

TECHNICAL NOTE

Job Name: Tollgate Road, Colney Heath
Job No: 332510999
Note No: TN001
Date: 24 January 2023
Prepared By: Åsa Söderberg
Subject: **Response to Resident Objection, dated 16 and 17 January 2023 (planning application reference 5/2022/1988)**

1. Introduction

On behalf of Vistry Group, Stantec UK Limited has prepared this rebuttal in response to an objection received from a local resident in relation to flood risk. The following correspondence refers to this matter:

- Email from Mr Rob Ellis of 84 Tollgate Road, dated 16 January 2023 @ 08:53 to Vistry
- Email from Mr Rob Ellis of 84 Tollgate Road, dated 17 January 2023 @ 11:38 to Vistry
- Email from Mr Rob Ellis of 84 Tollgate Road, dated 17 January 2023 @ 11:41 to Ms Cooper (MP)

The objections raised suggest the Flood Risk Assessment (FRA) fails to consider all sources of flood risk as well as failing to consider an underground stream that crosses the site.

2. Response to objection

In section 5 of the FRA, flood risk from all sources of flooding have been considered such as flood risk from main rivers (fluvial), surface water (pluvial), groundwater, reservoirs and sewers as well as considering historic flood risk. The flood risk referred to within the email correspondence listed in paragraph 1 above, is addressed in section 5.3.4 and 5.3.5 in the FRA confirming there is a surface water flow path identified on the surface water flood map, see figure 1 below. The conclusion within the FRA is that the surface water flood risk is due to ponding of surface water runoff due to localised low spots.

Figure 1 – Surface water flood risk



DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed (Discipline Lead)	Approved (Project Director)
332510999/TN001	-	24.01.23	ACS	OB	ACS	RH

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TECHNICAL NOTE

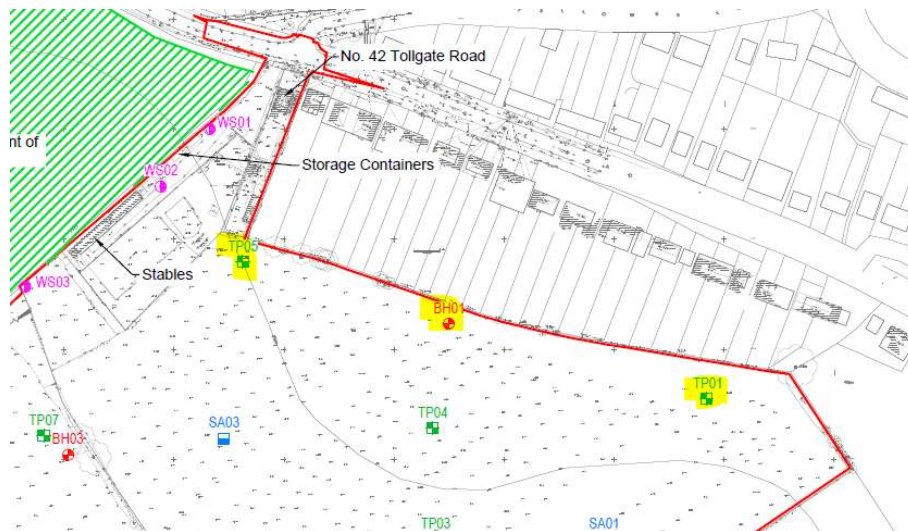
The underground/subterranean stream referred to in the email correspondence is in all likelihood referencing a sub surface chalk stream within the main aquifer. The ephemeral nature of chalk streams in Herts and surrounds is related to ground water levels in the Chalk Aquifer beneath, rising to the point where they appear above ground when incident rainfall is sufficient to recharge the aquifers to that level.

Based on the photos provided, it is suspected that there is local ponding of water in a depression in the surface of the site in clay rich Kesgrave Group geology or potentially within granular Kesgrave Group deposits where the groundwater is unable to drain due to surrounding cohesive/ relatively impermeable geology. The natural drainage of the area may well concentrate within these local depressions which may even form a longitudinal feature, depending on the topography locally this may even induce a flow in particularly heavy rainfall events.

The geology present at the site is not typical of where underground/ subterranean river – or ‘winterbourne rivers’ as they are sometimes referred – would form. The geological sequence along that northern boundary (BH01, TP01 and TP05, see location plan in Figure 2 below) indicates the presence of the following sequence:

- BH01 Kesgrave Sub Group – gravel dominated (1.3m thick) over clay dominated Kesgrave (3.1m thick) over Diamicton Till
- TP01 Kesgrave Clay (0.55m thick) kesgrave sand (1.65m) over Kesgrave Clay (unproven depth)
- TP05 Kesgrave Sand (1.45m) over Kesgrave sandy clay (unproven depth)

Figure 2 – Borehole and trial pit locations



The location of the borehole and trial pits coincide with the area shown in Figure 1 shown to be at risk of surface water flooding.

In even lightly wet weather, surface water could easily pool in a shallow topographical depression such as this and realistically has nowhere to go until it can roll downhill or permeate into the sub ground.

On inspection of the historical mapping resources there is nothing to describe an issue, spring or winterbourne river in this area.

TECHNICAL NOTE

The subterranean stream locations identified in the local vicinity do indeed appear to be related to chalk outcrops which is to be expected, however these conditions do not exist within this site.

