

To Jeff Eaton

Date 23/11/2023

Dept. Planning

Ref 23/00018/FUL

From Local Lead Flood Authority

Local Lead Flood Authority Consultation Response - 23/00018/FUL

Proposed filling station with ancillary convenience store (325 sq m GIA), forecourt with 4, 2 sided, pump islands , canopy, electric vehicle charging points and associated car parking, a drive thru fast food restaurant (349 sq m GIA)(Use Class E(b)/sui generis hot food takeaway use) with associated car parking, new site access road, new electricity substation, firewall to valve compound and associated works at The Woodyard, Weaver View, Clifton, Runcorn, WA7 4XU.

After reviewing 23/00018/FUL planning application the LLFA has found the following:

- The site is described as 0.94ha and is considered to be a Greenfield site.
- The proposed development would comprise a mix of development types with those of the highest vulnerability classified as less vulnerable to flood as defined within Planning Practice Guidance.
- A separate Flood Risk Assessment and Drainage Strategy for both the petrol filling station and McDonalds Restaurant have been prepared in support of the application.

The LLFAs comments on the Flood Risk Assessments are:

- Fluvial flood risk
 - o The nearest watercourse to the site is a stream on the western site boundary.
 - o The site lies wholly within Flood Zone 1. The nearest watercourse classified as a Main River is the Weaver Navigation, which is located 400m southwest of the site.
 - o The proposed development includes the development of a petrol filling station and McDonald's restaurant which is appropriate within Flood Zone 1 subject to the need to avoid flood risk from sources other than main rivers and the sea.
- Surface water flood risk

- This assessment indicates the majority of the site is at very low risk from flooding from surface water, with some low-risk areas mapped along the surrounding highways and medium risk within the woodland towards the west of the site.
- The LLFA agrees with this assessment.
- Groundwater
 - An assessment of groundwater flooding indicates the risk to the site to be low.
 - The LLFA is satisfied that the proposed buildings will likely not be at risk of groundwater flooding.
- Flooding from artificial sources.
 - The LLFA is satisfied that the risk from sewers, canals and reservoirs would be low.

Drainage Strategy

- Discharge location
 - The site comprises a Greenfield land classification.
 - It is noted that infiltration is not a viable option, and the applicant has undertaken on site ground investigations to prove infiltration rates would be insufficient to drain the site. Therefore, it is accepted that discharge of managed flows into the existing ditch/watercourse along the western boundary of the site, which discharges into Flood Brook to the southeast via a new headwall is the most sustainable viable option.
- Assessment of SuDS
 - The strategy provides an assessment of the SuDS methods in order to show that the geocellular storage is the most appropriate option.
 - The strategy proposes to attenuate flows using geocellular attenuation system.
 - The geocellular storage is sized to store 308m², to contain flows on site up to and including the 1 in 100 year +45% CC event. The LLFA would note that the storage calculated within the modelling summary is not consistent with the Proposed Drainage General Arrangement and the Tank Flotation Check. It is requested that these are updated to reflect the results of the hydraulic modelling.
- Runoff Rates

- The LLFA notes Q_{BAR} run off rate has been calculated as 2.5l/s. The modelling shows that the pre-development runoff rate for the 100 year storm event is 5.3l/s with the post development runoff rate being restricted to 3.5l/s.
- The LLFA would agree for flows to be limited to this rate.
- Drainage Performance
 - Storage will be provided for the 1 in 100 year plus 45% CC event. Storm events in excess of the 1 in 100 year plus 45% CC event would cause a temporary shallow depth flooding along the access road and Weaver View.
 - It should be noted that the Drainage GA shows the roof of the Petrol Filling Station being drained into the surface water network, this area is not currently included within the modelling. The LLFA would request that this modelling is updated to reflect the areas being positively drained on site.
- Maintenance and management
 - The proposed maintenance and management of the network has been included in the Drainage Maintenance Plan.
 - The proposed system will be managed and maintained by McDonalds.
 - There is a clear management and maintenance plan for the development.

In summary, the LLFA agrees with the assessment of flood risk to and from the site and the applicant has provided a clear drainage strategy. Therefore, the LLFA would recommend the following conditions:

- No development shall take place until an updated drainage strategy report and associated general arrangement drawings and calculations have been submitted to and approved by the local planning authority. The scheme shall be implemented and thereafter managed and maintained in accordance with the approved details. The required drainage strategy updates include:
 - Updated modelling results and drainage area plan to include the Petrol Filling Station Canopy Roof area.
 - Updated Flotation calculations and drainage General Arrangement to be consistent with the Modelling results.
 - Consistency in the attenuation volume/tank plan area across the drainage strategy report, GA drawings and calculations.
- No development shall be occupied until a verification report confirming that the SuDS system has been constructed in accordance with the approved design drawings (including off site alterations) and in accordance with best practice

has been submitted to and approved by the local planning authority. This shall include:

- Evidence that the SuDS have been signed off by an appropriate, qualified, indemnified engineer and are explained to prospective owners & maintainers plus information that SuDS are entered into the land deeds of the property.
- Submission of 'As-built drawings and specification sheets for materials used in the construction, plus a copy of Final Completion Certificate.