



2639-Greenbrow Social Club, Manchester

Drainage Strategy & Maintenance Document

Rev: P01 Date: 07.02.2024

1. Assessment of Drainage Options

The site is to be assessed for the suitability of infiltration type surfacewater drainage systems in accordance with BRE Digest 365; however, it is found that the subsoils are not permeable. 2 Soak away tests in accordance with BRE365 have been carried out with both tests failing respectively, Ref: 100855 - BRE365 Infiltration test report.

The site has been assessed for the viability of a surface water connection to an existing local watercourse. The site has no surrounding watercourse and therefore will not be assessed any further.

The site is brownfield and therefore is surrounded with a positive sewer network. Copies of the United Utilities sewer records have been obtained and verified on site as generally accurate. Existing manholes have been lifted to check pipe diameters, depths, and routes. According to the records the surrounding sewers are combined water sewers.

It is therefore determined that drainage connections from the proposed development should be routed to the existing combined water public sewer networks surrounding the development site. A S106 application will be undertaken according to the Water Industry Act to United Utilities for sewer connections.

2. Drainage proposals

Details of the proposed drainage are shown on the following drawings:

2639-SCE-00-00-DR-C-0001-P02-Drainage_Strategy

The main sewerage for the development will remain private with space foul and surface water connections to the existing public sewer near the site. This therefore ensures that the main sewerage infrastructure shall be owned and maintained by the client or management company. United Utilities and the Lead Local Flood Authority had been consulted by the previous engineer at pre planning stage to agree a surface water discharge rate of 5.0L/s into the combined water sewer network.

The surface water sewer system has been designed in accordance with Sewers for Adoption 6th Edition and therefore includes the design for attenuation of flows for up to a 1 in 100 year + 45% climate change storm events without flooding. The outflow to the public sewer will be controlled by a hydrobrake device manhole. Attenuation has been provided in the form of cellular storage. This attenuates up to and includes the 1 in 100 year + 45% CC return period for a site impermeable area of 1,540m². The hydrobrake has been designed to restrict surface water flows to a discharge rate of 5.0L/s. details of the hydrobrake can be found in the Micro drainage calculations and hydro-international details.

It is to be agreed with united utilities that the foul drainage will discharge with an assumed free discharge to a private combined sewer before outfalling to the existing combined sewer within Greenbrow Rd.

A proposed maintenance plan shown in Table 1 breaks down the maintenance responsibility and regimes of the other various assets.

Table 1: Proposed Maintenance (in accordance with best practice and CIRIA C753 – The SuDS Manual).

Drainage Asset	Responsible Organisation	Maintenance Work	Frequency
Pipework / Manholes	Private Ownership / Management Company	Inspect pipe work and clear blockages	Annually or after severe storms.
		Inspect manholes and clear blockages	
		Repair any defects in network	
Hydrobrake Control Chamber	Management Company	Inspect structure and remove any debris/litter on structure	Annual or after severe storms.
Catchpits prior to attenuation	Management Company	Inspect structure and remove any debris/litter on structure	Six monthly or after severe storms.
Cellular Storage	Management Company	Inspect structure and remove any debris/litter on structure	Annually or after severe storms.