Stephen Buss Environmental Consulting

Nicola Pettifer 15 August 2025

Horsham District Council

Albery House

Springfield Road

Horsham RH12 2GB

DC/25/0102 - Campsfield, Southwater (committee deferral)

Dear Nicola

I am writing on behalf of the applicant for the above development. As a hydrogeologist I wrote the hydrogeological impact assessment for the Campsfield boreholes, and also for the abstractions at Horsham Golf and Fitness development (DC/23/1178).

I understand that application DC/25/0102 was deferred at committee due to questions over the source of groundwater to the Campsfield site, and a concern whether the Horsham Golf and Fitness abstraction would capture some of the water heading to Campsfield.

This is not the case, because the boreholes draw water from two different aquifers (an aquifer is a layer of rock underground that provides water).

GEOLOGICAL STRUCTURE

The geological sequence beneath Southwater comprises the Weald Clay Formation, overlying the Upper Tunbridge Wells Sand Formation. A schematic description is shown in Figure 1, which is clipped from the British Geological Survey map sheet 302 (Horsham). Between Horsham and Southwater the geological layers get deeper ('dip') gently southwards.

The Tunbridge Wells Sand is at ground surface across Horsham but, south of the River Arun the higher ground is formed by Weald Clay that overlies the Tunbridge Wells Sand. At the Horsham Golf and Fitness development, about 1.6 km south of Horsham, the top of the Tunbridge Wells Sand is at about 50 m depth (as observed whilst drilling the boreholes). The boreholes are between 75 and 100 m deep so they take groundwater from the Tunbridge Wells Sand aquifer.

The Campsfield boreholes are about 5.2 km south of Horsham so the Tunbridge Wells Sand is much deeper here. At a very deep exploration borehole just east of Southwater (BGS reference TQ12NE94), the top of the Tunbridge Wells Sand was identified at a depth of about 160 m. Since the Campsfield boreholes are only 100 m deep they do not reach the Tunbridge Wells Sand. i.e. groundwater is drawn from layers within the Weald Clay.

A schematic cross-section is drawn in Figure 2 that shows the vertical arrangement of aquifer layers southwards from Horsham. This makes it clear how the Tunbridge Wells Sand passes beneath the base of the Campsfield boreholes.

WATER SOURCES

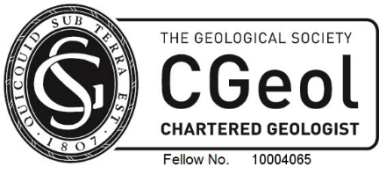
Boreholes in the Tunbridge Wells Sand aquifer are most likely to ultimately source their water from the area around Horsham, where the aquifer is exposed at the ground surface. Rainwater that percolates through gardens, parks and the outlying agricultural land recharges the water table in the aquifer, and moves southwards to the boreholes.

Because the Campsfield boreholes have not been constructed into the Tunbridge Wells Sand they have no connectivity with the water recharged beneath Horsham and so have a much more local source: the gardens, parks and fields around Southwater.

CONCLUSION

Regarding the main question, there is no risk of interference between the boreholes at Horsham Golf & Leisure and the boreholes at Campsfield. They take water from different geological layers and have different sources of water.

