



H Fraser  
CONSULTING  
CONTAMINATED LAND  
AND HYDROGEOLOGY

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Our ref: 30422TRDC001 300421

Dear Claire

**RE: MAPLE LODGE DEVELOPMENT REF 21/0573/FUL**

I write in response to letters to yourself from Hertfordshire Ecology (13/04/2021) and the Maple Lodge Conservation Society (18 April 2021). We are the authors of the DQRA report submitted in support of the planning application. Our work also fed into the Piling Method Statement and Risk Assessment submitted with the planning application, authored by Tier, and we were closely involved with the development of this document.

**Hertfordshire Ecology (HE) 13/04/2021**

My comments are in regard to paragraphs 4.1, 4.2 and 4.3 of this letter, which pertain to the dependence of the Maple Lodge Nature Reserve on groundwater. HE is concerned that the long-term impacts arising from changes in groundwater flow are sufficiently understood to demonstrate that the groundwater flow reaching the reserve is not reduced or otherwise unacceptably affected by the proposals.

The DQRA report presents groundwater contours which show that groundwater flow was consistently towards the southwest from the site, indicating a discharge to the stream on the western boundary. The DQRA concluded that any groundwater diverted from its original pathway through the site will very readily flow around the piled zone and resume a similar course, due to the very high permeability of the shallow aquifer. The available evidence shows there will not be a significant change of water flow volumes from the site to the Maple Lodge Nature Reserve as a result of the piling.

**Maple Lodge Conservation Society (MLCS) 18<sup>th</sup> April 2021**

MLCS present photographs of water standing in excavations at the site, and conclude firstly that this is groundwater, and secondly that because groundwater supports the Maple Lodge Nature Reserve, a Water Framework Directive Assessment is required.

Our view is that the very high groundwater levels observed on the east of the site are linked to the surface water flooding in the road; during the winter months parts of the site were also flooded. Groundwater levels in the west of the site, near the stream, were lower. It is also noted that contractors on site have been watering down to reduce airborne dust; it is not known whether this may have contributed to the standing water observed but it is a possibility.





We acknowledge that there is a relatively shallow groundwater table in the shallow aquifer at the site, and that groundwater flow through the aquifer to the Maple Lodge Nature Reserve is a component of the water supply to the reserve. The DQRA submitted in support of the planning application confirms that impacts on groundwater flow and quality will be negligible, and we can therefore be confident that groundwater related impacts to the nature reserve will also be negligible. Any diversion in groundwater flow around the piling zone on the site will readily resume a similar course due to the high permeability of the shallow aquifer, and the net flow to the nature reserve will not be affected.

A WFD assessment is not necessary for this development. Such assessments are undertaken where works directly within or adjacent to a channel are likely to affect flows, and are not relevant here, where there is no direct work occurring in the channel itself.

Yours sincerely

**Hannah Fraser**  
**Director**