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TO: Planning Department
Arun District Council
Civic Centre
Maltravers Road
Littlehampton

FLOOD RISK ASSESSMENT

25. 09. 2013 / REVISED 23.10.2013 / CONFIRMED VALID AT 07.11.2014

The Old Dairy, Church Street, Littlehampton, Sussex
Proposed residential re-development

1.01 FLOODING:

Detailed information has been obtained from the Environment Agency with particular regard to this application site and its location.

The following documents are attached to this Statement:

- [a] Flood Map for Surface Water showing 1 in 30 chance of flooding in the vicinity suggests a possibility of 0.1M just at the front of the site where the access road meets Church Street which would not prejudice escape and the majority of the site would be out of the suggested flood area providing adequate refuge at the rear of the site.
- [b] Flood Depth for rainfall showing 1 in 200 chance of flooding in the vicinity suggests a possibility of 0.3M at the junction of the access road with Church Street which would not prejudice escape as stated at [A] above.
- [c] Modelled Data Node Point Location Map.
- [d] Letter dated 23.10.2013 from the Environment Agency containing Supporting Information. In particular please note the paragraph headed 'Flood Defences' confirming the evidence shown on the enclosed maps and stating that the new East Bank Flood Defence Scheme will improve the chances of flooding to 1 in 300 when completed which will result in a re-calibration of the enclosed flood risk maps.

1.02 The site is currently largely hard surfaced in concrete draining to gullies and thence to the public surface water sewer system. Following demolition and construction of the new dwellings and access road, large areas will be left as soft landscaped gardens. Private parking spaces will be formed with permeable pavings all of which will allow more rainwater to drain naturally into the ground rather than be immediately discharged into the sewer.

1.03 The site is shown as being located in a flood zone however there are no records of flooding on the site as has been confirmed by the previous owners Littlehampton District Council.

1.04 All ground floors will be concrete, steps or ramps up to front doors will be a minimum of 150mm above adjoining general ground levels subject to compliance with disabled access requirements.

1.05 The response from The Environment Agency to the previous similar planning application was that they would not oppose the development.

Graham Nicolls Limited

Mr Graham Nicolls
grahamnicolls@hotmail.com

Our ref: SSD/2223/VH
Your ref:

Date: 23/10/2013

Dear Mr Nicolls

Provision of Product 4 for 3 and 5 Church Street, Littlehampton BN17 5EL

Thank you for your request to use Environment Agency data. The information is attached.

If you have requested this information to help inform a development proposal, then you should note the detail in the attached advisory text on the use of Environment Agency Information for Flood Risk Assessments / Flood Consequence Assessments.

Supporting Information

This information is provided subject to the enclosed notice, which you should read.

Modelled Flood Levels

The attached flood levels have been taken from the 2011 Arun to Adur Flood Modelling study. These levels represent defended and undefended tidal flood risk.

Guildbourne House, Chatsworth Road, Worthing, West Sussex BN11 1LD
Customer services line: 08708 506 506
Email: enquiries@environment-agency.gov.uk
www.environment-agency.gov.uk

Flood Defences

The estimated Standard of Protection for defences offering protection to this area vary from 1in50yr to 1in200yr, with crest levels varying from 4.4 to 3.8 mAOD. The Littlehampton Arun East Bank Tidal Walls Flood Defence Scheme will make improvements to the flood defences on the East Bank of the River Arun in the town of Littlehampton to reduce the risk of flooding to 0.33% (1in300yr) up to the year 2110. Further details available at <http://www.environment-agency.gov.uk/homeandleisure/floods/114650.aspx>

Flood History

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

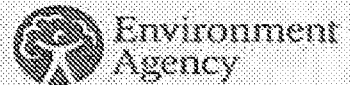
If you have any queries or would like to discuss the content of this letter further please don't hesitate to contact me.

