

Our Ref:2502330/Letter
15th May 2026
Jake Silverton
(SuDS and Watercourses Support Officer)
Lead Local Flood Authority
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Response to Hertfordshire County LLFA Land At Talbot Way, Letchworth –Drainage Strategy Review comments.

Dear Jake,

Following the recent correspondence from the LLFA on the submission of the SuDS Design we have reviewed the comments and have provided a response below.

Condition 3

We advise that there isn't sufficient technical information to support the application in relation to the wording of Condition 3. We have concerns that the submitted information does not meet with NPPF, PPG or the LLFA Flood Risk Management Strategy policies and the proposal will either increase the risk of flooding elsewhere or to the proposed development. We provide the following technical review for your consideration.

- We note that in the approved outline drainage strategy, permeable paving was proposed across much of the site. The drainage strategy submitted with this application does not include any permeable paving and so we would expect justification to be provided on why it has been removed from the design. Even if it is not required for water quality purposes based on the Simple Index method, we still expect all types of SuDS to be explored as much as possible across the site to reduce the requirement for below ground storage and provide water quality, amenity and biodiversity benefits. Check dams could also be implemented if the slopes on the site are prohibitive. We also seek confirmation that the side slopes of the proposed swales will be a minimum of 1 in 3 (1 in 4 or shallower is preferred).

Response

- With regards to permeable paving, its use has been reviewed as part of the design development, please see the updated drainage strategy drawing (2502330-ACE-XX-00-DR-C-0151F Drainage Strategy). However, it is worth noting that the drainage strategy incorporates a range of other source control SuDS features, including roadside swales, bioretention systems (rain gardens) and two attenuation basins, which are distributed across

the site to manage runoff as close to source as reasonably practicable. These features have been integrated within the highway and landscape design to provide attenuation, water quality and amenity benefits in line with national SuDS standards. These above ground, vegetated features were prioritised over permeable paving, due to their obstacles associated with adoption, long-term maintenance considerations, lack of ecological / amenity benefit and challenges accommodate services and adopted sewers. Overall, the strategy seeks to maximise the use of adoptable, green source control SuDS requiring minimal maintenance, whilst adopting a practical and robust approach in response to the site-specific constraints.

With regards to swales, typical standard detail for a 1:3 is provided in this response, please see drawing (2502330-ACE-XX-00-DR-C-SK03 Swale Sections).

- We note that in the approved outline drainage strategy, individual rain gardens were proposed on the downpipe of each plot. Although we note that a few indicative locations for bioretention features have been suggested in the latest drainage strategy, commentary should be provided on whether individual plot rain gardens have been considered.

Response

- Although the outline drainage strategy incorporated raingardens within the private curtilage, SuDS have been avoided to in private curtilage to ensure the SuDS proposed can either be adopted or maintained by the estate management company. This ensures their presence in perpetuity, particularly as the lifetime of these type of proprietary products is limited and avoids placing a maintenance burden on the future occupants. It should also be noted that the run-off from the roof contains the least pollutants and given the size and application to a single RWP the impact in terms of flood risk will be negligible.
- Point e) of condition 3 requires finished floor levels to be either 300mm above expected flood levels of all sources of flooding or 150mm above ground level (whichever is more precautionary). Although we note that finished floor levels have been provided on the drainage plan, we require further evidence that these levels align with the wording within condition 3.

Response

- The proposed finished floor levels have been designed to be a minimum of 150mm above the ground levels throughout the site, as illustrated on drawing '2502330-ACE-XX-00-DR-C-0101G Levels Strategy'. The site is steep in places and as such some re-grading is required to minimise impact upon the surrounding vegetation and achieve a cut and fill balance across the development.
- Furthermore, the drainage strategy has been designed to ensure the development site does not pose any surface water flooding risk during an extreme event, i.e. 1 in 100 years + 40% climate change.

- Point c) requires attenuation features to be able to half drain in 24-48 hours. Evidence should be provided that the basins and tanks proposed meet this criteria.

Response

- The original drainage strategy was prepared at outline stage when infiltration was considered a potential option. At that stage, half drain down criteria were relevant for any infiltration-based SuDS features in line with CIRIA C753. Following detailed infiltration testing at Reserved Matters stage, infiltration has been confirmed as not suitable for the site due to low infiltration rates. The drainage strategy has therefore been revised to a fully attenuation-based system discharging to the Anglian Water sewer at a restricted rate of 8 l/s.
- As the final design does not rely on infiltration, half drain down times are not a controlling design requirement. Instead, the system is designed to store runoff and release it in a controlled manner through the outlet control structure. However, the system has been checked to understand half drain times to 48 hours. Where the half drain time has not been achieved the system has been tested under the critical 1 in 30 year event + 35% climate change followed by the critical 1 in 10 year event to check performance under consecutive storms.
- The half drain times have been calculated using the formula $DT = V / Q$, where V is the volume utilised (m^3) and Q is the volumetric discharge rate in hours (m^3/hr) for each respective basin. Basin-01, with a stored volume of $382.9 m^3$ and a discharge rate of 1.2 l/s ($4.32 m^3/hr$), achieves a half drain time of 44.31 hours. Basin-02 combined with the Attenuation Tank, with a total stored volume of $876.4 m^3$ ($428.4 m^3 + 448.0 m^3$) and a discharge rate of 8 l/s ($28.8 m^3/hr$), achieves a half drain time of 15.21 hours. Both basins drain within the 48-hour threshold, demonstrating that the system provides adequate storage and controlled release of surface water runoff.
- The results provided (2502330 - Surface Water Network Calculations - 1 in 30 years plus 35% CC event plus 1 in 10 years event) confirm that the system does not surcharge or flood and retains adequate capacity for subsequent rainfall events. The results also show that Basin-01 will have 303mm freeboard, whereas Basin-02 will have 499mm freeboard following the 1 in 30 years + 30% climate change plus 1 in 10 years subsequent rainfall events. Furthermore, discharge rates are restricted to agreed limits, ensuring no increase in flood risk elsewhere. On this basis, whilst the 24–48 hour half drain down criterion is acknowledged, it is not considered a governing requirement for this attenuation-led scheme, and the design is demonstrated to meet the intent of the SuDS Manual C753 by maintaining effective storage, controlled runoff, and resilience to successive storm events.

Condition 4

We advise that there isn't sufficient technical information to support the application in relation to the wording of Condition 4. We have concerns that the submitted information does not meet with NPPF, PPG or the LLFA Flood Risk Management Strategy policies and the proposal will either increase the risk of flooding elsewhere or to the proposed development. We provide the following technical review for your consideration.

- Point a) of Condition 4 requires the submission of a timetable for the implementation of the drainage scheme. This has not been submitted with this application. We would also like to note that we recommended that there isn't sufficient technical information to support the application 26/00514/DOC (for Condition 3). As a result, the detailed drainage design is still subject to change which may mean updates are required on this application to support Condition 4. We will not be able to recommend that Condition 4 is discharged until sufficient information is provided for Condition 3.

Response

- The drainage works on site will begin on the 1st June 2026.