Yours sincerely



Dr Stephen Buss MA MSc FGS CGeol

Owner / Principal Hydrogeologist

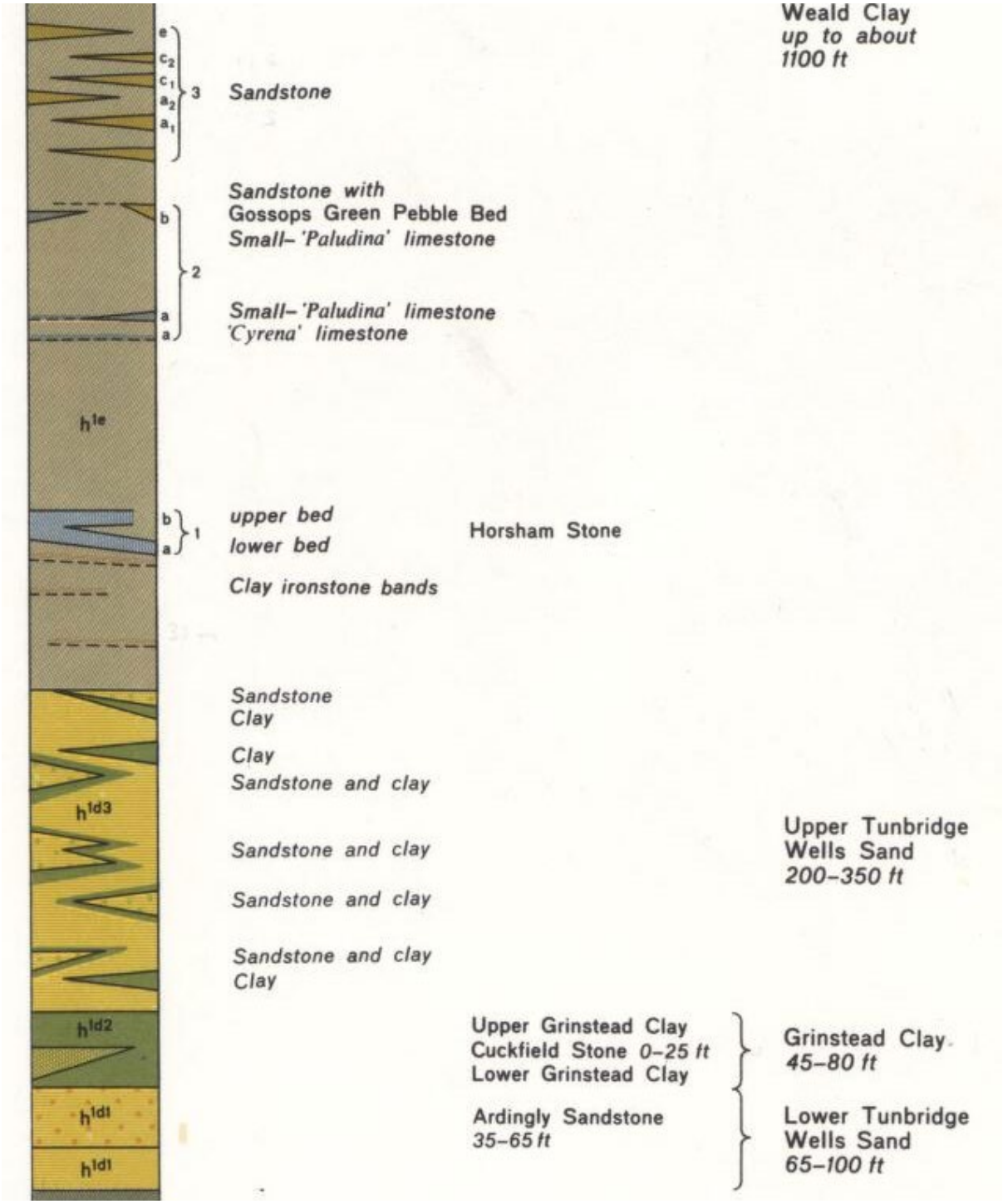


Figure 1: Schematic representation of geology beneath Southwater

https://largeimages.bgs.ac.uk/iip/mapsportal.html?id=1001794

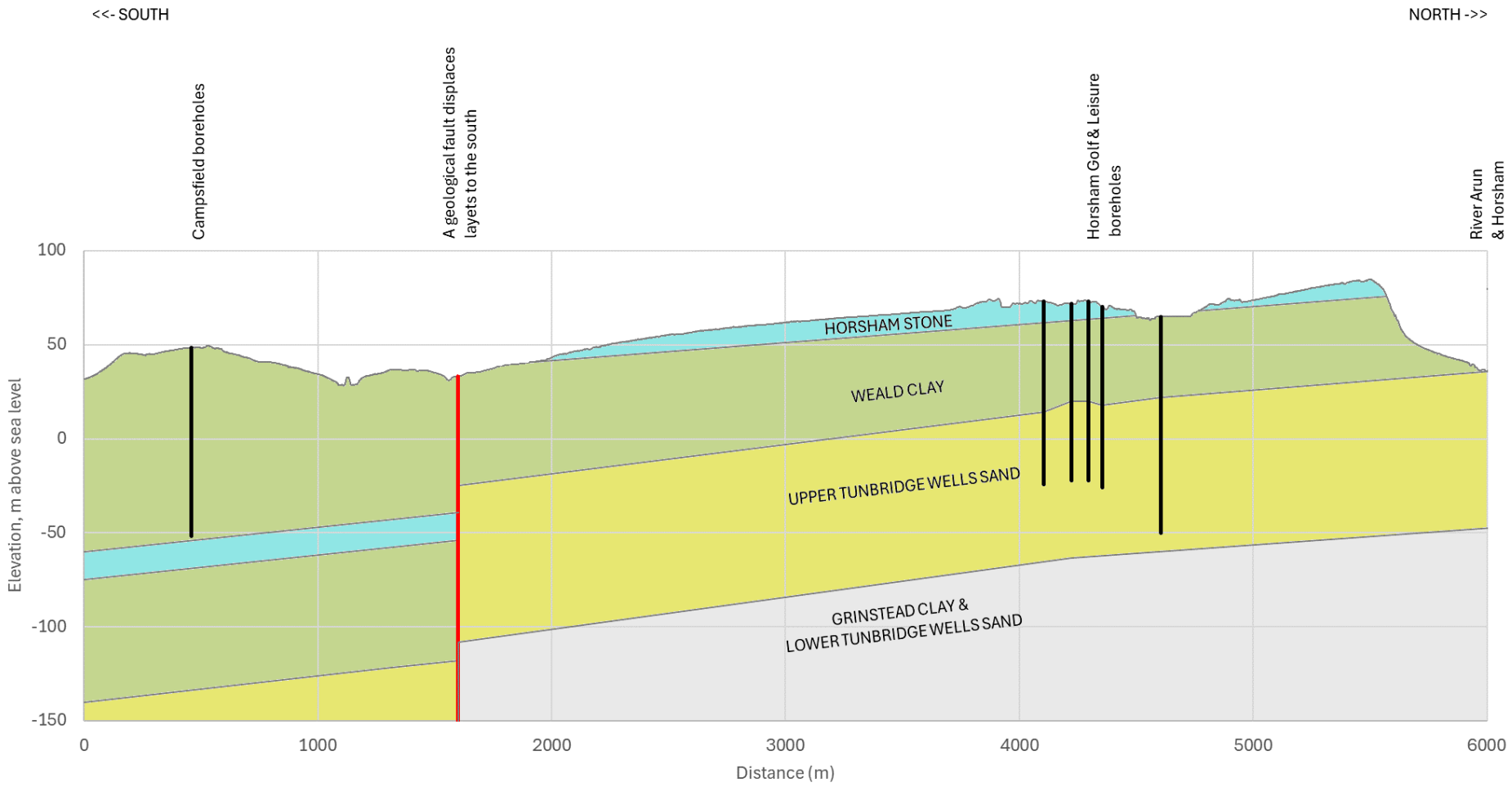


Figure 2: Geological section from Horsham to Campsfield

10 x vertical exaggeration