Yours faithfully

Jon Denman
FCRM Officer
Partnership and Strategic Overview Team – West Sussex

Enc. Detailed FRA/FCA Map, Node Point Map, Flood Map for Surface Water
[Standard Notice]

Standard Notice (not for use with Special Data, Personal Data or unlicensed 3rd party rights)



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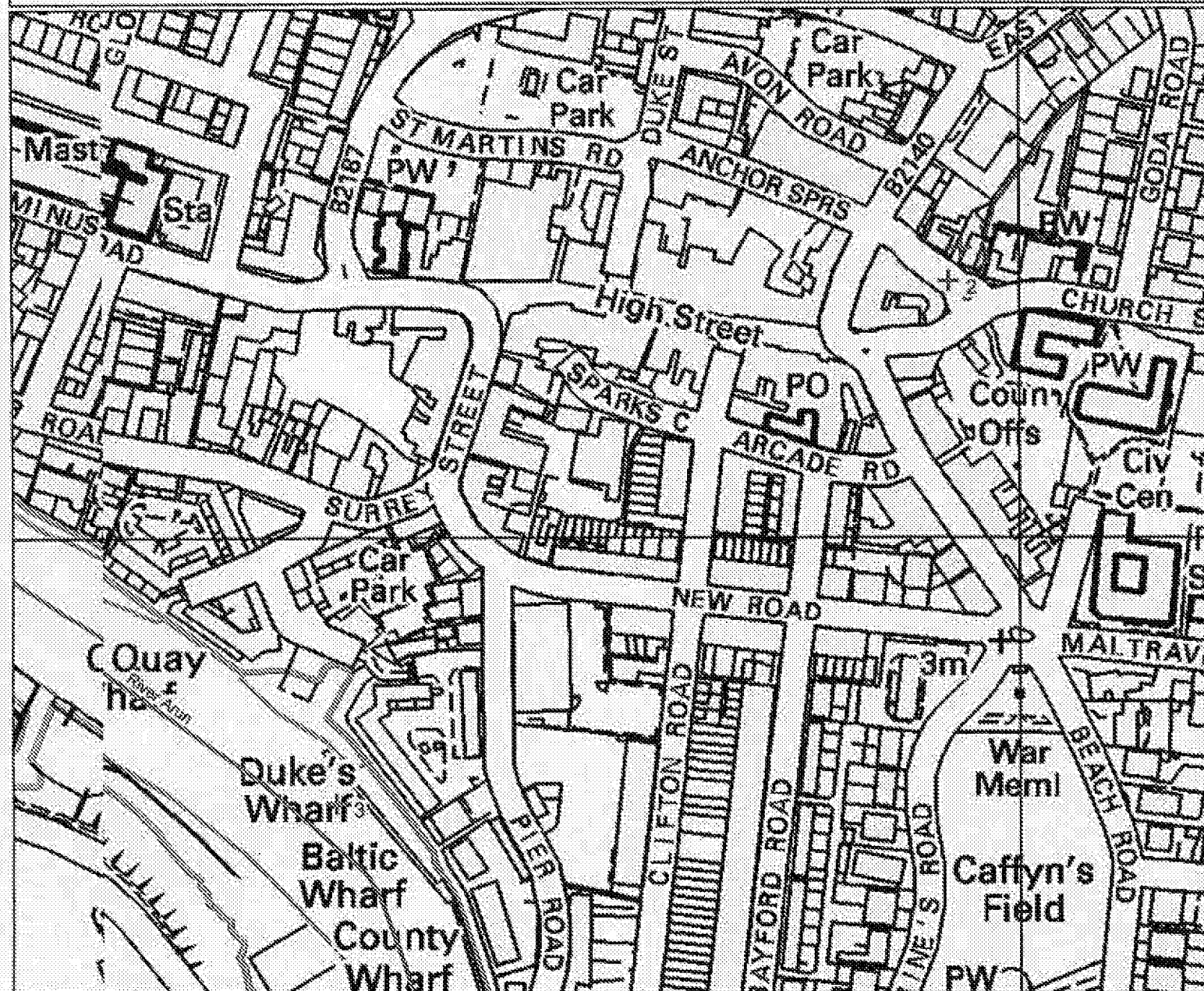
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Modelled Flood Depth taken from 2011 TUFLOW Modelling [m]								
Node Point	Easting	Northing	DEFENDED			UNDEFENDED		
			0.5% [1in200yr]	0.5% [1in200yr] +CC	0.1% [1in1000yr]	0.5% [1in200yr]	0.5% [1in200yr] +CC	0.1% [1in1000yr]
1	502968	102153	Null	2.04	0.09	0.89	2.09	1.2
2	502961	102135	Null	2.39	0.44	1.24	2.44	1.55
3	502637	101857	N/A	N/A	N/A	N/A	N/A	N/A

