

DRAINAGE STRATEGY

This site is part of two Phase development Phase 1Fe & Phase 2FE, with the latter being subject to the development of Housing on adjacent land. It is anticipated the Phase 2FE will include a suitable offsite water body & network to discharge into. At present Booth-king Partnership has no control on the time frame for this development and the strategy below will be set out to reflect this.

Due to the nature of the site being a School we have dismissed the option for any open water features based on health and safety grounds.

A previous Phase 2 SI report has been referred to (pre-2019) and the ground conditions underlying the site have been found to have shallow standing water levels, the use of shallow soakaway was not suitable for disposal of surface water runoff. Soil infiltration tests were found not to be conclusive, further Phase 1 & 2 SI reports are planned and this strategy will be updated to reflect any additional findings.

Surface Water Drainage strategy

The surface water drainage proposals for this site are to discharge into a Private network via a conventional below ground piped network using a storage tank and flow control device to limit flows to agreed discharge rates.

The following final discharge outfall options are then available.

- Housing development starts imminently and an outfall connection is made to discharge into the new offsite Redrow network/depression storage. We currently believe this to be unlikely until the completion of the Phase 1FE stage.
- Phase 1FE is completed without Redrow development in place.
The network will be set-out with future discharge position in mind and to suit on site topography.
An immediate outfall will be made into the existing combined sewer within the site boundary and ultimately discharging into the adopted UU combined sewer on Thornham Lane, subject to approval from UU and a Section 106 agreement being granted.
At present this appears to be the only viable option on the completion of Phase 1FE.
 - Surface water discharge rate needs to be agreed first with United Utilities and LLFA (Assumed 5l/sec TBC).
 - The attenuation tank will be designed to cater for roof and hardstanding areas. Storage will be provided to cater for storm periods up to 1 in 100 years with an allowance of 45% for climate change. Flows will be attenuated via flow control devices. Ultimately, flows will be restricted to the discharge rates shown above before entering United Utilities sewers.

Whilst this is lower down the hierarchy identified by the EA, within the NPPF and the LLFA it still represents a suitable SUDS solution which is compatible with the particular constraints of the site detailed in the FRA and site investigation report.

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FOUL WATER

It's planned to convey all foul water into the pre- existing on site private network.
The on-site foul water network connects to an existing UU combined water sewer in Thornham Lane.

