flood.

First steps

- Take care as there may be hidden dangers in the flood water like sharp objects, raised manhole covers and pollution.
- Flood water could have caused structural damage to your property.



- In almost all cases the insurance company will send a loss adjuster to look at your property. They will confirm what repairs and replacements are needed and covered by your policy.
- If you rent your property, contact your landlord and your contents insurance company as soon as possible.
- If you do not have insurance, your local council should be able to provide information on hardship grants or charities that may be able to help you.

ARUN DISTRICT COUNCIL AB/187/06/

There are a number of things to be aware of when clearing up after a flood

Flood water can contain sewage, chemicals and animal waste. Always wear:

- waterproof outerwear, including gloves.
- wellington boots.
- face mask.

If your electricity supply is not already switched off at the mains, get a qualified person to do this. DO NOT touch sources of electricity when standing in flood water.

You can get water out of your property using a pump and generator. Position the generator outside in the open air as generators produce carbon monoxide fumes which can kill.

Only pump out water when flood levels outside your property start to be lower than inside. This reduces the risk of structural damage.

Shovel mud away evenly from both sides of a wall. This stops pressure building up on one side.

You can clean and disinfect your property using ordinary household products.

A garden hose is useful for washing down. Do not use high-pressure hoses as they blast contaminated matter into the air.

If you are drying your property naturally, keep doors and windows open as much as possible. If using dehumidifiers, close external doors and windows.

If you have gas or oil central heating and it has been checked by an engineer, turn it on. Keep the thermostat between 20-22 degrees centigrade for steady drying.

Local councils usually provide skips and extra rubbish collections for items that your insurance company has agreed you can throw away.

ARUN DISTRICT COUNCIL AB/187/06/

dealing with an insurance c

If flooding has caused damage to large parts of the country, you may have to wait for a loss adjuster to visit you.

Ask the insurance company

- How long it will be before the loss adjuster visits.
- If you are to clean your property or if they will get a company to do it for you.

Always make your own record of flood damage

- Use a permanent ink pen to mark on the wall the height the flood water got to. Do this in every room affected by flooding.
- Photograph or video your damaged property. List the damage to your property and belongings.
- If your insurance policy covers you for loss of perishable goods, make a list of all the foods you throw away. Include any food touched by flood water and anything in your fridge or freezer ruined by loss of power.

Things to help with your insurance claim

- Confirm the insurance company will pay for any service or equipment you need.
- Make a note of all telephone calls. Record the date, name and what was agreed.

ARUN DISTRICT COUNCIL AB/187/06/

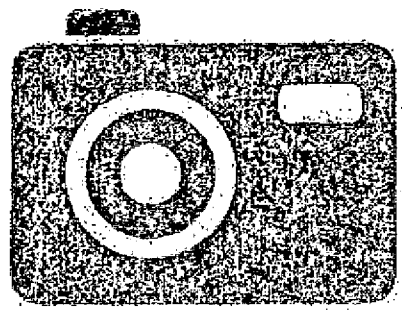
laim

- Keep copies of all letters, emails and faxes you send and receive.
- Keep receipts.
- Don't throw anything away until told (except ruined food).

Important note: the insurance company may only offer to clean and repair something, not replace it.

If you do not have insurance, your local council should be able to provide information on hardship grants or charities that may be able to help you.

Photograph or video record your damaged property



ARUN DISTRICT COUNCIL AB/187/06/

further steps to protect your pr

As you plan your property repairs, you might want to think about ways to protect it from future flooding.

There are things you can do whilst repairing your property that will make it easier and cheaper to clean up after a future flood.

Here are some improvements you can make

Discuss them with your loss adjuster and builder.

