

From: Planning Support
Subject: FW: Planning Consultation - LB Haringey - HGY/2022/4310 - Omega Works, Hermitage Road, Tottenham, London, N4 1LZ

Sent: 05 May 2023 12:20

Subject: RE: Planning Consultation - LB Haringey - HGY/2022/4310 - Omega Works, Hermitage Road, Tottenham, London, N4 1LZ

Dear Philip,

Thank you for consulting us on the above planning application reference number HGY/2023/4310 (Full planning permission), which consists of Redevelopment of the site for a mixed-use scheme comprising employment use (use Class E) and 36 residential units (use class C3). Together with associated landscaping, new courtyard, children's play space, cycle storage, new shared access route, 2x accessible car parking spaces and waste and refuse areas (Omega Works B) at Hermitage Road, Tottenham, London N4 1LZ. Noted that this application forms part of the Omega Works A planning application which has been submitted under HGY/2023/. Following review of the applicants FRA and SuDS Strategy (Doc. Ref. 20064/OMA-EOC-RP-001/P02), dated 11th August 2022 prepared by EOC Consulting and other related documents and drawings, we have the following comments/observations to make:

- 1) In terms of discharge destination, the applicant has reviewed the viability of infiltration, and concluded based on ground conditions, that maintaining an existing public surface water system is the only viable option. Based on the supporting evidence this approach is accepted. We note that the proposed discharge rate is 5l/s for all events up to and including the 1 in 100yr plus climate change event. Whilst the allowable discharge rate has not been supported by calculation methods such as the IoH124, FEH statistical method or the ReFH2 methodology. However, given the site is a previously developed brownfield site and subject to TW acceptance, the proposed discharge rate is considered acceptable to the LLFA;
- 2) We note that the SuDS Manual (CIRIA 753) methodology has been adopted for sizing the volume of attenuation required to ensure off site discharge rates can be restricted up to and including the design 1 in 100 yr. plus climate change event. It is noted that this is generally considered appropriate for the initial sizing of storage required to inform the development of the master plan. The SuDS guidance published by Haringey's LLFA is not prescriptive in regards to the method of calculation provided. However, it does highlight that the Designer should 'demonstrate that the methodology for deriving hydraulic outputs (i.e. flow rates, volumes and flow velocities and levels) are appropriate for the size, scale and nature of the site.'
- 3) As this is a full application, which is reliant on a pumped outfall we consider it reasonable to request full hydraulic calculations, using the latest FEH13 rainfall datasets as input into Micro drainage modelling software or similar, to simulate a range of storms events through the drainage system, with results of critical storms, demonstrating that there is no surcharging of the system for the 1 in 1 year storm, no flooding of the site for 1 in 30 year storm and that any above ground flooding for 1 in 100 year storm is limited to areas designated and safe to flood, away from sensitive infrastructure or buildings. These storms should also include an allowance for climate change
- 4) It is noted that the applicant has proposed to incorporate green roofs, which is welcomed. No supporting information could be located within the FRA and SuDS statement on the specifics of the green roof systems proposed (i.e. extensive/intensive or blue/green roof system). Green roofs are effective during lower order rainfall events and contribute to interception storage providing water quality enhancement of run-off. Noted that within the Landscape Statement the green roof is stated as including a 150mm media where storage will be provided. During the design 1 in 100yr plus climate event overflows within the green roof system will discharge unrestricted to the proposed surface water drainage system serving the wider development. The FRA and SuDS statement indicates that the main form of storage provided within the proposed scheme consists of a below ground modular tank approximately 7x7x1.2m which is reliant on a pumped outfall. Whilst the use of a pumped outfall is not considered to be a sustainable drainage solution, it is accepted that level constraints mean that a gravity solution is not possible in this instance.
- 5) In terms of the SuDS management train, the reliance on end of pipe below ground modular storage to provide attenuation storage for flood control provides very little benefit in terms of biodiversity, amenity

value and water quality treatment. It is noted within Section 4.6 of the Landscape Statement 'Urban Greening Factor' tabulates the calculation of the factor which makes reference to the inclusion of permeable paving (lined) and tree pits. These features are not listed or defined within the FRA and SuDS, nor is there any consideration of other forms of SuDS such as raingardens (lined) or raised planters that could be included as part of the SuDS scheme. These features contribute to the interception storage provided within the scheme and provide an important function in regard to water quality treatment prior to discharging run off into the public sewer system.

- 6) We note that there is no assessment of the residual flood risks posed to the scheme as a result of a pump failure, which should be given some further consideration. It is noted that it is proposed to adopt a duty/standby pumping arrangement with backup generators, which we would assume will be integrated within the buildings BMS. We would encourage the designer to consider undertaking some form of sensitivity analysis to ensure that duty/assist pumping and BMS/call out times to implement repairs are sufficient to minimise the residual risk of internal flooding, and to provide a basis for the assessment of appropriate flood resilience measures (if any) i.e. requirement for non-return valves to minimise the risk of backflows, electrics/services raised accordingly and floor finishes/building materials resilience to exposure to flood waters.
- 7) Section 4.8 'Design Exceedance' of the FRA and SuDS statement notes that 'Any flood waters from the ground floor drainage would flow in a southerly direction onto Hermitage Road where it will be contained within the highway and not affect any of the surrounding buildings.' No quantitative details are provided to evidence the conclusions made in relation to residual flood risks both to and from the development resulting from exceedance events or pump failure/blockages. A diagrammatic indication of these routes on plan demonstrating that these flow paths would not pose a risk to properties and vulnerable development

The FRA and SuDS statement should be aligned with the details set out within the 'Urban Greening Factor' details provided within the Landscape Statement which indicates that the scheme includes measures such as tree pit planting and use of permeable surfacing, in addition to the use of green roofs systems within the development. It is noted that the calculated urban greening factor is 0.27 which is below the target value of 0.4. Therefore, further consideration should be given to the inclusion of raingardens and raised planters as part of the SuDS scheme, as these features will also contribute to water quality and biodiversity within the site.

Given the issues raised above, the use of a condition is not considered appropriate in this instance, given the scheme is a full planning application and that at present only outline details are provided, which do not demonstrate that appropriate SuDS management train has been employed, assess the performance of the system during design conditions, nor in the event of exceedance/failure in the system. The FRA and SuDS statement should be updated to reflect all of the SuDS measures proposed within the scheme as set out within the Landscape Statement in order to demonstrate how the proposed SuDS scheme provides flood water control, water quality enhancement, biodiversity and amenity value.

We would therefore request that the revised SuDS and FRA statement is revised with full calculations and aligned to the Landscape Statement to demonstrate compliance with the CIRIA and LLFA guidance supported by an addendum to the SuDS Strategy document

Hope the above is of assistance. However, should you have any concerns or require any further clarification then please do not hesitate to contact me

Best regards

Jason

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