

**Consultation Response from KC,
Lead Local Flood Authority**

2023/91405 Part of former St Luke's Hospital site, Blackmoorfoot Road, Crosland Moor, Huddersfield, HD4 5RA

Erection of foodstore (class E) with associated access, parking, servicing area and landscaping

Date Responded: 09/04/2024.

Responding Officer: Martin Stephenson

Responding Ref: 2

Previous response by the LLFA

Dated 09/06/2023 for application 2023/91405.

Dated 30/01/2024 for application 2023/91405.

Documents reviewed by the LLFA:

Topping Engineers:

- Drawing Ref: 21561-DR-C-0100, Drainage Strategy, Rev P5 dated 20/02/2024.
- Drawing Ref: 21561-DR-C-0101, Temporary Drainage, Rev P1 dated 20/02/2024.
- Drawing Ref: 21561-DR-C-0102, Attenuation Detail, Rev P1 dated 20/02/2024.
- Document Ref: 15.02.24 Network.mdx, Hydraulic Calculations dated 16/02/2024.

Drainage Summary:

Temporary Drainage

The drainage condition states that surface water run-off during the temporary drainage phase should be limited to 2.5 l/s per ha for the 1 in 2 year storm – the Temporary Drainage drawing shows this run-off passing through the permanent hydrobrake rated at 3.1 l/s **which is greater than** the required temporary drainage rate. Please confirm how the surface water drainage run-off will be limited to the required rate for temporary drainage. Note that, for the temporary drainage phase, a flow control device less than 75mm in diameter would be acceptable to the LLFA and should be regularly maintained by the Contractor.

Attenuation Tank

The details shown on the Attenuation Tank drawing are generally acceptable. However, the LLFA has the following comments which **need to be addressed**:

- The upstream MH should be a PCC chamber 1.2m diameter as shown on the Drainage Strategy drawing and should be a silt trap type.
- The tank and impermeable geo-membrane should be replaced after 25 years unless the developer has BBA (or similar) certification proving that the design life of these elements is longer – in which case the tank and membranes will need to be replaced at the end of their guaranteed design life.

Permanent Drainage

Generally, the LLFA will not accept pumped surface water drainage due to the risk of pump failure or power cuts during storms – however the LLFA accepts that the loading area needs to be lower at the end of the ramp to allow for level access from delivery vehicles into the building and therefore pumping is deemed acceptable in this instance.

The MD Hydraulic Calculations indicate a maximum water level of 147.288 during the critical 1 in 100 year (plus CC) rainfall event, however it is noted on the Drainage Drawing that levels are to be capped at **146.650** to prevent overtopping of the channel drain. The LLFA therefore **cannot accept** these calculations as surface water run-off will not be contained within the site during the critical rainfall event.