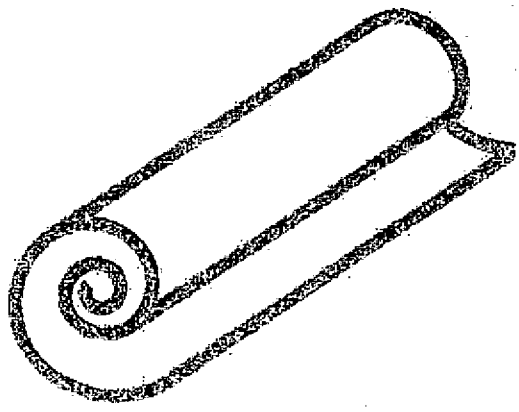
- Lay ceramic tiles on your ground floor and use rugs instead of fitted carpets.
- Raise the height of electrical sockets to at least 1.5 metres above ground floor level.
- Use lime plaster instead of gypsum on walls.
- Fit stainless steel or plastic kitchens instead of chipboard ones or have free-standing kitchen units you can move.
- Position any main parts of a heating or ventilation system, like a boiler, upstairs or raised well above the ground floor.
- Fit non-return valves to all drains and water inlet pipes.
- Replace wooden window frames and doors with synthetic ones. They are easier to clean.

ARUN DISTRICT COUNCIL AB/187/06/

operty

Important!
Always use reputable building contractors. Beware bogus trade people calling door-to-door. Always check references and do not pay in advance.

Lay rugs instead of fitted carpets on your ground floor



ARUN DISTRICT COUNCIL AB/187/06/

temporary housing

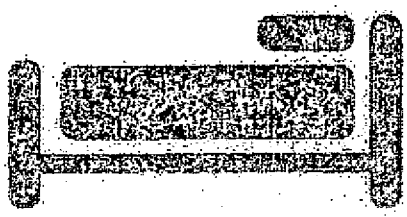
Flood repairs can take weeks or months to complete, especially if there has been widespread flooding and builders are scarce. It takes time to dry out a property and some buildings may have to be gutted before repairs can start.

Ask your insurance company or landlord if they will provide you with temporary accommodation. This could be a nearby bed and breakfast, a static caravan or a rented house. You do not have to accept the first place you are offered.

However, if flooding has affected many people, the choice of accommodation may be limited.

If you will be in a temporary property for some time, think about having your post redirected.

Your insurance company should provide you with temporary accommodation



ARUN DISTRICT COUNCIL AB/187/06/

For more information

These organisations have advice, information and services to help you after a flood.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

ARUN DISTRICT COUNCIL AB/187/06/

Would you like to find out more about us, or about the environment?

Then call us on
08708 506 506* (Mon-Fri 8-6)

email
enquiries@environment-agency.gov.uk

or visit our website
www.environment-agency.gov.uk

incident hotline **0800 80 70 60** (24hrs)
floodline **0845 988 1188** (24hrs)
typetalk **0845 602 6340**

* Weekday Daytime calls cost 8p plus up to 6p/min from BT Weekend Unlimited. Mobile and other providers' charges may vary.

Environment first: This report is printed on paper made from 100 per cent previously used waste. By-products from making the pulp and paper manufacture are used for composting and fertiliser, for cement making and for heat conversion.

FLHO1110BTFK E P

ARUN DISTRICT COUNCIL AB/187/06/

ARUN DISTRICT COUNCIL AB/187/06/

If you live in an area that is at risk of flooding, there are things you can do to reduce the damage that a flood can do to your home. The illustration below shows some examples.

Kitchen units and appliances

Fit stainless steel, plastic or solid wood kitchen units rather than chipboard. White goods such as fridges should be raised on plinths.

Flooring

Lay ceramic tiles or rugs on your ground floor rather than carpets. Rugs can easily be removed and placed out of reach. Non-carpeted floors can be easier to clean once the water has subsided and are cheaper to replace.

