

The following points should be clarified and further information provided on the following:

1. **The SuDS hierarchy**, as stated in the National Standards for SuDS (2025) must be followed (See text below), where Priority 1 is given to water collected for non-potable use. Evidence of rainwater harvesting/re-use is not currently presented.

Standard1: run off destinations

1.2 Run off from the development shall be discharged to the following final destinations, to the maximum extent practicable, in accordance with the following hierarchy:

- *Priority 1: collected for non-potable use*
- *Priority 2: infiltrated to ground*
- *Priority 3: discharged to an above ground surface water body*
- *Priority 4: discharge to a surface water sewer, or another piped surface water drainage system*
- *Priority 5: discharged to a combined sewer*

In response to Priority 1- Water butt rainwater harvesting is proposed to be put into place to collect for non-potable use. Priority 2- The wider drainage system is to be collected site wide and discharged to the basins located at the Northwest to infiltrate.

2. **Highway drainage** – We understand the main spine road is to be traditionally drained via road gullies before discharge to the SuDS network. The SuDS hierarchy should be explored, including measures to drain the main road using source control SuDS in place of / in addition to traditional gullies. The Highway Authority may adopt SuDS features such as swales and rain gardens that only drain the highway – we would recommend Highways are approached to discuss.

Filter trenches have been integrated in addition to traditional gullies, positioned alongside the highway to collect highway run off as a form of source control.

3. **Source Control measures** – While we welcome the use of above ground SuDS, the development first should consider the inclusion of source control measures to capture water at source, for example the use of rain gardens and SuDS planters to capture rainwater from downpipes. Further source control measures should be explored.

Rainwater gardens have been integrated into the South section of the site to collect highway run off and help treat run off at the source to mitigate surface water flooding

4. **Basin design** – the basin slopes are given as 1 in 3 slopes. This is a minimum requirement. We would recommend a slope of 1 in 4 which will allow the area to function more as a multifunctional space. Consideration should be given as to how this basin might be made shallower and the space can be better incorporated into the development and used as a multifunctional space.

We note that 1 in 4 slopes are preferred for the basin design, however due to limited space to position the basin and due to the required volumes to store the 1 in 100-year storm event we require 1 in 3 slopes which still complies within your design standard.

5. **Confirmation of infiltration parameters** – In addition, reviewing the drainage strategy drawing and the main body of text – there is a mismatch between the infiltration rate noted on the design and used in the calculations (1.80×10^{-4} m/s) and the rate stated in the main body of text (8.31×10^{-5} m/s). The lower rate needs to be one that the design is based on at this stage, with further testing required (post permission). Also, from the infiltration results, it would appear that only one trial pit was successful – TP8, which successfully recorded a rate in 3 tests at that location.

The infiltration rates above are the range of results we had from testing however the rate of (8.31×10^{-5} m/s) was used for the design of the drainage as this was the slowest rate recorded to provide a worst-case scenario for the infiltration rate within the design.