Modelled Flood Levels taken from 2011 FULFOW Modelling [mAOD]								
Node Point	Easting	Northing	DEFENDED			UNDEFENDED		
			0.5% [1in200yr]	0.5% [1in200yr] +CC	0.1% [1in1000yr]	0.5% [1in200yr]	0.5% [1in200yr] +CC	0.1% [1in1000yr]
1	502968	102153	Null	4.89	2.94	3.74	4.94	4.05
2	502961	102135	Null	4.88	2.94	3.74	4.94	4.05
3	502637	101857	3.84	4.88	4.05	3.82	4.71	4.04

**Modelled Data Node Points Map Centered on Church Street, Littlehampton BN17 5EL -
Created 22/10/2013 [Ref: SSD/2223/VH]**



**Environment
Agency**

Legend

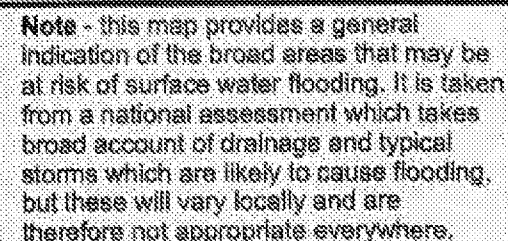
- Main River
- +3 Node Point

1:3,000

*when printed at A4.



1. **Introduction**
 2. **Background**
 3. **Methodology**
 4. **Results**
 5. **Conclusion**



- This information may be useful to help inform emergency & spatial planning and general awareness of surface water flood risk.
- It is not suitable for use at an individual property scale due to the method used.
- The information should not be interpreted as stating that the location you are interested in will or won't actually flood, but simply that it is in or not in an area shown at risk on the maps.
- As there are various sources of surface water information available, you should contact your local authority to ask them what surface water information best represents local conditions.

Flood depths from rainfall with a 1 in 200 chance of occurring in any given year



110,000

Data produced 2010.

Flood Map Centred on BN17 5EL- created 8 July 2013



Legend

- Flood Map - Defences
- Area Benefiting from Flood Defences
- Flood Map - Flood Storage Areas
- Flood Map - Flood Zone 3
- Flood Map - Flood Zone 2

