Sheerwater Regeneration

Low Rise Drainage Principles

Swale

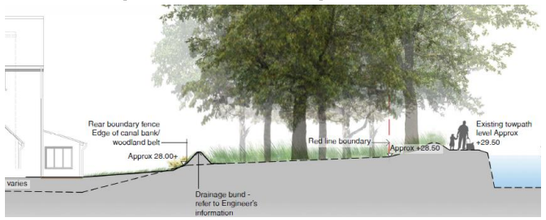
A swale will run through the linear park. This will take overland flows during extreme storm events, and will also direct any flood water from the canal into the central park.

Rain gardens

A number of rain gardens will be constructed along the road side on the main north to south road. These will act like gullies draining the road and provide surface water storage.

Bund

A bund has been proposed around the boundary of the site in order to protect the houses in the unlikely event of the Basingstoke Canal flooding.

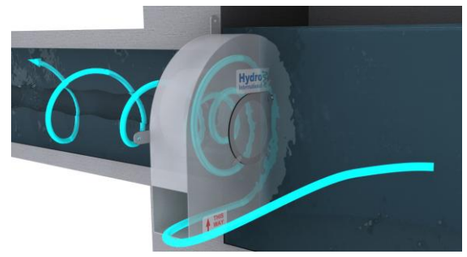


Permeable Pavement

Tertiary roads will be constructed with permeable paving. The permeable pavement will treat surface water run-off before it enters the public sewer network and the sub-base will provide storage.

Hydro-brake

Hydro-brakes will be utilised to restrict the peak surface-water discharge rate to the public sewer. Flow rates will be restricted to a minimum of 50% of the pre-development 1 in 100 year storm peak run-off rate as agreed by Campbell Reith with Woking Borough Council during the previous planning application submission.



Attenuation Tank

Attenuation tanks, which are geocellular modular plastic units, will be utilised to provide temporary surface water storage below ground. These provide large amounts of storage as they have a 95% void ratio.

Sewer Adoption

The proposed surface and foul water drainage network will connect to the existing on-site public sewers. They will be offered to Thames Water for Adoption.

PRICE & MYERS

Sheerwater Regeneration

Medium Rise Drainage Principles

Park & Pedestrianised Areas
A number of rain gardens will be constructed along the pedestrianised streets and within the park. These will provide storage for surface water run-off.

Foul Water
Foul water connections will be made directly to the existing public sewers along the existing roads and to new sewers, proposed for adoption, underneath the new private and adoptable roads.

Pond
A pond is proposed within the central park. This can provide storage for surface water during the larger storm events.

Parcels D, E & F
Parcels D, E and F will be providing surface water storage within the plot boundary, utilising the podium structure and will be designed by MLM.

Parcels A & B
These parcels will utilise surface water storage within the plot boundaries (designed by MLM), and oversized surface water pipes within the roads in order to reduce the peak discharge rate to the existing surface water public sewer.

Parcel C
Parcel C is made up of terraced blocks, therefore, it is not appropriate to provide shared temporary surface water storage within the private gardens.

The private roads and car parking bays either side of the parcel will feature permeable paving and attenuation tanks to provide surface water storage prior to discharging to the Thames Water public sewer at a reduced rate.

Public Sewers
The proposed site wide surface and foul water drainage network which runs underneath the roads will connect to the existing on-site public sewers. They will be offered to Thames Water for Adoption.

Some of the existing public sewers will be required to be demolished and diverted. The diverted sewers will be constructed in accordance with Sewers for Adoption and Thames Water guidelines.

PRICE & MYERS