Your ref:

Our ref: 22500/001/CBH/PJ/RMF/KFW

15 May 2009

peterbrett

Peter Brett Associates LLP Caversham Bridge House Waterman Place, Reading Berkshire RG1 8DN T: +44 (0)118 950 0761 F: +44 (0)118 959 7498 E: reading@peterbrett.com

Longford Securities and Equities Ltd. 61 Welbeck Street London W1G 9XD

Attn: Mr H Gauntlett

Dear Hugh,

# RE: Park House, Station Road, Teddington - Flood Risk Assessment

This Flood Risk Assessment (FRA) letter report has been prepared by Peter Brett Associates (PBA) for the proposed mixed use development consisting of a 69 bed hotel on the lower floors together with 3 floors of office space.

1 8 MAY 2009

The site is less than 1 hectare and in Flood Zone 1. Reference to the consultation matrix in the Planning Policy Statement 25 Development and Flood Risk (PPS25) Flood Risk Standing Advice (FRSA) version 2.1 (Jan 2009) confirms that 'No consultation required – see surface water management good practice advice' (ref: cell F5). However, the detailed guidance states the following (see attached copy of relevant FRSA, which also provides details of surface water management good practice principles and standards for reference):

# Exceptions to this guidance note: This note does not apply in the following circumstances;

- Where an area with critical drainage problems has been identified by the Environment Agency and notified to the Local Planning Authority and formal consultation is required (paragraph (zd) statutory instrument 2006 No. 2375).
- In areas where the Local Planning Authority has identified drainage problems through a Strategic Flood Risk Assessment or Surface Water Management Plan and they have indicated that a formal flood risk assessment is required and FRA guidance note 1 should be followed; for more information see the Flood risk Standing Advice pages on www.environment-agency.gov.uk

The FRA letter report has been prepared in accordance with PPS25 and the FRSA guidance to identify whether any critical drainage problems exist at Park House, Station Road, Teddington and the surrounding area.

### **Site Location**

The site is located at OS grid reference 515,947m E, 171,044m N, on the north-eastern outskirts of Teddington (see attached plans).

J:\22500 Park House, Teddington\001\WP\Reports\22500\_Park House\_Teddington\_FRA\_May 2009.doc

Registered Office: Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN. UK T: +44 (0)118 950 0761 F: +44 (0)118 959 7498.

Peter Brett Associates LLP is a limited liability partnership and is registered in England and Wales with registered number OC334398. A list of members names is open to inspection at our registered office.











### Strategic Flood Risk Assessment

The London Borough of Richmond upon Thames confirmed in an email dated 12<sup>th</sup> March 2009 (attached) that a Strategic Flood Risk Assessment (SFRA) was produced in June 2008, covers the entire borough of Richmond.

Within the SFRA, Figure 006 'Teddington Lock, Eel Pie Island and Strawberry Hill' includes the site (circled red) and provides the following information:

- Confirms that the it is within Flood Zone 1 and is approximately 250m from the 1 in 100 (1%) plus climate change extent located to the east of the site;
- The nearest localised drainage issue recorded is 330m to the east of the site on Manor Road.

### Flood Zone Map

The EA response dated 2<sup>nd</sup> April 2009 (attached) includes a copy of their detailed Flood Zone map. This confirms that the site lies within Flood Zone 1 'low probability' (i.e. less than 1 in 1000 (0.1%) annual probability of river flooding).

### **Historic Flooding Information**

Requests for information were made to the EA, The London Borough of Richmond upon Thames (LBRT, as the land drainage and highways authority), and Thames Water (TW, the sewer utility company) for records of historic flooding and known drainage problems.

The attached EA response confirms they 'have no records of historical (flooding) events within the area of the site.'

LBRT confirmed in the email dated 19<sup>th</sup> March 2009 (attached) that 'the SFRA considered and collated all known sources of flooding that may affect existing and/or future development within the Borough'. The information within the SFRA in relation to the site is provided above.

TW have confirmed that they have no records of public sewer flooding in the vicinity of the site (see TW letter dated 13<sup>th</sup> March 2009 attached).

### Summary

The information obtained from the stakeholders detailed above confirms there are no known drainage problems at, or in the vicinity of, Park House, Station Road, Teddington.

I trust the above is satisfactory. If you have any queries please get in touch either with myself or Richard Fisher

Yours sincerely

Katherine Waters
For and on behalf of

PETER BRETT ASSOCIATES LLP

J:\22500 Park House, Teddington\001\WP\Reports\22500\_Park House\_Teddington\_FRA\_May 2009.doc





PPS25 FRSA (national) version 2.0 Advice issued on 27th January 2009



# Development less than 1 hectare in Flood Zone 1 - surface water drainage information

# Exceptions to this guidance note:

This note does not apply in the following circumstances;

- \* Where an area with critical drainage problems has been identified by the Environment Agency and notified to the Local Planning Authority and formal consultation is required (paragraph (zd) statutory instrument 2006 No. 2375).
- \* In areas where the Local Planning Authority has identified drainage problems through a Strategic Flood Risk Assessment or Surface Water Management Plan and they have indicated that a formal flood risk assessment is required and FRA guidance note 1 should be followed; for more information see the Flood risk Standing Advice pages on www.environment-agency.gov.uk

In all other cases, the following notes sets out good practice to achieve sustainable surface water management.