Electrical sockets

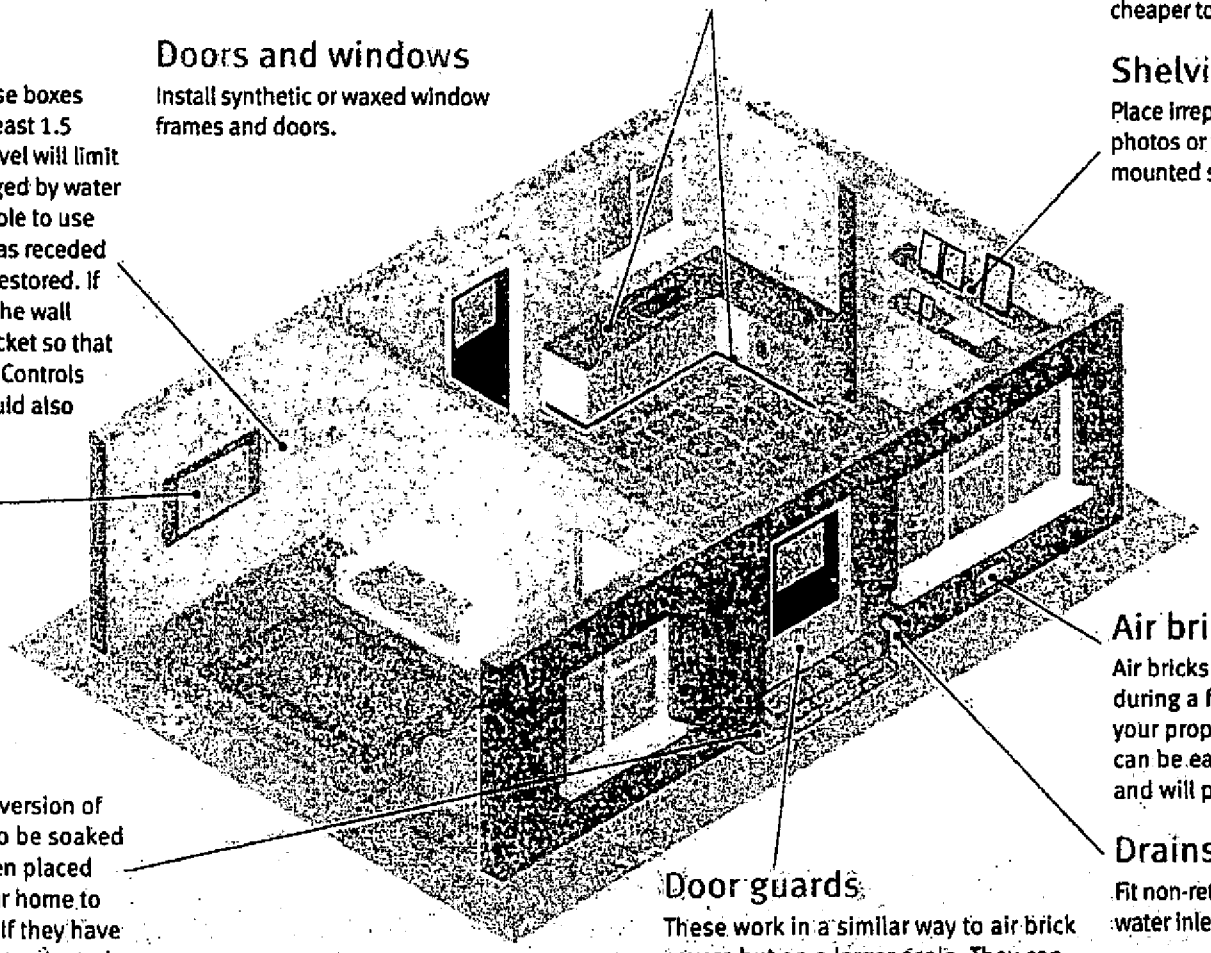
Raising electrical sockets, fuse boxes and associated wiring to at least 1.5 metres above ground floor level will limit the risk of them being damaged by water during a flood. You may be able to use them again once the water has receded and the electricity supply is restored. If rewiring, bring cables down the wall from the top to the raised socket so that cabling doesn't get affected. Controls and ventilation systems should also be well above floor level.

Doors and windows

Install synthetic or waxed window frames and doors.

Shelving

Place irreplaceable items, such as family photos or treasured possessions, on high mounted shelves.



TV and hi-fi

Mount your TV or hi-fi and speakers on the wall.

Walls

Use lime-based plaster instead of gypsum on walls.

Flood sacks

These are a lighter, modern version of sandbags. The sacks need to be soaked in water so they expand, then placed around the entrances to your home to protect against flood water. If they have not been in contact with contaminated water, they can be left to dry and shrink and can be reused. They take up little storage and can be cost-effective.

Air brick covers

Air bricks are used for ventilation, but during a flood, they can let water into your property. The covers are airtight, can be easily attached to the air bricks and will prevent water entering.

Drains and pipes

Fit non-return valves to all drains and water inlet pipes.

Door guards

These work in a similar way to air brick covers but on a larger scale. They can be placed across the bottom of your external doors to hold back low levels of water.

ARUN DISTRICT COUNCIL AB/187/06/