SUDS AND DRAINAGE STRATEGY SUMMARY – DATUM MANCHESTER MCR2

SITE

Simon House, Brownley Rd
M22 5RA Wythenshawe
United Kingdom

1. SUDS & DRAINAGE INFRASTRUCTURE MANAGEMENT

The drainage system includes below-ground attenuation tanks, permeable paving, and swales. Surface water runoff is controlled via a Hydrobrake manhole, limiting discharge to 2.07 l/s into an existing combined sewer. The system is designed to handle storm events up to 1 in 100 years plus 40% climate change allowance.

2. DRAINAGE SYSTEM DESCRIPTION

Key components include:
- Attenuation Tank (215m³ capacity)
- Permeable Paving in car park areas
- Swales at the rear of the building
- Hydrobrake Flow Control
- Rainwater Harvesting (for toilet flushing)
- Porous Surfacing

3. ROLES & RESPONSIBILITIES

The site owner is responsible for all maintenance and operational oversight. The design team includes Lyons O'Neill.

The site owner contracts a third party maintenance provider 'Keysource' who shall manage and execute the maintenance strategy for the sites drainage infrastructure.

4. MAINTENANCE SCHEDULE

Each component has a tailored schedule:
- Attenuation Tanks: Monthly for 3 months, then 6-monthly; annual sediment removal; post-storm inspections.
- Swales: Monthly litter removal, vegetation management, half-yearly sediment control checks.
- Permeable Paving: Brushing/vacuuming 3x/year; monitoring post-storm and annually.
- Hydrobrake: Monthly inspections initially, then 6-monthly.
- Manholes & Piped Drainage: Monthly inspections; flushing and debris removal at start-up.

The following table outlines the maintenance schedule for key drainage components:

Component	Required Action	Frequency
Attenuation Tanks	Inspect for blockages, sediment build-up, and vent issues. Remove debris and repair inlets/outlets.	Monthly for 3 months, then 6-monthly; annually or after storms
Swales	Remove litter, cut grass, manage vegetation, repair erosion, inspect for ponding and sediment.	Monthly; half-yearly for sediment control
Permeable Paving	Brush and vacuum surface, inspect for clogging and siltation, remediate depressions.	Three times a year; post-storm and annually
Manholes & Piped Drainage	Flush pipelines, remove debris, inspect covers and gullies.	Monthly; at start-up and as required
Hydrobrake	Inspect unit, remove debris, hose down if needed.	Monthly for 3 months, then 6-monthly

5. MONITORING & RECORD KEEPING

Visual inspections of all components are required. Records of sediment accumulation, ponding, and blockages must be maintained. Maintenance logs will be kept for each inspection and action taken.

The maintainer Keysource utilises a CMMS toolset for logging inspection records, tracking performance data, and storing maintenance logs. This provides a centralised and accessible platform for record keeping and compliance monitoring.

6. HEALTH & SAFETY MEASURES

Safe access to chambers and swales is required. Manufacturer guidelines will be followed for Hydrobrake and porous surfacing. Inspections involve lifting covers and checking for damage or blockages.

7. FUNDING & LONG-TERM MANAGEMENT

The site owner funds and oversees all maintenance. Maintenance is aligned with CIRIA SuDS Manual standards. Long-term sustainability is ensured through scheduled inspections and responsive actions manged by the clients nominated maintainer 'Keysource'

8. RISK MANAGEMENT OVERVIEW

Flood Zone Classification: Site is in Flood Zone 1 (low probability).
Flood Risk Types & Mitigation:
- Fluvial/Tidal: Low risk
- Surface Water: Low risk, mitigated by SuDS
- Groundwater: Low risk
- Sewer Flooding: Low risk
- Artificial Sources: Very low risk

Climate Change Allowance: 40% increase in rainfall intensity considered.
Operational Risk Controls: Hydrobrake, attenuation tank, monitoring protocols, and maintenance schedules reduce risk of system failure.

9. CONTACTS AND ESCALATION PROCEDURE

For support and fault escalation, the following procedures are in place:
- In-hours support (Mon–Fri, 09:00–17:00): Call 0345 204 3335
- Out-of-hours support (Mon–Fri, 17:00–09:00, weekends & public holidays): Call 0345 204 3334
- Fault Reporting & Technical Queries: support@keysource.co.uk

- General Service Queries & Maintenance Coordination: serviceteam@keysource.co.uk
- Engineers dispatched as required to agreed SLAs