# Surface water management good practice principles and standards

For developments (other than changes of use) less than 1 hectare in Flood Zone1, the main flood risk issue to consider is usually the management of surface water run-off. Drainage from new development must not increase flood risk either on-site or elsewhere. Government policy strongly encourages a sustainable drainage system (SUDS) approach to achieve these objectives. Guidance on how to address specific local surface water flood risk issues may also be available through the Strategic Flood Risk Assessment or Surface Water Management Plan produced by the Local Planning Authority.

For on/near site flooding, the PPS25 Practice Guide at paragraph 5.47 states that:

"For events with a return-period in excess of 30 years, surface flooding of open spaces such as landscaped areas or car parks is acceptable for short periods, but the layout and landscaping of the site should aim to route water away from any vulnerable property, and avoid creating hazards to access and egress routes (further guidance in CIRIA publication C635 Designing for exceedence in urban drainage - good practice). No flooding of property should occur as a result of a one in 100 year storm event (including an appropriate allowance for climate change). In principle, a well-designed surface water drainage system should ensure that there is little or no residual risk of property flooding occurring during events well in excess of the return-period for which the sewer system itself is designed. This is called designing for event exceedence."

The CIRIA publication `Designing for exceedence in urban drainage-good practice' can be accessed via the following link <a href="http://www.ciria.org/acatalog/C635.html">http://www.ciria.org/acatalog/C635.html</a>

For off-site flooding, the PPS25 Practice Guide states at paragraph 5.50:

PPS25 FRSA (national) version 2.0 Advice issued on 27th January 2009



Further information on SUDS can be found in annex F of PPS 25, while chapter 5 of the PPS25 Practice Guide gives an extensive selection of references., The Interim Code of Practice for Sustainable Drainage Systems provides advice on design, adoption and maintenance issues and a full overview of other technical guidance on SUDS. The Interim Code of Practice is available electronically on both the Environment Agency's web site at: <a href="http://www.environment-agency.gov.uk">http://www.environment-agency.gov.uk</a> and CIRIA's web site at: <a href="http://www.ciria.org.uk">http://www.ciria.org.uk</a>

# Is the proposal part of a larger development?

A Reserved matters application in Flood Zone 1 might be part of a larger site that already has outline permission. If so, the Local Planning Authority should ensure that any conditions applied previously in relation to drainage are taken into account in the reserved matters application. This is to prevent a piecemeal approach to drainage taking place.

# sposal to public sewer

Where it is intended that disposal is made to public sewer, the Water Company or its agents should confirm that there is adequate spare capacity bearing in mind all known development proposals in the area.

