

CRADDYS

PRIVATE DRAINAGE O & M MANUAL

FOR

THE GREEN, CHEADLE

CLIENT

ALDI STORES LTD



AUTHOR CRADDYS

63 MACRAE ROAD
EDEN OFFICE PARK
HAM GREEN
BRISTOL
BS20 0DD

PHONE: 01275 371333
E-MAIL: Nick.Sibanda@Craddys.co.uk

DATE: 05.05.22
CRADDYS DOCUMENT REFERENCE: 79-EXXXX-CDY-XX-XX-RP-D-PM_30_30_29-0003

CONTENTS

1.	INTRODUCTION	2
2.	DESCRIPTION OF THE PROJECT	2
3.	DRAINAGE MAINTENANCE RESPONSIBILITIES	2
4.	PRIVATE DRAINAGE OPERATION AND MAINTENANCE ACTIVITIES AND SCHEDULES	2

Revision	Date	Notes	Author	Checked	Approved
S2-P01	05.05.22	Initial issue	NKS	CS	RG

1. INTRODUCTION

- 1.1. **Purpose of this Report.** This document provides the client with all relevant information required for the operation and maintenance of the private drainage on site. The operation and maintenance of adoptable drainage is not covered in this report.
- 1.2. **CDM Regulations.** The information provided is in line with the requirements of the CDM regulations (2015). For unusual or unforeseeable residual risks associated with the operation, maintenance and decommissioning / dismantling of the drainage, reference should be made to the CDM boxes on the individual drawings.
- 1.3. **Maintenance.** Refer to sections 4 for full maintenance requirements.
- 1.4. **Supporting information.** The as-built drawings will be provided in electronic format to accompany this document as part of the H&S file.

2. DESCRIPTION OF THE PROJECT

- 2.1. **Site location.** The Green, Cheadle, ST10 1XS.
- 2.2. **Brief.** Development of Brownfield site with construction of an ALDI store.
- 2.3. **Foul Water Drainage.** The foul water drainage for the site discharges offsite to the public foul water sewer via a foul water pump station.
- 2.4. **Surface Water Drainage.** The surface water drainage for the site discharges offsite to a watercourse located to the south of the site.

3. DRAINAGE MAINTENANCE RESPONSIBILITIES

- 3.1. All the drainage will be private drainage and will be maintained by Aldi Store Ltd's management company with a quantified regime.

4. PRIVATE DRAINAGE OPERATION AND MAINTENANCE ACTIVITIES AND SCHEDULES

- 4.1. **Overview.** The following information details the drainage items which will require periodic maintenance, and sets out how often they should be maintained to achieve their maximum design life in accordance with CIRIA C753 guidance. All maintenance should be carried out by suitably trained individuals using the appropriate equipment.
- 4.2. **Inspection chambers and manholes.** Inspection chambers and manholes should be inspected annually for build-up of silt and general debris. Should silt/debris be identified in the drainage system, the services of a specialist drainage engineer should be enlisted.
- 4.3. **Unusual / unresolved problems.** If problems persist even after following the following guidelines including the jet-cleaning if necessary, this might indicate greater issues within the system. At this point, a CCTV survey is likely to be required and further advice should be sought from a drainage engineer.

- 4.4. **Cellular storage.** This surface water drainage system is designed to be maintenance free. The collector pipe is lined with a geotextile to stop silt from entering the tank. Therefore, the likelihood of silt entering the tank is very minimal. Refer to the table below which is based on Table 21.3 of the CIRIA C753 for the synthesised maintenance requirements. Reference should be also be made to the Access and Maintenance document by Environmental Sustainable Solutions Ltd, the Versavoid tank supplier. Where guidance contradicts, the Access and Maintenance document by Environmental Sustainable Solutions Ltd should take precedence. A copy of the Access and Maintenance document by Environmental Sustainable Solutions Ltd will be issued as part of the Health and Safety File.

O&M Requirements for Attenuation Storage Tanks (Table 21.3 of CIRIA C753)		
Maintenance schedule	Required action	Typical frequency
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action	Monthly for 3 months, then annually
	Remove debris from the catchment surface (where it may cause risks to performance)	Monthly
	For systems where rainfall infiltrates into the tank from above, check surface of filter for blockage by sediment, algae or other matter; remove and replace surface infiltration medium as necessary.	Annually
	Remove sediment from pre-treatment structures and/ or internal forebays	Annually, or as required
Remedial actions	Repair/rehabilitate inlets, outlet, overflows and vents	As required
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed	Annually
	Survey the pipe that runs through the tank for sediment build-up and remove if necessary	Every 5 years or as required

- 4.5. **Silt traps and hydrobrake chamber.** The silt traps and the hydrobrake chambers should be inspected monthly for the first three months following commissioning and six-monthly thereafter. It will be necessary to hose down and remove any silt from the chamber sumps. If a blockage occurs within a hydrobrake chamber, this can usually be overcome by operating the by-pass door using the rope provided. This will empty the chamber of water down to the level of the outlet allowing further maintenance to be carried out if required.

Silt Traps and Hydrobrake Chamber O&M Requirements (Based on Table 13.1 of CIRIA C753)

Maintenance schedule	Required action	Typical frequency
Regular maintenance	Inspect for sediment and debris in chamber sump Cleaning of gutters and any filters on downpipes	Annually Annually (or as required based on inspections)
Occasional maintenance	Properly maintain pre-treatment components, i.e. gutters and permeable pavements. Check the hydrobrake chamber for blockages.	As required, based on inspections
Remedial actions	Check the condition of the hydrobrake and operation of by-pass door and replace if necessary.	As required
Monitoring	Inspect the hydrobrake and note rate of sediment accumulation	Monthly in the first year and then annually