



STORM WATER / SUDs MAINTENANCE PLAN; SYMMETRY PARK MERSEYSIDE

UNITS 3 and 4

1. Introduction

This drainage maintenance proposal is to be read in conjunction with the following documents:

L036-TIE-52-EX.XX-D-C-005521 - Unit 3 & 4 Drainage Layout

The considered drainage solution comprises of surface water network with free discharge into the attenuated network with a restricted discharge rate to Fox's Bank Brook on the southern boundary of the proposed development limited by a vortex flow control device.

The phase 1 drainage network includes oversized pipes and permeable paving for the 1 in 30 year storm events and attenuation ponds and dock levellers to accommodate the 1 in 100 year event plus 40% climate change.

A plan of routine inspection maintenance should be adopted and adhered to in order to prevent failure due to inadequate maintenance. This document describes the drainage systems used and provides a framework for future maintenance procedures.

2. Site Drainage Components

The site drainage network is shown on Tier Consult drawing reference: L036-TIE-52-EX.XX-D-C-005521 - Unit 3 & 4 Drainage Layout

The main drainage components are;

1. Roof water from the building is collected into a gravity fed drainage system and routed to the below ground oversized pipes. Pipes requires periodic inspection and de-silting as required.
2. The access road is drained by trapped gullies and the service yard by channel drainage. These systems require periodic inspection and de-silting.
3. Porous paved surfaces receive rainwater run-off from the carpark areas of development. Surface water infiltrates through to the subbase where a perforated collection pipe conveys surface water flows into the wider drainage system. This system requires periodic inspection and cleaning to remove litter, dust and leaf fall.



3. Maintenance Schedule

The rate of build up of silt and debris within a drainage system varies from site to site and is dependent upon individual site characteristics. Therefore, the frequency of actions below should be adopted as a minimum standard for a period of 24 months after the completion of the development. This period will be sufficient to assess the system performance over 2 complete seasonal cycles after which the maintenance activity schedule may be reviewed accordingly.

Action	Frequency
Inspect all manholes chambers, road gullies and channel drains for siltation and debris	6 monthly and after every major storm event. Remove debris/silt as encountered
Catchpits immediately upstream from swales	6 Monthly and after heavy rainfall. Remove debris /silt as required
Permeable paving parking bays	3 times per year to remove debris, dust and leaves.

The Land Trust will be responsible for the off site attenuation pond and the minimum requirements from them will be;

- Remove litter and debris.
- Cut grass to retain grass height within operational range.
- Manage vegetation and remove nuisance plants.
- Inspect inlets and outlets for blockages.
- Reseed areas of poor vegetation growth and alter plant types to suit better conditions if required.

4. Management Company

The Land Trust will be manage the off-site maintenance regime, the contact details are below;

The Land Trust, 7 Birchwood One, Dewhurst Road, Birchwood, Warrington, WA3 7GB