# Other flood risk issues to consider for development in Flood Zone 1

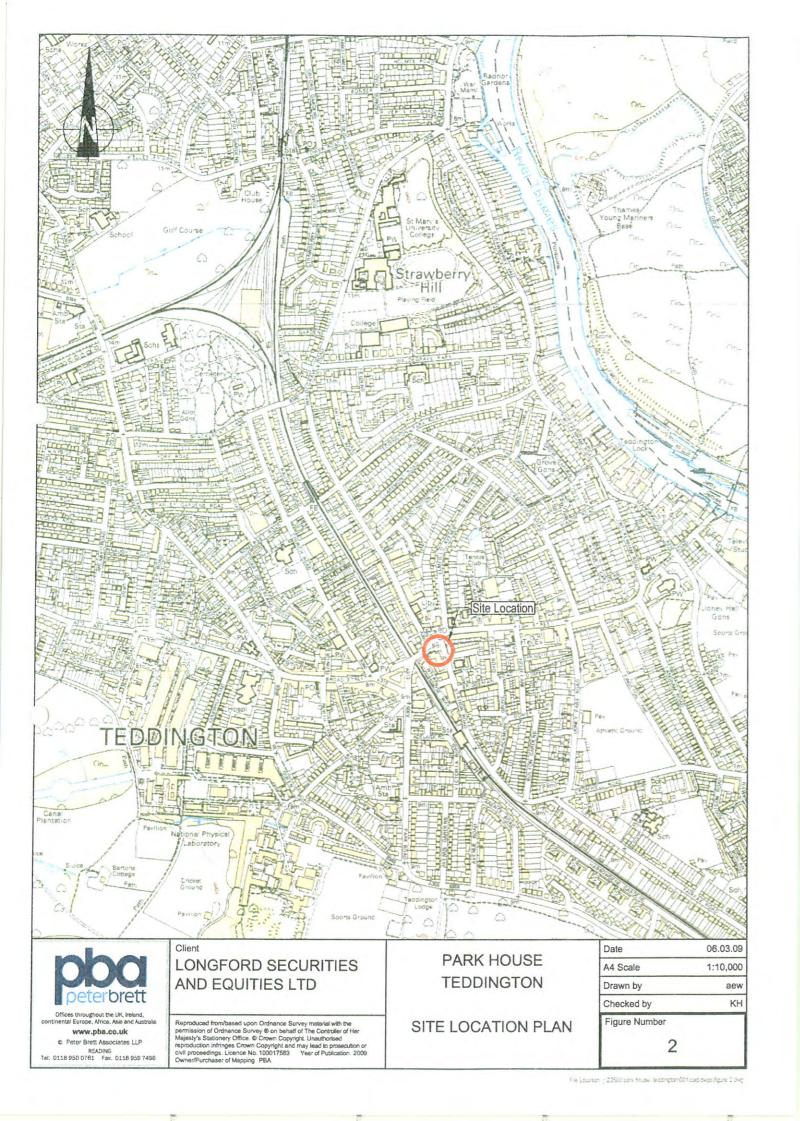
# - Dry Islands

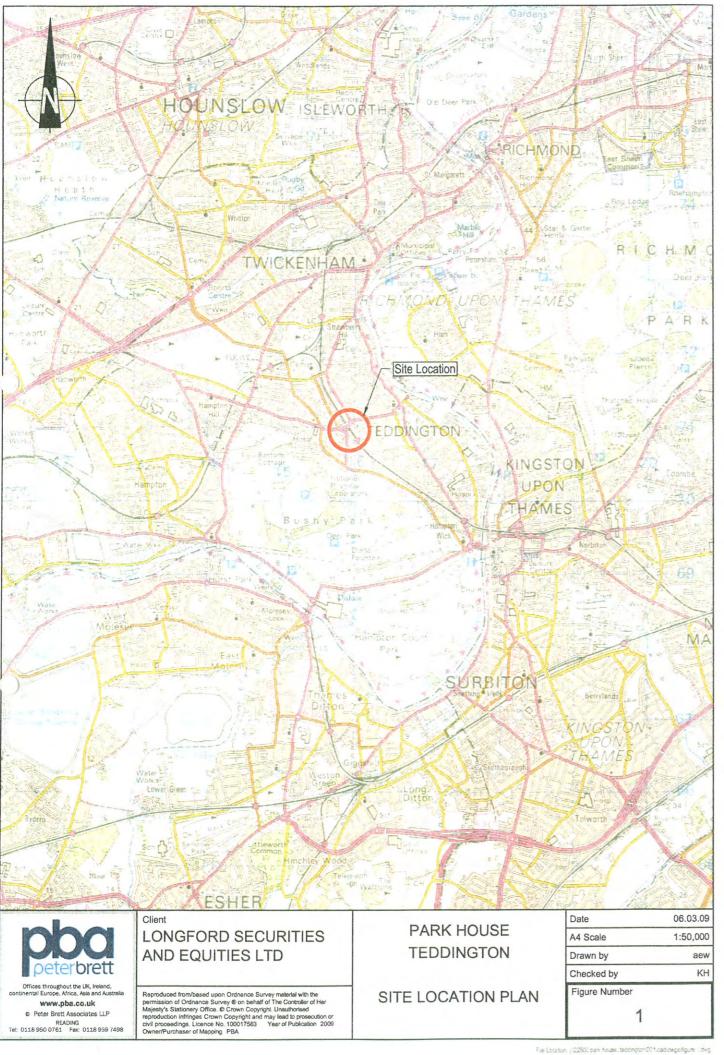
Some areas within Flood Zone 1 are surrounded by areas at a higher risk of flooding i.e. areas falling within Flood Zones 2 and 3. In certain cases development within such `dry islands' can present particular hazards to public safety such as people being surrounded by water and needing to be rescued. The distribution of dry islands and the risks posed by them in terms of access/exit vary considerably across the country. If you are in any doubt about how flood risks associated with `dry islands' may affect your Authority area, please contact your local Environment Agency Planning Liaison team by calling 08708 506 506.

