



2514-F Lloyd Industrial Estate, Wrexham

Drainage Strategy
& Maintenance Document

Rev: P01 Date:14.02.2023

1. Existing and Proposed Drainage

The nature of the scheme comprises of an industrial estate whereby new drainage networks are to accommodate newly proposed extensions.

A review has been undertaken on the existing drainage accommodating the existing hard standing areas and building footprints, a GPRS survey and previous drainage proposals have highlighted various utility surveys which are to be considered when routing any new proposed drainage.

Surface Water – Extension 1

Following a review of the existing surface water network, it has been identified that an attenuation system by way of 5x1.8m in diameter pipes are located within the footprint of the proposed extension 1, we have also identified MH03 to be a manhole which we assume to have a control device within the chamber, this is to be confirmed on site before any construction works utilizing the manhole in question. Further investigations are also required to confirm the existing attenuation volume catering for the current impermeable areas within the site.

As per the proposed drainage strategy **2514-SCE-00-00-DR-C-0001.1-P01-Drainage_Strategy**, we have proposed to abandon any existing pipes within the footprint of the proposed building and redirected to a newly proposed surface water network,

The proposed extension is utilizing some existing soft landscaped area, this therefore provides an additional 1794m² of impermeable area which is to be catered for in the proposed surface water network.

In comparison to the current hard standing impermeable area of 10,073 plus, we have proposed to provide an additional 20% of surface water storage volume, volume is to be confirmed pending confirmation of current tank volume. However, we believe this to be more than sufficient in catering for the added hard standing impermeable area.

Although a location for the newly located tank has been located on the drainage strategy plan, this is to be confirmed pending a full review of all Utility surveys and proposed levels to existing levels across site.

Surface Water – Extension 2

Following a review of the existing surface water network, it has been identified that no attenuation features are located within the area of interest, with several existing surface water pipes routing through the proposed

1. Existing and Proposed Drainage

footprint of the building we would simply look to reroute/divert any pipes as per proposed drainage strategy **2514-SCE-00-00-DR-C-0001.2-P01-Drainage_Strategy**. on review of the GPRS survey it is noted some pipes were unable to be sonde/traced to their full length, line and levels of pipes are to be confirmed on site before all proposals are confirmed for construction.

Foul Water – Extension 1

On review it has been identified that no foul drainage was picked up on the GPRS survey for the building where extension 1 is associated to, pending confirmation by the architect, any proposed foul outputs if any within extension building footprint are to be reviewed and a proposed network to be design to discharge to the closest existing foul network available.

Foul Water – Extension 2

On review it has been identified that an existing building within the footprint of the proposed extension has 2 foul outfalls routing to the nearby foul manhole (MH08) on the existing foul network, the existing building is to be demolished therefore abandoning the existing foul pipes.

It is therefore assumed that any new foul waters being discharged from the proposed extension, if any pending architect confirmation, are to be routed and discharged to the same manhole available for a foul discharge point.

A foul/combined rising main has also been identified routing through the site boundary of extension 2, based on current proposed drainage strategy this may not impact proposals, however it looks to be in close proximity of the building and the contractor is to be aware of any impacts this have before construction stage.

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	
Private Hydro brake Manhole Chamber	Private Ownership / Management Company	Inspect structure and remove any debris/litter on structure	Six monthly or after severe storms.
Catchpits prior to attenuation	Private Ownership/ Management Company	Inspect structure and remove any debris/litter on structure	Three monthly or after severe storms.
Attenuation Storage Feature	Private Ownership/ Management Company	Inspect structure and remove any debris/litter on structure	Annually or after severe storms.