

JAajh-20230405-BY Kentish Town Planning Response_LLFA.docx

5th April 2023

Christopher Winters
Sustainability Officer (Planning)
Supporting Communities
London Borough of Camden
5 Pancras Square
London
N1C 4AG

Dear Christopher,

2023/0093/P –LLFA COMMENTS: DRAINAGE RESPONSE

Thank you for returning comments from the LLFA pertaining to the Drainage Strategy and Maintenance Statement for the proposed development at 24-27 Regis Road under planning application 2023/0093/P.

For clarity, the original comments contained in the email response of 2nd March 2023 have been copied out in full below and each addressed in turn in the same order.

Comments in full, as received:

- 1. Details of the green roof and its minimum 150mm substrate for storage have not been provided. Rainwater harvesting has been discounted due to low demand however blue roofs should also be considered.*
- 2. Infiltration has been discounted however the results of the infiltration testing have not been provided.*
- 3. It is unclear if the tree pits are to be provided and where they will be located, as they are not referenced in the drainage strategy.*
- 4. The proposed runoff volume (which takes the proposed SuDS into account) has not been provided.*
- 5. It is stated that the site will flood in the 1 in 100 year + 40% CC event. It should be demonstrated where flooding will occur on site in a drawing.*
- 6. The full site area has not been included in the micro-drainage calculations.*
- 7. A half drain time has not been calculated as the structure is too full, this must be a maximum of 24 hours.*
- 8. The maintenance tasks and frequencies have not been provided for the hydrobrake.*
- 9. The name of the maintenance owner responsible for the drainage components post-development has not been provided*
- 10. Consent for the proposed discharge point connection has not been provided.*

11. *No information has been provided detailing the management of Health and Safety risks related to the SuDS design.*
12. *The SuDS Proforma is not in line with the strategy.*

CampbellReith's response to the comments:

1. Please find enclosed with this letter the Euroseam Green Roof Details, which shows typical details of the proposed green roof. Please note that these are not bespoke to the proposed development, and will be subject to change at later design stages. It should also be noted that the green roof is not proposed to act as surface water storage, but does act to slow down and attenuate flows, resulting in a reduced attenuation storage volume requirement.

The proposed green roof will be an intensive system, created using a wildflower meadow / grassland mix. The wildflower meadow mix used will be the Emorsgate Special Meadow Mix (or something similar). This mix has a large number of meadow grass and herb species, and, based on the composition, would most reasonably fall into the habitat condition category 'other, semi-improved neutral grassland'. An area approximately 235m² is proposed.

With regards to maintenance regime, the initial 12 months are covered by the specialist landscaping contractor. There follows an extract from our Operation and Maintenance Manual agreed with the contractor:

Green Roofs, in common with ground level planting, requires maintenance to ensure that the original species selected establish and become a thriving self-sustaining plant community. In the first 12 months post installation maintenance should consist of 2 visits followed by, a minimum, 2 maintenance visits per year.

Typical procedures carried during maintenance include:

1. *Removal of unwanted plant material i.e. invasive species (if required).*
2. *Correction of any localised plant system problems that may have occurred post installation.*
3. *Replacement of any failed plants exceeding 5% of total plants installed.*
4. *Application of nutrient source.*
5. *Removal of dead flower heads (if required).*
6. *Inspection of rainwater outlet chambers and surrounding vegetation breaks.*
7. *Replenishment of any areas of settled substrate.*

At the end of the defects period, Big Yellow's internal Facilities Team, as the maintenance owner are obligated to undertake routine and preventative maintenance of the building fabric, underground drainage, external areas and soft landscaping on an ongoing basis, using a framework of contractors. For the underground drainage Big Yellow contractors inspect the drains visually, on an annual basis and jet the drains to keep them clean/flowing as necessary.

The proposed self storage facility comprises a lightweight steel portal frame structure, with an efficient use of steel to reduce the embodied carbon footprint of the new building. In line with Big Yellow's renewable energy strategy, the new store includes 100kwp roof mounted solar PV array. An intensive green roof has been included as part of the sustainable urban drainage strategy to attenuate the surface

water associated with the new store. We prefer to keep Solar energy and green roofs separate so they can be easily maintained and do not compete for the same natural elements.

Big Yellow self storage buildings dispose of the rainwater collected by the roof, quickly and efficiently by utilising external gutters and downpipes; a pitched roof is proposed for this store which is unsuitable as a medium to support a blue roof. Furthermore a blue roof holds a higher volume of rainwater than a green roof and the additional steelwork/embodied carbon associated with a blue roof is not justified.

2. Infiltration testing results have been provided in Appendix D of the updated Drainage Strategy and Maintenance Statement (ref: 13675-CRH-ZZ-XX-RP-C-0002 Rev P6). For completeness, please also find the site investigation factual report (ref: GL24466) in full enclosed with this letter.
3. Tree pits are not included in the proposed drainage strategy. The reference made to tree pits in the SuDS proforma is in fact referring to the areas of bio-retention/rain gardens included within the surface water drainage network.
4. The calculation results have been revised to include discharge volumes and are included in Appendix G of the updated Drainage Strategy and Maintenance Statement (ref: 13675-CRH-ZZ-XX-RP-C-0002 Rev P6).
5. It is anticipated that the small volume of flooding (approximately 0.2m³ in the worst case 15 minute 1 in 100 year storm event) will be stored in the rain garden at the northern boundary of the site. Excess flows will be stored here until the network has sufficient capacity to discharge them.
6. The full site area was included in the drainage model, however it is noted that this was not shown clearly in the calculation pack included in the Drainage Strategy and Maintenance Statement. The area not shown in the original calculations corresponded to the area of green roof, which was included as a time-area diagram. This area has now been included on page 8 of the updated calculations pack, which is contained in Appendix G of the revised Drainage Strategy and Maintenance Statement (ref: 13675-CRH-ZZ-XX-RP-C-0002 Rev P6).
7. The updated calculation pack contained in Appendix G of the revised Drainage Strategy and Maintenance Statement (ref: 13675-CRH-ZZ-XX-RP-C-0002 Rev P6) shows the proposed attenuation tank to have a half-drain time of 558 minutes for the 1 in 30 year storm event.
8. Section 6.8 has been added to the revised Drainage Strategy and Maintenance Statement (ref: 13675-CRH-ZZ-XX-RP-C-0002 Rev P6), describing the maintenance requirements of the Hydro Brake flow control unit.
9. The maintenance owner responsible for the drainage components post-development is to be Big Yellow Self Storage Ltd. The Drainage Strategy and Maintenance Statement has been revised to reflect this.
10. A Section 106 application will be submitted to Thames Water to confirm consent for the discharge from the site post-planning. This will be completed so as to ensure that consent is received prior to construction.

11. Please find enclosed the Designer's Risk Assessment for the proposed development, including items pertaining to the drainage strategy.
12. An updated SuDS proforma has been included in Appendix G of the revised Drainage Strategy and Maintenance Statement (ref: 13675-CRH-ZZ-XX-RP-C-0002 Rev P6).

I trust the above is sufficient to address your comments. However, please let us know if you require any further information.

Yours sincerely



JONATHAN ADAMS

For and on behalf of **CAMPBELL REITH HILL LLP**

cc

Nigel Hartley (Big Yellow Self Storage Ltd)

Andrew Deller (DWD LLP)

Encl.

- Green Roof Detail
- Drainage Strategy and Maintenance Statement 13675-CRH-ZZ-XX-RP-C-0002 Rev P6
- GL24466 Ground Investigation Factual Report
- 13675- Designers Risk Assessment