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## **1.0 Introduction**

### **1.1 Overview**

This plan has been prepared to set out the Maintenance and Management for the proposed drainage to serve the residential development at land adjacent Chapel Hill, Longridge.

### **1.2 Purpose**

The purpose of this plan is to set out the requirements of maintenance to the drainage in order to ensure the body responsible for maintenance is entrusted with a robust inspection and maintenance programme, ensuring the optimum operation of the surface water drainage network is continually maintained for the lifetime of the assets.

The activities listed in this plan are specific to this site and represent minimum maintenance and inspection requirements. However, additional tasks or varied maintenance frequency may be required. Specific maintenance needs of the drainage should be monitored, and maintenance schedules should be adjusted to suit requirements.

All those responsible for maintenance should follow relevant health and safety legislation for all activities and risk assessments and method statements should always be provided.

### **1.3 Drainage at Chapel Hill, Longridge**

The foul and surface water drainage utilises traditional pipework and manholes, plus oversized pipes to act as attenuation and a surface water pumping station.

## 2.0 Management

### 2.1 Overview

There are two levels of inspection proposed in this plan:

- **Yearly inspection.** Consists of a site walkover and visual inspection of the drainage.
- **5 yearly inspection.** Consists of a site walkover and visual inspection, plus review of a CCTV drainage survey.

There are three categories of maintenance activities referred to in this plan.

- **Regular maintenance** (including inspections and monitoring). Consists of basic tasks done on a frequent and predictable schedule.
- **Occasional maintenance.** Comprises tasks that are likely to be required periodically, but on a much less frequent and predictable basis than routine tasks.
- **Remedial maintenance.** Comprises intermittent tasks that may be required to rectify faults associated with the system, although the likelihood of faults can be minimised by good design. Where remedial work is found to be necessary, it is likely to be due to site-specific characteristics or unforeseen events.

### 2.2 Responsibilities

None of the drainage is to be put up for adoption with United Utilities.

A private maintenance company will be instructed to manage and maintain the privately owned drainage within the communal land and highways, plus the pumping station.

### 2.3 Funding

A management company will be set up with all property owners paying into it.

### 3.0 Inspection

#### 3.1 Yearly

The below table provides recommendations to be included within the management and maintenance companies' regular inspection regime for the structure.

	<b>Yearly inspection</b>
Y1	<b>Manholes and inspection chambers.</b> Annual visual inspection to check free flow from ground level.
Y2	<b>Surface Water Pumping Station</b> Annual visual inspection to check free flow from ground level. Review and replacement parts as required to suit the specialist providers requirements.

#### 3.2 5 yearly

In addition to the yearly inspection, all drainage should be surveyed by a specialist drainage CCTV company and a report should be provided to document the condition of the drainage and make any recommendations for remedial repair works.

## 4.0 Maintenance

### 4.1 Regular maintenance

The below table summarises the regular maintenance required.

	<b>Regular Maintenance</b>	<b>Frequency</b>
A1	<b>Litter management</b> Pick up all litter on hard surfaces and in landscaped areas.	Monthly
A2	<b>Grass maintenance</b> Mow all grass and remove cuttings from site.	As required or monthly
A3	<b>Hard surfaces</b> Sweep regularly.	Monthly
A4	<b>Pumping Station</b> It is recommended that the unit should be inspected for debris, silt build up or blockages.	6 monthly

### 4.2 Occasional maintenance

The below table summarises the occasional maintenance required.

	<b>Occasional Maintenance</b>	<b>Frequency</b>
B1	<b>Inspection chambers</b> Inspect chamber cover and frame for any defects, repair and replace as necessary. Inspect chamber interior and incoming/ outgoing pipes for the build-up of silt and debris. Removal of silt and debris by means of vacuum suction and or jetting/ rodding. Ensure manhole access steps/ ladders are secured and inspect for corrosion.	Yearly
B2	<b>Inlets, outlets, gulleys and channels</b> Inspect and remove silt and leaves from gullies and channels. Inspect cover and frame for any defects, repair and replace as necessary. Inspect sumps and outgoing pipework for the build-up of silt and debris. Removal of silt and debris by means of vacuum suction and or jetting/ rodding.	Initially a 6 monthly inspection and if found to be acceptable, reduce to yearly.

	<b>Occasional Maintenance</b>	<b>Frequency</b>
B3	<b>Pumping Station</b> Inspect the pumping station annually by specialist company. Pumps removed, inspected and repairs undertaken as required.	Yearly

## 4.2 Remedial maintenance

The below table summarises the Remedial maintenance required.

	<b>Remedial Maintenance</b>	<b>Frequency</b>
C1	<b>Inlet and outlet repairs</b> Repair damage to inlets and outlets.	As required.
C2	<b>Inspection chamber repairs</b> Repair damage to inspection chambers.	As required.
C3	<b>Carrier drain repairs</b>	As required based on 5 yearly CCTV survey.