

**SUSTAINABLE DRAINAGE AND HIGHWAY  
MANAGEMENT AND MAINTENANCE PLAN**

**for**

**OAKMERE HOMES**

**PROPOSED RESIDENTIAL DEVELOPMENT**

**at**

**CHATBURN ROAD**

**CLITHEROE**

**SEPTEMBER 2019**

**REFORD**

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# **1. INTRODUCTION**

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- 1.1 This sustainable drainage and highway management and maintenance plan for the lifetime of the development has been produced on behalf of Oakmere Homes in support of a planning application for a proposed residential development comprising 39 dwellings on land adjacent Chatburn Road, Clitheroe.
- 1.2 A Management Company will be commissioned to maintain the development in terms of highways, car parking areas, drainage, landscaping, open space etc. An annual levy will be raised by the said company from each householder for the upkeep and future maintenance of the said infrastructure.

## 2. SITE DESCRIPTION

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### Existing

- 2.1 The development site lies to the north of Chatburn Road to the east of the centre of Clitheroe.
- 2.2 The site comprises grassland. The southern boundary of the site is Chatburn Road.
- 2.3 The adjacent site to the west has a planning permission for 30 residential dwellings, which has been granted by Ribble Valley Borough Council and is under construction.
- 2.4 Within the site and parallel to its northern boundary runs a watercourse that flows to the west and ultimately discharges into the River Ribble.
- 2.5 The site falls from Chatburn Road towards the watercourse into which surface water runoff from the site discharges.
- 2.6 United Utilities sewer records show a public foul sewer within Chatburn Road that lies along the site's southern boundary.

### Proposed

- 2.7 Surface water from the development will be collected by a piped system and a restricted discharge made to the watercourse. Attenuation is provided within oversized pipes and manholes. The surface water drainage system is to remain private.
- 2.8 Foul water from the developed site will be collected by a piped system to a proposed foul pumping station located at the end of the access spine road and pumped to the public foul sewer that is located in Chatburn Road. The foul drainage system will remain private.
- 2.9 The proposed roads and car parking areas within the site development are to remain private. Surface water runoff from the roads and car parking areas will drain through SuDS / treatment features comprising trapped gullies and manhole chambers.
- 2.10 The watercourse that runs along the northern boundary of the site in open ditch and will be maintained by the management company.

### 3. MANAGEMENT AND MAINTENANCE RESPONSIBILITIES AND SPECIFICATION

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- 3.1 The table below identifies the maintenance responsibilities for the various drainage and highway features of the scheme.

<b><u>Feature</u></b>	<b><u>Maintenance responsibility</u></b>
Domestic private surface water and foul water drainage	Homeowners
Main surface water drainage within the roads and landscaped areas, including lateral connections	Management company
Main foul water drainage within the roads and landscaped areas, lateral connections, pumping station and rising main	Management company
Highway and car parking areas including drainage (gullies and connections) and street lighting	Management company
Open watercourse on the northern boundary of the site	Management company

- 3.2 The table below lists the various drainage features utilised within the proposed drainage design for the residential development at Chatburn Road, Clitheroe, along with the maintenance regime that should be followed.

<b><u>DOMESTIC PRIVATE DRAINAGE</u></b>	
<b>Regular maintenance</b>	<b>Frequency</b>
Visually inspect gutters to ensure they are kept clear of leaves, debris etc. Lift covers of drainage to inspect chambers for debris and build-up of silts.	Annually. No triggers other than maintenance to be taken on regular schedule.
<b>Occasional tasks</b>	<b>Frequency</b>
Remove leaves and debris from gutters. Remove debris from inspection chambers to ensure outlets are kept clear of debris to ensure adequate drainage.	As required. Indicator of problem / trigger for maintenance when surcharging or flooding of drains occurs or gutters and chambers full of debris and leaves etc.
<b>Remedial work</b>	<b>Frequency</b>
Should drains be heavily blocked or damaged contact drainage maintenance company for unblocking / repair works.	As required. Indicator of problem / trigger for maintenance when drainage not functioning and unblocking pipes and chambers etc. not effective.
<b><u>MAIN SURFACE WATER DRAINAGE WITHIN THE ROADS AND LANDSCAPED AREAS</u></b>	
<b>Regular maintenance</b>	<b>Frequency</b>
Manhole covers are securely in place. Specialist operatives with current confined spaces training to lift covers and visually inspect manholes to ensure they are kept clear of leaves, debris, silt, etc. Check drainage pipes are operating as expected.	Annually or when notified.