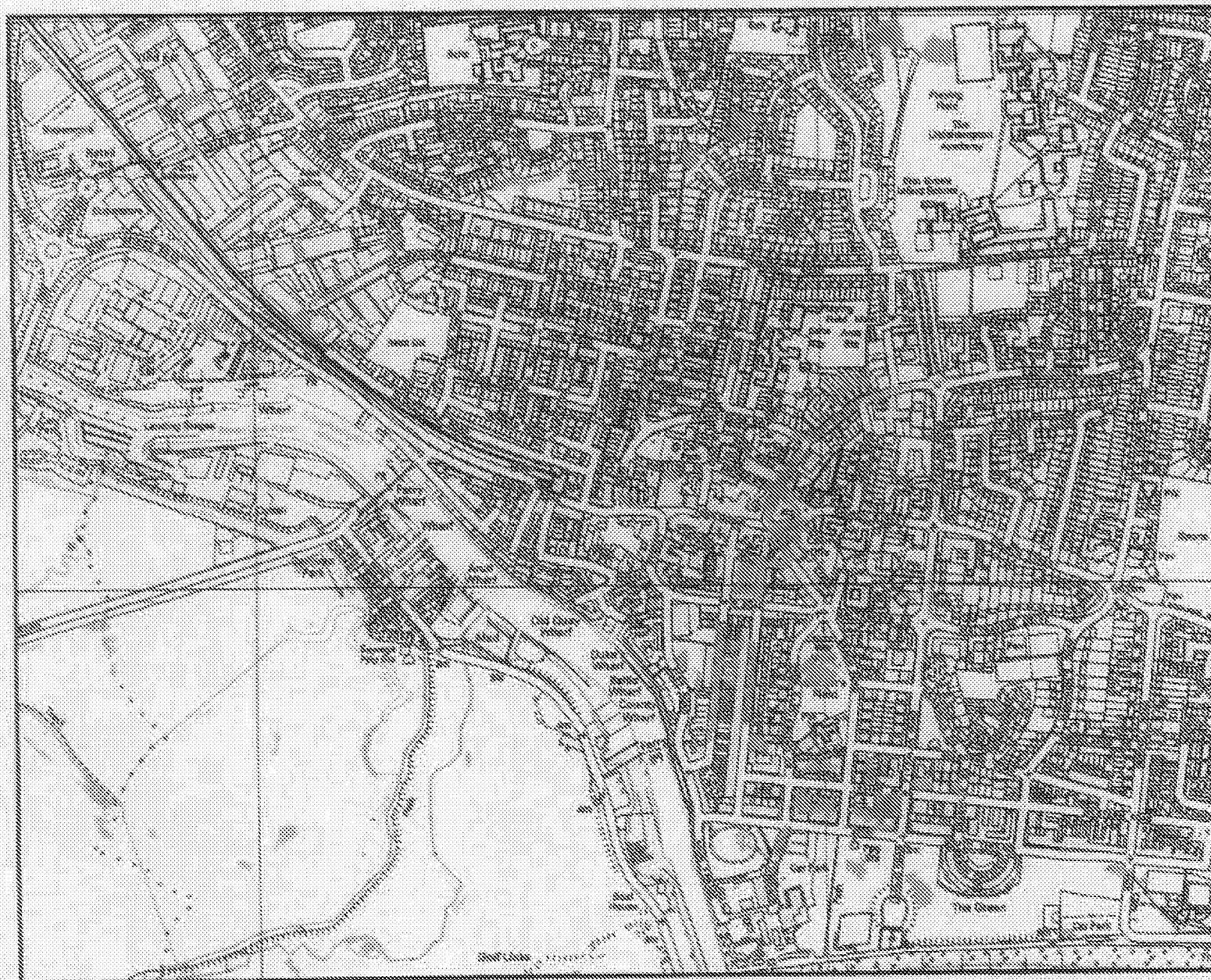


0 38 76 114 m.



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Flood Map for Surface Water - BN17 5EL



Note - this map provides a general indication of the broad areas that may be at risk of surface water flooding. It is taken from a national assessment which takes broad account of drainage and typical storms which are likely to cause flooding, but these will vary locally and are therefore not appropriate everywhere.

Important

- This information may be useful to help inform emergency & spatial planning and general awareness of surface water flood risk.
- It is not suitable for use at an individual property scale due to the method used.
- The information should not be interpreted as stating that the location you are interested in will or won't actually flood, but simply that it is in or not in an area shown at risk on the maps.
- As there are various sources of surface water information available, you should contact your local authority to ask them what surface water information best represents local conditions.

**Flood depths from rainfall
with a 1 in 30 chance
of occurring in any given
year**

 > 0.3m

 > 0.1m

1:10,000

Data produced 2010.

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**Flood Map Centered on Church Street, Littlehampton BN17 5EL -
Created 22/10/2013 [Ref: SSD/2223/VH]**



Environment
Agency

Legend

- Main River
- Flood Zone 3
- Flood Zone 2

Flood Map Areas (assuming no defences)

Flood Zone 3

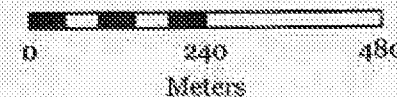
Shows the area that could be affected by flooding:
- from the sea with an 1 in 200 or greater chance of happening each year.
- or from a river with a 1 in 100 or greater chance of happening each year.

Flood Zone 2

Shows the extent of an extreme flood from rivers of the sea with up to a 1 in 1000 chance of occurring each year.

1:10,000 *

*when printed at A4.



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