

5 September 2019

David Elmore
Senior Development Management Officer
Welwyn Hatfield Borough Council
The Campus
Welwyn Garden City
AL8 6AE

Dear David,

**PLANNING APPLICATION AT PLOT 5100, HATFIELD BUSINESS PARK
6/2019/1411/MAJ**

I write in response to the enclosed letter of objection from Affinity Water.

Having read the letter, the points raised are more areas of concern that they wish us to consider. We have set out below what we intend to do regarding the foundation construction and how the points 1-6 in the attached letter are covered by this.

We are aware of a bromate and bromide plume that is contaminating the chalk and lower gravel aquifer. Previous investigations have revealed this to be at around 16m below ground level (bgl), the deep site investigation borehole also seems to correlate with the Chalk being at this level.

For the reasons noted above we will be proposing the use of CFA piles – avoiding penetration into the aquifer at 16m. CFA piles are formed by drilling to the required depth using a hollow stem continuous flight auger. After reaching the designed depth, concrete is pumped through the hollow stem. While the concrete is being pumped, the auger is withdrawn at a controlled rate, removing the soil and forming a shaft of concrete extending to ground level. The method enables piles to be formed in water-bearing strata and does not allow cross contamination of underlying aquifers by contaminated upper soils. Also, particularly in our case and in reverse a shallower pile will not allow a pathway between the lower and upper aquifer. This is the method carried out on a number of other buildings completed on the Hatfield Business Park site.

1. Noted, British Standards and appropriate management practices will be followed during the construction works.
2. Noted, we will avoid penetration into the lower groundwater table using the CFA piling method noted above.
3. Noted, we will avoid creating a pathway by using the CFA piling method noted above.
4. Prior notification of the piling process starting on site can be given if required.
5. Surface water infiltration techniques will not be employed on this site. The storm water will be attenuated with peak flows restricted out to the wider drainage network. Our drainage plans reflect this.
6. No tanks or generators are proposed at present, but the secondary containment requirement is noted should these be introduced.

I would be grateful if you could add this response letter on to the application as an additional document. If you require any further information, please do not hesitate to contact me.

Yours sincerely,
For and on behalf of Arlington Business Parks GP Limited

Robin Moxon
Development and Planning Director

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Enc

Welwyn Hatfield Borough Council
The Campus,
Welwyn Garden City,
Herts.
AL8 6AE

Reference Number: 6/2019/1411/MAJ

4 July 2019

Dear Madam/Sir

DESCRIPTION: Erection of a multi-franchise car dealership (sui generis use) with offices (B1 use class), workshops (B2 use class) and car storage (B8 use class), together with car parking, cycle parking, boundary treatment, landscaping, lighting and access

LOCATION: Plot 5100 Mosquito Way Hatfield Business Park Hatfield AL10 9WN

Thank you for notification of the above planning application. Planning applications are referred to us where our input on issues relating to water quality or quantity may be required.

You should be aware that the proposed development site is located within an Environment Agency defined groundwater Source Protection Zone (SPZ) corresponding to Hatfield Pumping Station. This is a public water supply, comprising a number of Chalk abstraction boreholes, operated by Affinity Water Ltd.

We are writing to object to this Application because we are concerned, for the reasons set out below, that it has the potential to impact adversely the public water supply. If you are minded to approve the Application, it is essential these concerns are addressed.

1. The construction works and operation of the proposed development site should be done in accordance with the relevant British Standards and Best Management Practices, thereby significantly reducing the groundwater pollution risk. It should be noted that the construction works may exacerbate any existing pollution. If any pollution is found at the site then the appropriate monitoring and remediation methods will need to be undertaken.
2. Any works involving excavations below the chalk groundwater table (for example, piling or the implementation of a geothermal open/closed loop system) should be avoided. If these are necessary, a ground investigation should first be carried out to identify appropriate techniques and to avoid displacing any shallow contamination to a greater depth, which could impact the chalk aquifer.
3. There is risk for piling to create pathways between the upper gravel aquifer and chalk aquifer. These upper gravel aquifers may introduce further contamination such as Nitrates and Metaldehyde to the chalk aquifer which is already contaminated with bromate. Also additional water from the gravel aquifer to the chalk risks a change in the hydraulic gradient resulting in a change in the direction of the bromate plume.

4. Excavations are likely to generate turbidity in the chalk aquifer, which could travel to the public water abstraction point and cause disruption to the service. Mitigation measures should be secured by way of condition to minimise this risk. We would also want to receive at least 15 days prior notification from the developer in advance of any such works, in order to intensify our monitoring and plan potential interruption of the service. We would be willing to discuss this with the applicant to ensure that appropriate measures can be put in place.
5. Surface water should not be disposed of via direct infiltration into the ground via a soakaway. This is due the potential presence of contaminated land and the risk for contaminants to remobilise and cause groundwater pollution. This is also due to the likelihood of surface water from the car park and valet area to carry on oil and hydrocarbons.
6. If any tanks or generators are to be installed as part of the development, they will need to have secondary containment which can hold 110% of the volume the tank or generator is designed to contain. A form of leakage detection is also recommended. This would help prevent further pollution in the event of a spillage or leak.

For further information we refer you to CIRIA Publication C532 "Control of water pollution from construction - guidance for consultants and contractors".

Thank you for your consideration.

Yours sincerely

Laurence Chalk
Catchment Officer
Catchment Management

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