

BARNARD & ASSOCIATES Ltd.
Consulting Civil & Structural Engineers
18 Northfields Prospect
Northfields
London SW18 1PE
☎ 0208 874 9005 Fax 0208 870 7386
Email barnard@intonet.co.uk



Environment Agency
(External Relations)
Swift House
Frimley Business Park
Frimley
Surrey
GU16 7SN

Date: 30th April 2008

By email: thnortheast@environment-agency.gov.uk
No original in post

Our Ref: ea300408a

Job No: 04086
(Please quote our job number on all correspondence)

For the attention of Michelle Robbins

Dear Ms Robbins

Re: 37 Hamilton Road, Twickenham

Thank you very much for your letter to us dated 28 April 2008 enclosing information relating to the latest flood modelling available for the river crane in the vicinity of the above site.

Our client is currently considering development proposals at the above site and we are formerly writing to request guidance regarding the agreed flood zone into which the site falls.

We would be grateful if you could forward to this letter and the enclosures to your development control colleagues and we would also be grateful if they could provide a response as to whether our interpretation of the information is acceptable.

1. We attach a copy of your flood model map, and flood plain map, with the site highlighted in red.
2. We also attach a copy of the topographical survey of the site providing spot levels across the site.

Continued

Directors: T J Barnard BScHons CEng MStructE M P Duckett IEng AMStructE
Associates: D A Purcell IEng AMStructE M Leon BScHons

Registered Address: 5 Underwood Street London, N1 7LY
Registered in England No. 3173850



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3. We note that the River Crane crosses the railway tracks to the west of the development site so that it falls on the north side of the existing railway line from node C533 downstream. We note that this node relates to a step change in water level, probably a weir structure.
4. We note that there are a number of similar wier structures along the length of the river, both upstream and downstream of the site.
5. We note that the railway track level adjacent to the development site is noted as being 9.9m AOD, so that the track bed level will be approximately 200 mm below this level.
6. We therefore note that the railway track will provide a natural flood barrier between the River Crane to the north side of the railway, and the development site. (The river levels at nodes C532u to C524, have a 1 in 100 year plus 20% allowance for climate change water level of 9.267 down to 7.968 respectively. The highest water level will therefore be approximately 500 mm or more below the track level on the northside of the railway).

For the 1 in 1000 year event, the levels from nodes C532u to C524, have a water level of 9.433 down to 8.14 respectively, all well below the track bed level.

We therefore assume that flood water will not be able to enter the development site from the River Crane to the north side of the railway.

7. We therefore believe that the water level relevant to the site is that noted at node C535, on the high side of the step change feature as the river passes under the railway line to the west of the site. The 1 in 100 year level plus 20% allowance for climate change relative to the development site will therefore be 9.628m AOD).
8. On this basis, and comparing spot levels on the attached site topographical survey drawing, the site levels all fall above a level of 9.7m AOD, with the majority of levels falling above the 1 in 1000 year event level for node C535 of 9.854m AOD.
9. We therefore conclude that the site is situated above the flood plain level and falls mostly into flood zone 1 and marginally into flood zone 2.
10. No part of the site falls within flood zone 3 based on the levels given above.

Continued



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11. It is intended to develop a scheme for the refurbishment of the existing buildings on the site, some of which have limited headroom. It is therefore very important to agree minimum finished floor levels for the refurbishment of the existing buildings as a raising of floor levels will compromise available headroom.

Can you please therefore consider the following alternative approaches to the question of the setting of finished floor levels for any new refurbishment development:-

- a) Is it reasonable to assume that water levels generated at node C535 are to be used when assessing flood levels for the site?
- b) Noting that all site levels at 37 Hamilton Road (taken from a detailed topographical survey of the site) fall above the 1 in 100 year plus 20% allowance for climate change level at node C535, of 9.628m AOD, can all floor levels within the development remain as existing (water will not enter the site under the 1 in 100 year plus 20% allowance for climate change event).
- c) Alternatively, will the EA take the view that a 300mm freeboard should be added to the 1 in 100 year plus 20% level when setting new finished floor levels, even if the site levels all fall above a level of 9.628m AOD.
- d) Will the EA require a Flood Risk Assessment (FRA) to accompany redevelopment proposals put forward in any forthcoming planning application?

We look forward to hearing from you.

Should you have any queries or wish to discuss any of the above or enclosed then please do not hesitate to contact us using the job number reference at the top of this letter.

Yours sincerely

A handwritten signature in black ink, consisting of a large, sweeping loop followed by a vertical line and a short horizontal stroke.

Mr T J Barnard

Encs as noted above

Cc: Mr Matthew Rockel

FML

By email

Please visit our website at www.ba-engineers.com for examples of projects undertaken

Our ref: NE16917JM

Date: 12 May 2008

Dear Mr Barnard

Enquiry regarding 37 Hamilton Road, Twickenham

Thank you for your enquiry.

As the site falls within Flood Zone 3, at planning application stage a Flood Risk Assessment (FRA) will be required. Please refer to www.pipernetworking.com for further information.

Modelling has recently been undertaken on the Crane catchment and we would recommend you use the node levels provided to establish the flood extent on site as part of your FRA. Many of the points you have raised are assumptions or evaluations which should be presented as part of the FRA for the development. We are unable to comment further on this at this stage.

Should you wish for us to provide comment on your FRA prior to formal submission of the planning application, please send this to our Planning Liaison team at planning.se@environment-agency.gov.uk.

Finished floor levels should be set at a minimum of 300mm above the 1 in 100 year level, accounting for climate change.

If I can be of any further help, please contact me.

Yours sincerely

Jennie Marshall

External Relations Officer

Direct dial 01707 632 301

Direct fax 01707 632 610

Direct email thnortheast@environment-agency.gov.uk