What appears to have been photographed is a low spot/minor depression in the local topography in a clay rich soil which drains very slowly. Most likely an artefact from the grading works involved on the housing plot builds when they were constructed in the 1930's.

3. Conclusion

Based on the above the FRA supporting this planning application is shown to be assessing flood risk from all sources of flooding and has been prepared in accordance with the fundamental objectives of the National Planning Policy Framework (NPPF) and local planning policy. Which demonstrates that:

- The development is safe
- The development does not increase flood risk; and
- The development does not detrimentally affect third parties.

TECHNICAL NOTE

Appendix A

- Email from Mr Rob Ellis of 84 Tollgate Road, dated 16 January 2023 @ 08:53 to Vistry
- Email from Mr Rob Ellis of 84 Tollgate Road, dated 17 January 2023 @ 11:38 to Vistry
- Email from Mr Rob Ellis of 84 Tollgate Road, dated 17 January 2023 @ 11:41 to Ms Cooper (MP)

From: Rob & Penny <robpenny@talktalk.net>
Sent: 16 January 2023 08:53
To: Strategic Land
Cc: Lynn Skelt; George.Burges@stalbans.gov.uk
Subject: Planning Ref 5/2022/1988 - land to rear & South of Tollgate Road AL4 0PY

NOTE: Email originated outside of Vistry Group.

F. A. O. Mr. Greg Fitzgerald

Dear Mr. Fitzgerald,

I have recently made comment to St.Albans District Council planning office regarding an underground stream that traverses the area of land that is the subject of this application by Vistry to build 150 houses. The stream runs from East to west adjacent to the Northern site boundary. A visible depression in the ground along the Northern boundary is indicative of the stream below.

Your unrepresentative flood risk assessment was undertaken in the summer and concentrated of the River Colne but ignored the very real and regular risk of flooding from this stream that at the time of the FRA survey was not visible on the surface. The attached photographs were taken recently after light rainfall and illustrates two areas of flooding. During heavy and prolonged rainfall the Northern boundary floods extensively to a depth of about 300mm.

My telephone number is 01727 822888 should you wish to discuss this in more detail and allow me to provide further information.

Sincerely

Rob Ellis - 84 Tollgate Road



From: Rob & Penny <robpenny@talktalk.net>
Sent: 17 January 2023 11:38
To: Strategic Land
Cc: George.Burges@stalbans.gov.uk; Lynn Skelt
Subject: 5/2022/1988 Land behind and South of Tollgate Road

NOTE: Email originated outside of Vistry Group.

F. A. O Mr. Gerald Fitzgerald

Dear Mr. Fitzgerald.

Following on from my earlier email, the question around the historic underground stream that runs along the Northern boundary of your proposed development site has gained momentum and I would like to update you as to recent considerations.

I am copying in Mr. George Burgess At SADC with this email in the hope that he will now consider the flood risk assessment included in your planning application as being inadequate or incomplete as it failed to consider the regular and extensive flooding of the Northern part of the site due to the historic underground stream regularly flooding above ground. I trust that Mr. Burgess will involve The Environment Agency and any other responsible or interested parties.

Dr. Haydon Bailey, Chairman of The Geological Society of Hertfordshire advises that a subterranean streamflow survey would be necessary to confirm that the underground stream is an ancient watercourse but that given the geology and routing of the River Colne this is entirely feasible. By including the planning officer in this email I suggest that Mr. Burgess requests that Vistry arrange to undertake the survey that has recommended before any further thought is given to this planning application.

Regards

Rob Ellis

From: Rob & Penny <robnpenny@talktalk.net>
Sent: 17 January 2023 11:41
To: daisy.cooper.mp@parliament.uk
Cc: George.Burges@stalbans.gov.uk; Strategic Land; Lynn Skelt
Subject: The field behind and to The South of Tollgate Road, Colney Heath AL4 0PY

NOTE: Email originated outside of Vistry Group.

Dear Ms Cooper

The field noted above is one of five currently proposed as being a suitable site for the mass of unsustainable over development of the village of Colney Heath. Whilst I understand that you cannot become involved in planning matters there is a related issue that falls very much in your remit.

There is an historic underground stream that traverses East to West across this proposed development, this stream runs along the Northern boundary, the gardens to the houses on the South side of Tollgate Road vary in length to run along side this stream. The stream is indicated by a depression in the ground and in periods of even moderate rainfall the area floods sometimes up to 300mm in depth.

Dr. Haydon Bailey, Chairman of The Geological Society of Hertfordshire advises that a subterranean streamflow survey would be necessary to confirm that the underground stream is an ancient watercourse but that given the geology and routing of the River Colne it is entirely feasible. I have suggested to both the developer and The Planning Officer that such a survey is undertaken before any further thought is given to this application.

There are two issues to be aware of, firstly that the Flood risk assessment included in the planning application only considered the River Colne to the Southend end of the field and not this area that regularly floods and secondly and rerouting of or any interference through construction must be conditioned against should the council, despite nearly 400 valid objections, be minded to take the indefensible decision to approve the application.

I look forward to your confirmation that you are able to ensure the necessary protection of this ancient watercourse.

Yours sincerely

Rob Ellis
84 Tollgate Road