

Hillingdon Council
Civic Centre
High Street
Uxbridge
UB8 1UW

Reference Number: 2382/APP/2023/2906

21 December 2023

Dear Sir/Madam,

DESCRIPTION: Redevelopment of the site to create the Hillingdon Watersports Facility and Activity Centre including demolition of existing Broadwater Lake Sailing Club (BSC) clubhouse at the north of the lake and erection of a building and facilities to be occupied by HOAC and BSC

LOCATION: Broadwater Lake, Moorhall Road, Harefield

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 1 (SPZ1) corresponding to at least two of our Pumping Stations (BLAF). These are public water supply sources, comprising a number of Chalk abstraction boreholes, operated by Affinity Water Limited.

We require the below conditions to be implemented and continual engagement with Affinity Water, to demonstrate conditions have been fulfilled and that public water supply will not be impacted. We also require our informative regarding biodiversity at our neighbouring lakes be acknowledged.

Informative

Affinity Water own and manage neighbouring lakes for biodiversity, and we have concerns that the impact on Broadwater lake will have a knock-on effect to the other lakes which are part of the same habitat network. We ask for this to be continually assessed throughout further plans and development if the scheme is to progress.

Conditions to be implemented

Contamination through **Ground Works**:

If any works involving excavations are necessary, then the following condition needs to be implemented:

Condition 1

Prior to the commencement of the development, no works involving excavations (e.g. piling or the implementation of a geothermal open/closed loop system) shall be carried until the following has been submitted to and approved in writing by the Local Planning Authority in consultation with Affinity Water:

- A **Foundations Works Method Statement and Risk Assessment** detailing the **depth** and **type** of excavations (e.g. piling) to be undertaken including **mitigation measures** (e.g. turbidity monitoring, appropriate piling design, off site monitoring boreholes etc.) to prevent or minimise any potential migration of pollutants including turbidity or existing contaminants to public water supply. Any excavations must be undertaken in accordance with the terms of the approved method statement.
- A **Remediation Strategy/Report** will be required following the results of the submitted Phase II Geo-environmental Report which identified existing contamination on site. The remediation strategy shall be implemented as approved with a robust pre and post monitoring plan to determine its effectiveness.
- **Acknowledgement of the need to notify Affinity Water of excavation works 15 days before commencement** in order to implement enhanced monitoring at the public water supply abstractions and to plan for potential interruption of service with regards to water supply.
- **Carry out any piling works outside of the period June-August**, to ensure that if any interruption to public water supply occurs as a result of piling, this does not coincide with the peak demand period for water.

Reason: Excavation works such as piling have the potential to cause water quality failures, due to elevated concentrations of contaminants becoming displaced to a greater depths or the enhancement of aquifer connection to surface water and/or water present in the superficial deposits, where elevated concentration of certain compounds are present. Increased concentrations of contaminants, particularly turbidity or manganese, impact the ability to treat water for public water supply.

Contamination **during construction**:

Construction works may exacerbate any known or previously unidentified contamination. If any pollution is found at the site, then works should cease immediately and appropriate monitoring and remediation will need to be undertaken to avoid any impact on water quality in the Chalk aquifer.

Condition 2

If, during development, contamination not previously identified is found to be present at the site, then no further development shall be carried out until the following has been submitted to and approved in writing by the Local Planning Authority, in consultation with Affinity Water:

- A **Remediation Strategy/Report** detailing how contamination will be dealt with. The remediation strategy shall be implemented as approved with a robust pre and post monitoring plan, to determine its effectiveness.

Reason: To ensure that the development does not contribute to unacceptable concentrations of pollution posing a risk to public water supply from previously unidentified contamination sources at the development site and to prevent deterioration of groundwater and/or surface water.

Contamination through **Surface Water Drainage:**

Surface water drainage should use appropriate Sustainable Urban Drainage Systems as highlighted in the Environmental Statement, to prevent the mobilisation of any contaminants where a direct pathway to the aquifer is present. This should use appropriate techniques that prevent **direct pathways** into the aquifer and that ensure sufficient **capacity** is provided for all surface water to be dealt with on site, preventing consequential flooding elsewhere.

