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Project	ICN Framework: Longhurst Road
Document Title or Subject	Drainage Maintenance Schedule
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1 Maintenance to Drainage Systems

Proper maintenance of drainage systems is essential to ensure they function effectively and sustainably. Key objectives include:

- Control the flow to prevent flooding and erosion;
- Prevent pollution by intercepting silt and cleaning runoff from hard surfaces;
- Preserving infrastructure by preventing blockages and damages to pipes and channels;
- Ensuring public safety by minimizing water-related hazards.

2 Managing the Drainage Systems

The attenuation tank and hydrobrake at Longhurst Road has been designed for easy maintenance to comprise:

- Regular Maintenance – Remove sediment and debris from flow control chambers, geocellular system and pipes.
- Remedial work - Repairing damage where necessary
- Monitoring – Conduct routine inspections to assess system performance, check for signs of blockage or deterioration, and verify that flow rates and water levels remain within design parameters.

Contact

Great Places are maintaining the drainage systems at present but will pass responsibility onto a recognised Management Company upon completion. Details to be finalised. United Utilities will be maintaining the S104 system following adoption of the asset. However, the maintenance of the geocellular tank is to remain under the maintenance of Great Places.

3 Drainage Maintenance Requirements & Specification

3.1 General Requirements

For the proposed drainage systems to perform effectively, it is essential that all inlet, outlets, flow control devices, gullies, pipes, manhole structures and attenuation features are monitored to ensure they remain operational. Any specific manufacturer recommendations should be adhered to in the first instance. Adequate access for inspection and maintenance should be available as necessary for the relevant parties, including appropriate equipment and vehicles

- **Avoid** use of weedkillers and pesticides to prevent chemical pollution
- **Avoid** de-icing agents wherever possible to allow bio-remediation of pollutants in permeable surfaces.
- **Protect** all permeable, porous and infiltration surfaces from silt, sand, mulch and other fine particles.
- **Protect** all control features through regular maintenance of the catchpit

Exclusions:

- Maintenance of rainwater harvesting chambers, pumps, etc.
- Maintenance of Plot Drainage
- Maintenance of Hydrobrakes and pipes. **Hydrobrake and pipes under S104 agreement will be solely maintained by United Utilities and not the responsibility of Great Places**

3.2 ACO drains / Gullies

ACO drains are linear drainage systems with surface grates that collect water along roads and paved areas, while gullies are point drains that capture water from specific locations and direct it into underground pipes.

Maintaining both is essential to prevent blockages, ensure efficient water flow, and reduce the risk of surface flooding and water damage. Regular cleaning and inspection help keep these systems functioning properly and extend their service life.

ACO CHANNEL / GULLIES	
Regular Maintenance	**Frequency**
Remove sediment and debris from gullies and channel drain	**Quarterly**
Remedial Actions	
Replace or clean Gullies / Channel Drain if failure occurs	**As Necessary**

3.3 Attenuation Storage Tank

Attenuation storage tanks are subsurface structures designed to temporarily store excess surface water during high-intensity rainfall events. The system is engineered to remain inactive during typical rainfall, only engaging when storm events exceed the 1 in 30-year return period threshold. Once activated, the tank attenuates peak flows by releasing water at a controlled rate into the downstream drainage network, thereby reducing flood risk and protecting infrastructure. The design ensures optimal use of storage capacity during extreme weather conditions while maintaining system efficiency during regular operation.

ATTENUATION STORAGE TANK	
Regular Maintenance	**Frequency**
Inspect and identify any areas that are not operating correctly. For systems where rainfall infiltrates into the tank from above check surface or filter for blockage by sediment, algae or other matter. Remove and replace surface infiltration mediums as necessary. Remove sediment from pre-treatment structures and/or internal forebays.	**Monthly for first 3 months then annually.** **Monthly** **Annually**
Remedial Actions	
Replace or clean inlets, outlets, overflows and vents.	**As Necessary**
Monitoring	**Frequency**
Inspect / check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed.	**Annually.**

3.4 Spillage – Emergency Action

Most spillages on development sites are of compounds that do not pose a serious risk to the environment if they enter the drainage in a slow and controlled manner with time available for natural breakdown in a treatment system. Therefore small spillages of oil, milk or other known organic substances should be removed where possible using soak mats as recommended by the Environment Agency with residual spillage allowed to bio-remediate in the drainage system.

In the event of a serious spillage, either by volume or of unknown or toxic compounds, then isolate the spillage with soil, turf or fabric and block outlet pipes from chamber(s) downstream of the spillage with a bung(s). (A bung for blocking pipes may be made by wrapping soil or turf in a plastic sheet or close woven fabric.) Contact the Environment Agency immediately.

4 Inspection routine

In the absence of specific manufacturer's guidance on inspections, the following section should be used as a guide.

During operational monitoring, the structures should be assessed against a range of criteria:

- **Condition,**
- **Structural Performance,**
- **Hydraulic Performance,**
- **Environmental**
- **Performance**
- **Health And Safety.**

The maintenance guidance for the surface water systems on-site is recorded in Section 3.

In line with CIRIA definitions, inspections are separated into two categories, General and Principal, which are defined as follows:

- **General inspection is the examination of all parts of a structure that can be inspected without specialist equipment.**
- **A principal inspection is defined as a close examination of all accessible parts, including adjacent earthworks, with man-entry or CCTV inspection taking place.**

All inspections carried out on the drainage system should be thoroughly documented, with records retained on file for future reference. This ensures traceability, supports ongoing maintenance planning, and provides evidence of compliance with regulatory and operational requirements.

Note: *Pressure jetting may be required prior to CCTV inspection*

Note: *Inspection regime of the hydrobrake and pipes are the responsibility of the adopting water body United Utilities and not Great Places.*