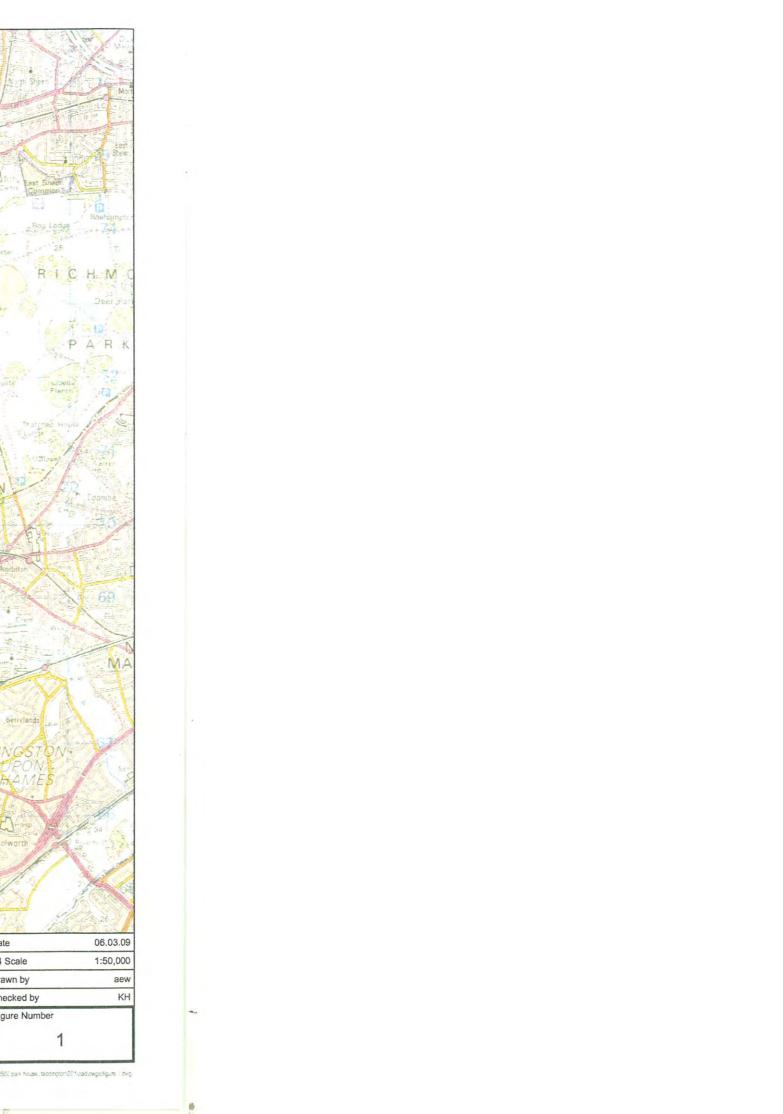
# · Climate Change

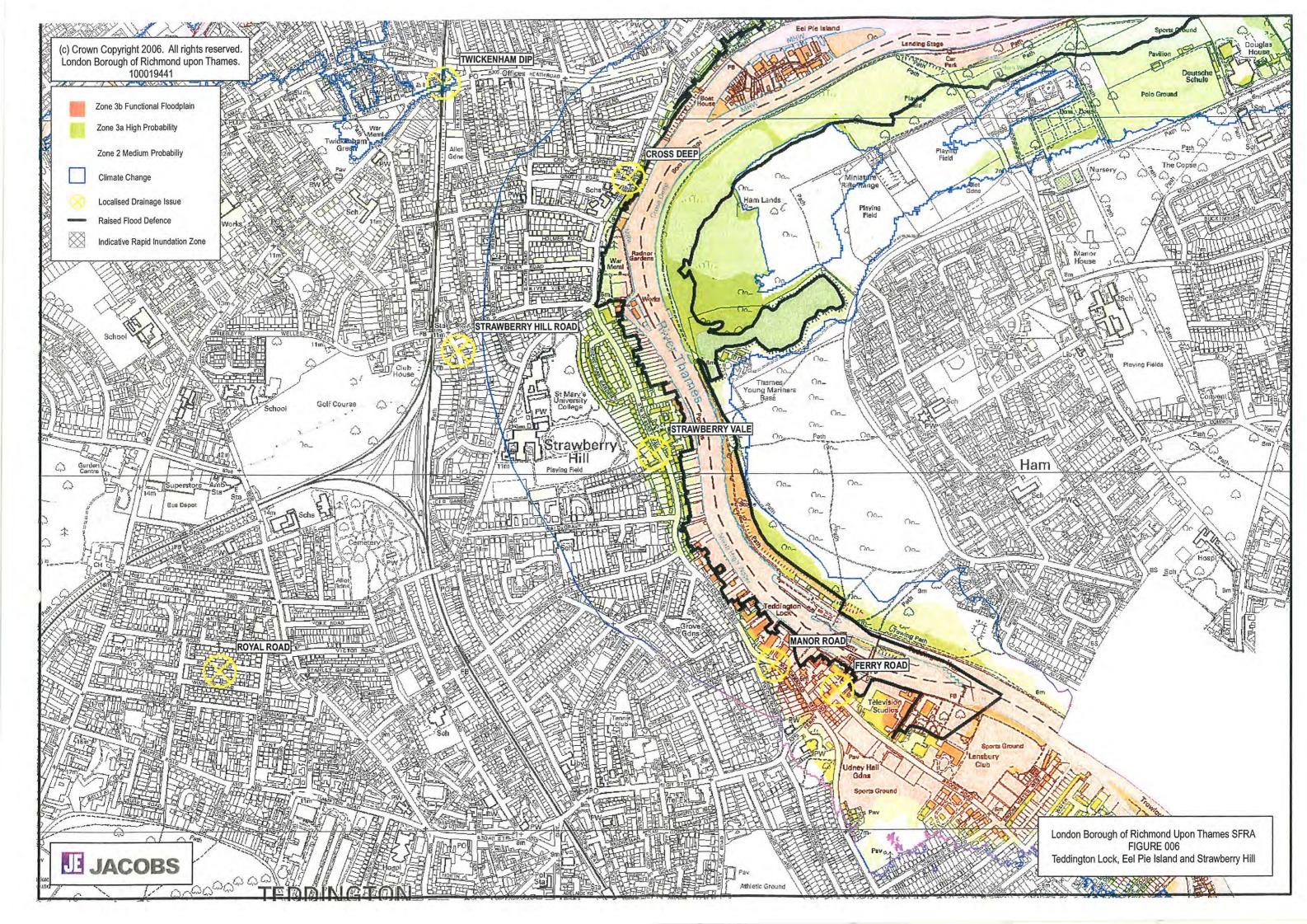
As highlighted above, the frequency and intensity of rainfall is predicted to increase as a result of climate change and an allowance for how this will affect the proposal will need to be factored into design.

