#### **MAINTENANCE PLAN**

for

## **OAKMERE HOMES (NW) LTD**

#### PROPOSED RESIDENTIAL DEVELOPMENT

at

**CHATBURN ROAD** 

**CLITHEROE** 

**JUNE 2018** 

## **REFORD**

**Consulting Engineers Limited** 

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#### 1. INTRODUCTION

- 1.1 This sustainable drainage management and maintenance plan for the lifetime of the development has been produced on behalf of Oakmere Homes (NW) Ltd for the proposed residential development on land at Chatburn Road, Clitheroe.
- 1.2 The site has an Outline Planning Permission, reference 3/2013/0981, which has been granted by Ribble Valley Borough Council.
- 1.3 A further planning application has been made, reference 3/2017/0653, for the erection of 30 dwellings.
- 1.4 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

#### **Existing**

- 2.1 The development site lies to the north of Chatburn Road, Clitheroe, to the east of the town.
- 2.2 The site comprises green fields. The southern boundary of the site is Chatburn Road.

  To the west are the residential properties that lie on Kiln Court and Cringle Way. To the east are green fields and within the site and parallel to the northern boundary is a watercourse that runs to the west.
- 2.3 The site falls from Chatburn Road towards the watercourse into which surface water runoff from the site discharges.
- 2.4 United Utilities sewer records show a public foul sewer within Chatburn Road that lies along the site's southern boundary.

#### **Proposed**

- 2.5 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.
- 2.6 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.
- 2.7 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.
- 2.8 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

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

<u>Feature</u>	Maintenance responsibility
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 / culverted watercourse on the eastern 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.

DOMESTIC PRIVATE DRAINAGE		
Regular maintenance	Frequency	
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.	
Occasional tasks	Frequency	
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.	
Remedial work	Frequency	
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.	
MAIN SURFACE WATER DRAINAGE WITHIN TH	E ROADS AND LANDSCAPED AREAS	
Regular maintenance	Frequency	
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.	

Occasional tasks	Frequency
Specialist operatives with current confined spaces training to remove debris and silt from the manholes to ensure outlets are kept clear	As required from regular maintenance inspection to trigger works.
of debris to ensure adequate drainage.	
Remedial work	Frequency
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.

# FOUL WATER DRAINAGE WITHIN THE ROADS AND LANDSCAPED AREAS / PUMPING STATION / RISING MAIN

Monto MAIN	T
Regular maintenance	Frequency
Manhole covers are securely in place.	Annually or when notified.
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.	
Specialist operatives to carry out maintenance	Annually or when notified.
of pumping equipment.	
Occasional tasks	Frequency
Specialist operatives with current confined	As required from regular maintenance
spaces training to remove debris and silt from	inspection to trigger works.
the manholes and pumping chamber to ensure	
outlets are kept clear of debris to ensure	
adequate drainage.	
Remedial work	Frequency
The specialist operatives are to advise the	As required from regular maintenance
management company of any repair works	inspection to trigger works.
necessary to the manholes and pumping	
chamber.	
Drains heavily blocked or damaged to be jetted	
/ repaired.	
The specialist operatives are to advise the	As required from regular maintenance
management company of any repairs to	inspection to trigger works or when equipment
pumping equipment.	fails to work.

## HIGHWAY AND CAR PARKING AREAS INCLUDING DRAINAGE (GULLIES AND CONNECTIONS) AND STREET LIGHTING

Regular maintenance	Frequency
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.
Occasional tasks	Frequency
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	Every six years.
accordance with BS7671 and a private	
underground cable network test. Clean the	
optics (lenses) to ensure the correct	
illumination levels are achieved	
Remedial work	Frequency
Repair and reinstatement of tarmac	As required. Indicator of problem / trigger for
construction where required. Kerbing to be	remedial action when road gullies clogged or
replaced where damaged.	blocked and remaining full and overflowing.
Replace lighting optics that are not working.	As required.
Replace damaged lamp standards.	As required.
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WATERCOURSE	
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Regular maintenance	Frequency
Regular maintenance  Visually inspect watercourse to ensure it is	Frequency Annually.
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Visually inspect watercourse to ensure it is	Annually.
Visually inspect watercourse to ensure it is kept reasonably clear of leaves and debris	Annually.  No triggers other than maintenance to be taken
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