

**Carrs Terrace,
Whiston,
Knowsley.
L35 3QP**

**Storm Water Strategy
and Maintenance Plan**

October 2024

Version 1.0

DOCUMENT CONTROL

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V1.0	22/10/2024	Planning Application	JH	JH	JH

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1. Introduction

- 1.1.** This strategy and maintenance proposal is to be read in conjunction with the following JH Drainage Design documents:
- Drainage drawing number YH04-01
- 1.2.** SuDS are an environmentally friendly approach to managing rainfall that uses landscape features to deal with surface water. SuDS aim to:
- Control the flow, volume and frequency of water leaving a development area.
 - Prevent pollution by intercepting silt and cleaning runoff from hard surfaces.
 - Provide attractive surroundings for the community.
 - Create opportunities for wildlife.
- 1.3.** The considered drainage solution comprises of a series of surface water pipework and geocellular underground tanks.
- 1.4.** The proposed surface water networks are designed to accommodate all storm events up to the 1 in 100-year storm event, plus an additional 40% to cater for climatic change.
- 1.5.** 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 of future maintenance procedures.
- 1.6.** The SuDS proposed on the site have been designed for easy maintenance to comprise:
- Regular day to day care – litter collection, grass cutting and checking inlets and outlets where water enters or leaves a SuDS feature.
 - Occasional tasks – managing pond vegetation and removing any silt that builds up in the SuDS features.
 - Remedial work – repairing damage where necessary.

2. Site Drainage Components

- 2.1.** The site drainage network is shown on JH Drainage Design drawing references YH04-01
- 2.2.** The main drainage components are:
- 2.2.1.** Roof water drainage collected through above ground gutters to vertical rainwater down pipes and collected into the below ground drainage network.

- 2.2.2. Surface water runoff from external paved areas is discharged into trapped gullies and linear channels. Requires periodic inspection and de-silting of all trapped gullies and channels.
- 2.2.3. The pavement areas require periodic sweeping as this will remove silt and contamination directly from the paved surface before becoming mobilised during rainfall events and transported into the drainage system.

3. Sustainable Drainage Maintenance Specification

3.1. Generally

Litter – collect all litter and other debris and remove from site at each visit.

Avoid use of weedkillers and pesticides to prevent chemical pollution.

Avoid de-icing agents wherever possible to allow bio-remediation of pollutants in permeable paving.

Protect all permeable, porous and infiltration surfaces from silt, sand, mulch and other materials that can produce fine particles.

3.2. Inlets, Outlets, Controls and Inspection Chambers

Inlets and outlets structures may be surface structures or conveyance pipes with guards or headwalls. They must be free from obstruction at all times.

SuDS flow control structures can be protected orifices, slots weirs or other controls at or near the surface to be accessible and easy to maintain. They may be in baskets, in small chambers or in the open.

Inspection Chambers and rodding eyes are used on bends or where pipes come together and allow cleaning of the system if necessary. They should be designed out of the system where possible.

Regular Maintenance, **monthly**– Inspect surface structures removing obstructions and silt as necessary.

Trim vegetation 1 meter surround to structures and keep hard aprons free from silt and debris.

Occasional maintenance, annually – remove cover and inspect ensuring water is flowing freely and that the exit route for water is unobstructed. Remove debris and silt.

3.3. Maintenance Schedule

The rate of build-up of silt and debris within the 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. The 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
Clear external areas of litter including bin and recycling enclosures.	Monthly
Clear guttering of leaves and debris.	Twice yearly. Spring and Autumn after leaf fall
Inspect all access points for sediment.	6 Monthly and after heavy rainfall. Remove debris /silt as required.
Inspect all manholes chambers for siltation and debris.	6 monthly and after every major storm event. Remove debris/silt as encountered.
Vortex Flow Control Unit.	3 monthly inspect and remove debris.
Catchpits immediately upstream from storage tank.	Minimum 6 monthly and after every major storm event. Remove debris/silt as encountered.

4. Management Company

- 4.1.** The drainage systems will be fully maintained by Young Homes, 116 Duke Street Liverpool L1 5JW. Contact number 07740067921 and will bear all costs associated with cleaning and regular inspections as required