In addition rising sea levels may put some areas currently within Flood Zone 1 at risk from tidal flooding. These areas should have been identified in your Local Planning Authority's Strategic Flood Risk Assessment.











Mrs Kate Waters Peter Brett Associates LLP Caversham Bridge Road Waterman Place Reading Berks RG1 8DN

Our Ref: SE15780 Your Ref:

Date: Thursday 2 April 2009

Dear Kate.

# Re: Park House Station Road Teddington

Thank you for your email regarding the above site. Please see below our response to your enquiry.

## Flood Map

Copy of flood map enclosed

# **Flood Defences**

The river Thames is defended along this section to a standard of 1:1000. The defences protect against a tidal flooding event that has a 0.1% annual probability of occurring up to the year 2030. However, as you can see in the Flood Map, this property does not lie within any of our flood zones. That means that the annual probability of a flood occurring is even lower than a 0.1%.

The defences along the tidal Thames in this area are all raised, man-made and privately owned. We regularly inspect them twice a year to ensure that they remain fit for purpose. They must be maintained by their owners to a crest level of 6.1 mAODN (the Flood Defence Level in this reach of the Thames). The overall condition grade for defences in the area is 2 (good), on a scale of 1 to 5.

There are no planned measures of alleviation as the standard of protection of 1:1000 is already one of the highest standards of protection. Like I said this property is well outside the flood zones, so an even higher standard of protection will apply, making the annual probability of a flood occurring almost insignificant.

# Flood History

Swift House, Frimley Business Park, Camberley, Surrey, GU16 7SQ Customer services line: 08708 506 506 Email: enquiries@environment-agency.gov.uk www.environment-agency.gov.uk

There are no culverted watercourses within the area of the site.

## Groundwater

There are 4 reports of groundwater flooding on our records, in the Erdington area, but none for Station Road. The area is underlain by Tallow and Kempton Park Gravels - aquifers that do hold shallow groundwater.

# **Critical Drainage**

Please contact the Local Authority for information on the above.

If you will be carrying out computer modelling as part of your Flood Risk Assessment, please read the enclosed guidance which sets out our requirements and best practice for computer river modelling.

You should note that this information is based on that currently available as of the date of this letter. You may feel it is appropriate to contact our office at regular intervals, to check whether any amendments/ improvements have been made. Should you re-contact us after a period of time, please quote the above reference in order to help us deal with your query.

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

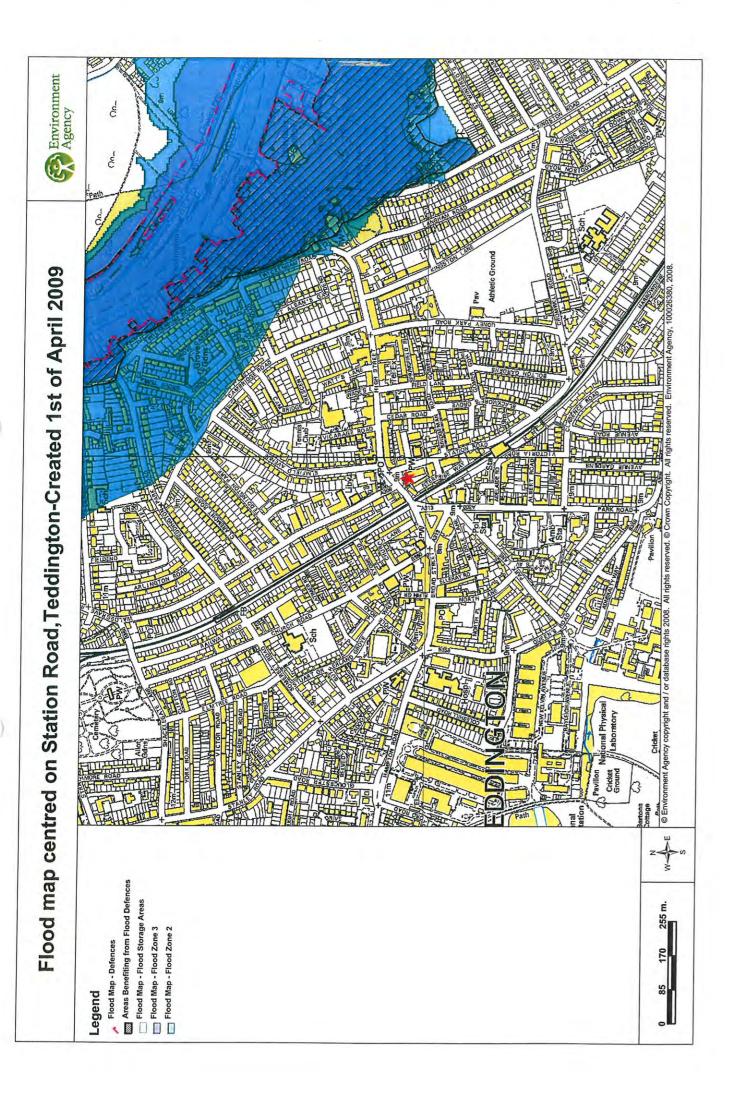
We will use the information you supply to us in accordance with our statutory obligations. In particular (although there may be other uses), we may:

