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**ALDI STORE
STRAIGHT MILE
LLAY**

DRAINAGE MAINTENANCE

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1. INTRODUCTION

This maintenance document covers the drainage system for the new Aldi store on the development site.

2. INITIAL DESIGN

The drainage network on the site has been designed in accordance with the Flood Consequences Assessment, covering the development, prepared by WaterCo. The 100 year storm event makes allowance for 20% climate change using infiltration drainage.

The design has been based on an impermeable service yard and access road being drained using a conventional gravity fed system with the car park being constructed in permeable macadam. The coarse graded aggregate sub-base to the car park area will act as attenuation given the need to limit the off site flow to 5.4l/s for all storm events.

Ground conditions mean that an infiltration method of disposal of the surface water is not possible and therefore the sub-base of the car park is lined by an impermeable membrane and filter drains are provided to collect the naturally attenuated flow. The carpark area has been designed with a permeable surface finish consisting of the following materials:

- 35mm of PA 10 SURF with 70/100 binder
- 120mm of AC20 open BIN with 160/220 binder
- 350mm of 4-20mm aggregate

3. SURFACE WATER MAINTENANCE REQUIREMENTS

The permeable macadam is required to be maintained by a sweeper fitted with water jetting and vacuuming equipment. It is therefore recommended that the whole car park area is swept twice a year with particular emphasis with one clean in early autumn to prevent the breakdown of leaf litter blocking the porous structure.

In a similar manner, the ACO channels to the service yard should be cleared on an annual basis ensuring that the proprietary silt traps are cleaned as necessary to prevent silt entering the permeable stone subbase.

It is recommended that all manholes on the development are cleared of silts on a bi-annual basis to help mitigate the risk of silts entering the system. This includes the manholes with the access road and service yard.

As with any drainage system it is recommended that jet clearing of the system is undertaken on a 5 yearly basis. This should check for defects in the pipework and allow for the removal of any debris.

4. FOUL WATER MAINTENANCE REQUIREMENTS

The foul water is discharged via a connection to the public sewer network and has been designed as a conventional gravity fed system.

It is recommended that the foul networks is cleared on a 5 yearly basis with the inspection also reviewing the pipes for any sign of damage.

5. RESPONSIBLE PERSON

Each Aldi region has designated Property Managers who are based with the distribution centre that serves their store. The drainage maintenance falls under their remit with works sub-contracted as necessary to complete the requirement.

At the time of writing the report Liz Bagnall is the Property Manager for the Neston region and can be contacted at:

Aldi Distribution Centre
Chester High Road
Neston
CH64 3TS
0151 353 2271

The maintenance contractor is David Ratcliff of Calder Construction. Their details are as follows:

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