Condition 3

Prior to the commencement of development, no works shall be carried out until the following has been submitted to and approved in writing by the Local Planning Authority in consultation with Affinity Water:

- A **Final Surface Water Drainage Scheme** demonstrating appropriate use of sustainable urban drainage systems that prevent the mobilisation of any contaminants ensuring protection of both surface and groundwater and does not include infiltration within any areas of contamination.

Reason: Surface water drainage can mobilise contaminants into the aquifer through infiltration in areas impacted by ground contamination. Surface water also has the potential to become contaminated and can enter the aquifer through open pathways, either created for drainage or moved towards existing open pathways where existing drainage has reached capacity. All have the potential to impact public water supply.

Contamination through **Substance Storage:**

If any tanks, generators and filling areas 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. These should also have a leak detection system, and a procedure should be adopted that includes directly notifying Affinity Water along with the Environment Agency immediately if any leak is suspected.

Condition 4

Prior to the commencement of development, no works shall be carried out until the following has been submitted to and approved in writing by the Local Planning Authority in consultation with Affinity Water:

- A **Construction Environmental Management Plan** which provides details of all substance storage and leak prevention and detection systems as highlighted in the Outline Construction Environmental Management Plan that has been submitted as part of the application. The Construction Environmental Management Plan should also detail a methodology in the event of a spill that includes immediate notification will be sent to Affinity Water and the Environment Agency

Reason: To prevent contaminants being discharged into the surface and groundwater network in the event of a spill and to enable Affinity Water and the Environment Agency to immediately assess the impact on public water supply and implement protection measures if necessary.

Contamination through **Dredging**:

The proposed dredging activity has the potential to change the current connectivity between the lake and Chalk groundwater, along with the additional turbidity risk both to Chalk groundwater and the lake.

Condition 5

Prior to the commencement of development, no works shall be carried out until the following has been submitted to and approved in writing by the Local Planning Authority in consultation with Affinity Water:

- A **Dredging Method Statement** that includes an understanding of the maximum depth of the dredging and the areas within the lake for which dredging will be undertaken.

Reason: To ensure that dredging is not unnecessarily over deepening or enhancing connectivity between the lake/superficial deposits and underlying Chalk aquifer.

Condition 6

Prior to demolition of the existing sailing club an understanding of any historic contamination at the site will be required. Demolition works may exacerbate any known or previously unidentified contamination. If any pollution is found at the site, then works should cease immediately and appropriate monitoring and remediation will need to be undertaken to avoid any impact on water quality in the Chalk aquifer:

- An **Intrusive Ground Investigation** to identify the current state of the site and appropriate techniques to avoid displacing any shallow contamination to a greater depth.

Issues arising from any of the above can cause critical abstractions to switch off resulting in the immediate need for water to be sourced from another location, which incurs significant costs and risks of loss of supply.

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.

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

Water efficiency

Being within a water stressed area, we expect that the development includes water efficient fixtures and fittings. Measures such as rainwater harvesting and grey water recycling help the environment by reducing pressure for abstractions in Chalk stream catchments. They also minimise potable water use by reducing the amount of potable water used for washing, cleaning and watering gardens. This in turn reduces the carbon emissions associated with treating this water to a standard suitable for drinking and will help in our efforts to get emissions down in the borough.

Infrastructure connections and diversions

There are potentially water mains running through or near to part of proposed development site. If the development goes ahead as proposed, the developer will need to get in contact with our Developer Services Team to discuss asset protection or diversionary measures. This can be done through the My Developments Portal (<https://affinitywater.custhelp.com/>) or aw_developerservices@custhelp.com.

In this location, Affinity Water will supply drinking water to the development. To apply for a new or upgraded connection, please contact our Developer Services Team by going through their My Developments Portal (<https://affinitywater.custhelp.com/>) or aw_developerservices@custhelp.com. The Team also handle C3 and C4 requests to cost potential water mains diversions. If a water mains plan is required, this can also be obtained by emailing maps@affinitywater.co.uk. Please note that charges may apply.

Thank you for your consideration.

Yours sincerely

Laurence Chalk
Catchment Adviser
Catchment Management
planning@affinitywater.co.uk
laurence.chalk@affinitywater.co.uk