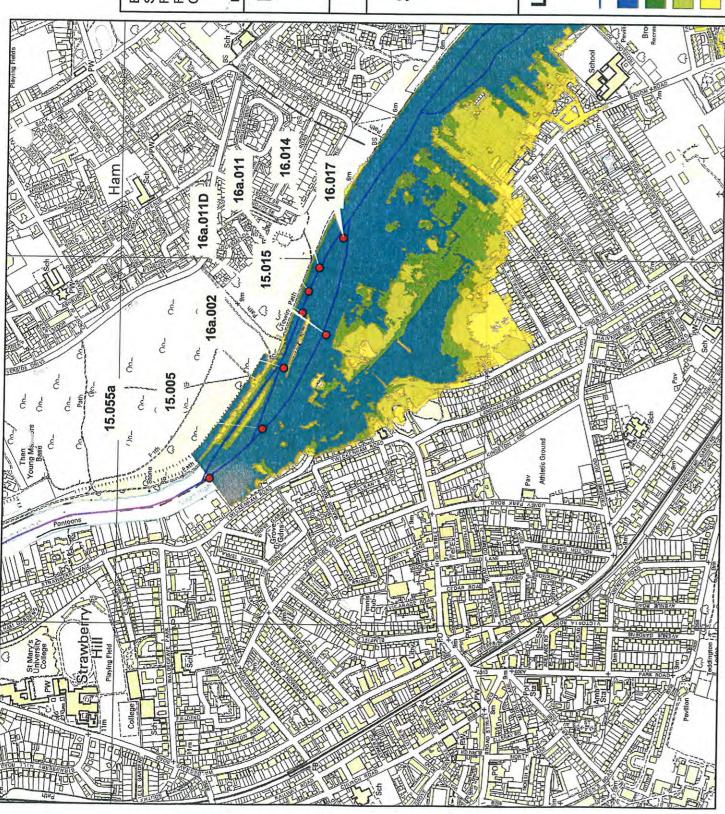
- Incorporate the information into our flood map and associated datasets. These are used for a variety of purposes.
- provide information to water companies and others as specified under s197 of the Water Resources Act 1991
- Respond to requests for information under the Freedom of Information Act and the associated Environmental Information Regulations 2004. Please note that whilst under this legislation we are obliged to operate with a presumption of disclosure in providing access to information that we hold, there are some exceptions that we can consider. In the case of Flood Risk / Consequence Assessment information, we recognise the potential commercial impact that may result from readily providing copies to requestors. Our general position is therefore that we will allow inspection of Assessments in our offices, but that we will not usually allow copying. We believe this fairly balances the interests of those providing Assessments against, for example, the rights of an individual to challenge our decisions and actions regarding flood risk management in an informed manner.

Please accept this letter as acknowledgement of your credit card payment of £54.00 for the supply of this information, if you require a receipt please contact me.

\*Please note that this letter is not a Flood Risk Assessment. The information supplied can be used to form part of your Flood Risk Assessment. Further advice and guidance regarding Flood Risk Assessments can be found at <a href="https://www.pipernetworking.com">www.pipernetworking.com</a>

Yours sincerely







Environment Agency South East Thames Area Frimley Business Park Frimley GU16 7SQ

Please note that this is NOT a copy of the

Node Locations and Modelled Extents from the Lower Thames Detailed Mapping

Map created: March 2009



# Legend

- Node Locations
- Detailed 1 in 5 year extent Main River
- Detailed 1 in 20 year extent
- Detailed 1 in 100 + 20% extent Detailed 1 in 100 year extent

# Notice for the supply of Environment Agency information (Standard Notice - Commercial)

2009

- 1. Nothing in this notice will in any way restrict your statutory or any other rights of access to the Information. If you wish to do anything in excess of those rights you may do so in accordance with the following paragraphs only if you agree to all the terms.
- 2. All intellectual property rights in the documents, data or information supplied to you (referred to as "the Information") whether owned by the Environment Agency (referred to as "Agency information") or third parties (referred to as "Third Party information") will continue to be owned by them.
- 3. The information has not been prepared to meet your or an**y**one else's individual requirements. It is your responsibility to ensure that the Information meets your needs.
- 4. The Environment Agency cannot ensure and therefore gives no promise that the Information in its possession will always be accurate, complete, up to date or valid.
- 5. The Environment Agency will take reasonable precautions to ensure that we provide you with an accurate copy of the Information from our records.
- 6. If we have specified that you must pay us for supply of the Information you must pay us before we respond to your request. You will only be able to cancel and request your fee back up to the point when we start work on providing the requested information.
- 7. If you have asked for the Information to be supplied in an electronic format we cannot guarantee that either the disk or the data file is free of any defects and you should check it for viruses and other items that may affect your computer.
- 8. Use of Third Party information, including copying, must be limited to statutory rights. This generally means that you will need to seek permission to copy. Third Party information may include information from our public registers, which has been supplied to us by a third party, for example the Information provided in an application form.