<b>Occasional tasks</b>	<b>Frequency</b>
Specialist operatives with current confined spaces training to remove debris and silt from the manholes to ensure outlets are kept clear of debris to ensure adequate drainage.	As required from regular maintenance inspection to trigger works.
<b>Remedial work</b>	<b>Frequency</b>
The specialist operatives are to advise the management company of any repair works necessary to the manholes. Drains heavily blocked or damaged to be jetted / repaired.	As required from regular maintenance inspection to trigger works.
<b><u>FOUL WATER DRAINAGE WITHIN THE ROADS AND LANDSCAPED AREAS / PUMPING STATION / RISING MAIN</u></b>	
<b>Regular maintenance</b>	<b>Frequency</b>
Manhole covers are securely in place. Specialist operatives with current confined spaces training to lift covers and visually inspect manholes and pumping chamber to ensure they are kept clear of leaves, debris, silt, etc. Check drainage pipes are operating as expected.	Annually or when notified.
Specialist operatives to carry out maintenance of pumping equipment.	Annually or when notified.
<b>Occasional tasks</b>	<b>Frequency</b>
Specialist operatives with current confined spaces training to remove debris and silt from the manholes and pumping chamber to ensure outlets are kept clear of debris to ensure adequate drainage.	As required from regular maintenance inspection to trigger works.
<b>Remedial work</b>	<b>Frequency</b>
The specialist operatives are to advise the management company of any repair works necessary to the manholes and pumping chamber. Drains heavily blocked or damaged to be jetted / repaired.	As required from regular maintenance inspection to trigger works.
The specialist operatives are to advise the management company of any repairs to pumping equipment.	As required from regular maintenance inspection to trigger works or when equipment fails to work.
<b><u>HIGHWAY AND CAR PARKING AREAS INCLUDING DRAINAGE (GULLIES AND CONNECTIONS) AND STREET LIGHTING</u></b>	
<b>Regular maintenance</b>	<b>Frequency</b>
Brush regularly and remove all sweepings from hard surfaces and inspect gullies for debris and silt. Clean out gullies.	As required. Indicator of problem / trigger for remedial action when road gullies clogged or blocked and remaining full and overflowing.
<b>Occasional tasks</b>	<b>Frequency</b>
Check wearing course to highway and car parking areas for condition (and any other highways inspection works).	As required. Indicator of problem / trigger for remedial action when road gullies clogged or blocked and remaining full and overflowing.

Carry out electrical testing to street lighting in accordance with BS7671 and a private underground cable network test. Clean the optics (lenses) to ensure the correct illumination levels are achieved	Every six years.
<b>Remedial work</b>	<b>Frequency</b>
Repair and reinstatement of tarmac construction where required. Kerbing to be replaced where damaged. Replace lighting optics that are not working. Replace damaged lamp standards.	As required. Indicator of problem / trigger for remedial action when road gullies clogged or blocked and remaining full and overflowing. As required. As required.
<b><u>WATERCOURSE</u></b>	
<b>Regular maintenance</b>	<b>Frequency</b>
Visually inspect watercourse to ensure it is kept reasonably clear of leaves and debris etc. at surface. Inspection of inlet and outlet structures.	Annually. No triggers other than maintenance to be taken on regular schedule.
Cutting of vegetation along length of open watercourse sections so that the watercourse doesn't become overgrown.	Frequency varies, vegetation will require cutting more often in summer / spring months than autumn / winter months. To be cut as required. No triggers other than maintenance to be taken on regular schedule.
<b>Remedial work</b>	<b>Frequency</b>
Maintenance of watercourse profile should scour or erosion or build-up of silt occur. Repair of inlets and outlets.	As required. Indicator of problem / trigger for maintenance when significant watercourse scour and erosion or build-up of silt has occurred.