# Permitted use of Agency information

- 9. As you have paid us our costs to supply and our internal commercial usage charge (currently £10) you may take unlimited copies of Agency information (exactly as it is) for the internal purposes of your business (commercial internal limited use), provided that:
  - a) you ensure that all copies are attributed to the Environment Agency;
  - b) you do not amend or alter the Information, or merge it with other information;
  - c) you do not supply the Information (or any information derived from, or based on the use of it) to others.
- 10. If you are a professional advisor and you have paid us our costs to supply and internal commercial usage charge (currently £10) you may in addition to the rights in paragraph 9, give copies of Agency information (exactly as it is) to your client and any other person who reasonably requires a copy (limited professional use), provided that:
  - a) any copies you send are in connection with the specific transaction or matter for which you obtained the Information from the Environment Agency;
  - b) you make no charge for supplying the Information other than for your actual costs and time incurred (to include the costs you have paid to us):
  - c) you attach a copy of this notice and require all recipients to comply with it.

Recipients of information under this paragraph do not need to pay any additional fee as long as they use the Information exactly as it is, internally and only for the same specific transaction or matter.

11. Please contact us if you need permission for any other use.

It is important that you also read any additional information or warning we give you about specific information.

69\_07\_SD02, version 2 Contact: enquiries@environment-agency.gov.uk 08708 506506





Katherine Waters
Peter Brett Associates
Caversham Bridge House
Waterman Place
Reading
Berks
RG1 8DN

### Thames Water Utilities Ltd

Your ref No Ref MDP/DQT

Name Mandy Davey-Patton Phone 0118 3738510 Fax 0118 923 6655/57

13<sup>th</sup> March 2009

# Park House, Station Rd, Teddington

Dear Sir or Madam

I refer to your letter, requesting information in relation to sewer flooding for the above area. The records held by Thames Water indicate there have been no incidents of flooding as a result of surcharging of public sewers in the vicinity of the above.

Although Thames Water does not have records of public sewer flooding within the vicinity, please be aware that property owners are not legally obliged to report this flooding to Thames Water. In addition flooding from private sewers, watercourses and highways drains are not the responsibility of Thames Water, and such incidents may not be noted in our records. We therefore strongly advise you to contact the current owners and occupiers of the premises and inquire about sewer flooding.

You should also note that sewer surcharging is directly affected by duration and intensity of rainfall. Future changes in rainfall patterns might therefore lead to increased surcharging of sewers, which might not be reflected in our records of previous sewer flooding events.

Yours faithfully

Mandy Davey-Patton
Data Quality Team

Thames Water Utilities Ltd

Reading Mailroom Reading Bridge House Reading Bridge Reading RG1 8PR

Registered in England and Wales No. 2366661, Registered office Clearwater Court, Vastern Road, Reading RG1 8DB

## Page 1 of 2

### Katherine Waters

From: Andrea Kitzberger [Andrea.Kitzberger@richmond.gov.uk]

Sent: 12 March 2009 12:32

To: Katherine Waters

Subject: your ref: 22500/CBH/BM/RMF/KFW - Info for FRA Park House, Teddington

Dear Ms Waters

Thank you for your letter dated 9 March 2009 requesting information for a Flood Risk Assessment (FRA) for Park House, Station Road, Teddington.

### Strategic Flood Risk Assessment

I can confirm that a Strategic Flood Risk Assessment (SFRA) (June 2008) has been produced for the entire Borough of Richmond. The SFRA is available online and the report as well as the accompanying maps can be downloaded via the following link:

http://www.richmond.gov.uk/home/environment/planning/planning\_guidance\_and\_policies/local\_development\_framewor

I can provide you the following information regarding details of the planning policy relating to flood risk and surface wate drainage / SUDS:

### **Unitary Development Plan**

The following policies from the Unitary Development Plan (UDP) (Adopted 1 March 2005) are relevant:

ENV 34 – Protection of the Floodplain and Urban Washlands

ENV 35 - Surface Water Run-off

The details of the above UDP policies are on our website and can be viewed via the following link: <a href="http://www.cartoplus.co.uk/richmond/text/05">http://www.cartoplus.co.uk/richmond/text/05</a> env open env.htm

### **Core Strategy**

In addition, the Borough has prepared a Core Strategy, which was submitted to Government on 20 March 2008. The Inspector has now reported on the Examination into the Core Strategy and it has been found sound. We are currently in the process of adopting the Core Strategy; the official adoption date will be 21 April 2009. Further information on the Core Strategy and the Inspector's Report can be found on:

http://www.richmond.gov.uk/home/environment/planning\_guidance\_and\_policies/local\_development\_framewor

The Core Strategy submission document is the following: http://www.richmond.gov.uk/core\_strategy\_submission\_version\_for\_print\_final.pdf

The Council proposed some pre-examination changes to the Core Strategy, which can be viewed via the following link: <a href="http://www.richmond.gov.uk/final\_version\_consolidated\_changes\_sept\_2008\_consult.pdf">http://www.richmond.gov.uk/final\_version\_consolidated\_changes\_sept\_2008\_consult.pdf</a>

The relevant policy of the Core Strategy with regard to flood risk and surface water drainage is the following, however, please note that this is still DRAFT:

CP3 Climate Change - Adapting to the Effects

This DRAFT version of the Core Strategy and the policy CP3 can be accessed via the following link (policy CP3 can be found on page 56):

http://www.richmond.gov.uk/core\_strategy\_submission\_version\_with\_propose-3.pdf

I hope the above is of assistance to you.

If you have any queries or would like to have further information, please do not hesitate to contact me.

Kind regards

Andrea Kitzberger Planning Policy Officer

15/05/2009

Page 1 of 2

### Katherine Waters

From: Andrea Kitzberger [Andrea.Kitzberger@richmond.gov.uk]

Sent: 19 March 2009 16:17
To: Katherine Waters

Subject: FW: your ref: 22500/CBH/BM/RMF/KFW - Info for FRA Park House, Teddington

### Dear Ms Waters

Further to my previous email regarding information for a Flood Risk Assessment (FRA) for Park House, Station Road, Teddington, I would like to add that all records we have are contained within the Strategic Flood Risk Assessment (see below). For information, the SFRA considered and collated all known sources of flooding that may affect existing and/or future development within the Borough.

### Kind regards

### Andrea Kitzberger Planning Policy Officer

London Borough of Richmond upon Thames Second Floor | Civic Centre | 44 York Street | Twickenham | TW1 3BZ

Tel: 020 8891 7364 | Fax: 020 8891 7347

Email: Andrea.Kitzberger@richmond.gov.uk | www.richmond.gov.uk

Reduce your environmental footprint... think before you print!

From: Andrea Kitzberger Sent: 12 March 2009 12:32

To: 'kwaters@pba.co.uk'
Subject: your ref: 22500/CBH/BM/RMF/KFW - Info for FRA Park House, Teddington

Dear Ms Waters

Thank you for your letter dated 9 March 2009 requesting information for a Flood Risk Assessment (FRA) for Park House, Station Road, Teddington.

### Strategic Flood Risk Assessment

I can confirm that a Strategic Flood Risk Assessment (SFRA) (June 2008) has been produced for the entire Borough of Richmond. The SFRA is available online and the report as well as the accompanying maps can be downloaded via the following link:

http://www.richmond.gov.uk/home/environment/planning\_guidance\_and\_policies/local\_development\_framework/local\_development\_framework research/flood\_ris

I can provide you the following information regarding details of the planning policy relating to flood risk and surface water drainage / SUDS:

### **Unitary Development Plan**

The following policies from the Unitary Development Plan (UDP) (Adopted 1 March 2005) are relevant:

ENV 34 - Protection of the Floodplain and Urban Washlands

ENV 35 - Surface Water Run-off

The details of the above UDP policies are on our website and can be viewed via the following link:

http://www.cartoplus.co.uk/richmond/text/05\_env\_open\_env.htm

### Core Strategy

In addition, the Borough has prepared a Core Strategy, which was submitted to Government on 20 March 2008. The Inspector has now reported on the Examination into the Core Strategy and it has been found sound. We are currently in the process of adopting the Core Strategy; the official adoption date will be 21 April 2009. Further information on the Core Strategy and the Inspector's Report can be found on:

 $http://www.richmond.gov.uk/home/environment/planning\_guidance\_and\_policies/local\_development\_framework/local\_dev$ 

The Core Strategy submission document is the following:

http://www.richmond.gov.uk/core\_strategy\_submission\_version\_for\_print\_final.pdf

The Council proposed some pre-examination changes to the Core Strategy, which can be viewed via the following link:

http://www.richmond.gov.uk/final\_version\_consolidated\_changes\_sept\_2008\_consult.pdf

The relevant policy of the Core Strategy with regard to flood risk and surface water drainage is the following, however, please note that this is still DRAFT:

CP3 Climate Change - Adapting to the Effects

This DRAFT version of the Core Strategy and the policy CP3 can be accessed via the following link (policy CP3 can be found on page 56): <a href="http://www.richmond.gov.uk/core\_strategy\_submission\_version\_with\_propose-3.pdf">http://www.richmond.gov.uk/core\_strategy\_submission\_version\_with\_propose-3.pdf</a>

I hope the above is of assistance to you.

If you have any queries or would like to have further information, please do not hesitate to contact me.

Kind regards

### Andrea Kitzberger Planning Policy Officer

London Borough of Richmond upon Thames Second Floor | Civic Centre | 44 York Street | Twickenham | TW1 3BZ

Reduce your environmental footprint... think before you print!

Tel: 020 8891 7364 | Fax: 020 8891 7347

Email: Andrea.Kitzberger@richmond.gov.uk | www.richmond.gov.uk

