Parkway One
Princess Road
Manchester
M14 7LU

# SuDS MAINTENANCE PLAN

for

Proposed New Build Apartments

at

Ducie Arms, 424 Stockport Road

Project: J8123

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Revision: -

**The Owner's manual**

This will include the following:

- This document.
- Location of all SuDS component on site (drainage and SuDS drawings).
- Operation and maintenance schedule (below) and a maintenance record.
- Emergency Plan (below)
- Explanation of the consequences of not carrying out the maintenance that is specified (below)
- Identification of areas where certain activities are prohibited for example, stockpiling materials on pervious surfaces (below).

**General Requirements**

Collection of all litter and debris from all areas is to be undertaken on a monthly basis by the property management company.

**Financial Management**

It is proposed that all SuDS facilities will be managed and maintained by Mediscan Diagnostics Services. Specialist maintenance will be carried out by an appointed specialist engineer retained on a fixed contract (of at least 1 year).

**Inlet Structures and Inspection Chambers**

Inlet structures such as rain water down pipes, road gullies and channel drawings. They should be free from obstruction at all times to allow free flow through SuDS. Inspection chambers and rodding eyes are used on bends or where pipes come together. They allow access and cleaning to the system if necessary.

| Maintenance Schedule | Required Action | Recommended Frequency |
|---|---|---|
| Regular Maintenance | Inspect rainwater down pipes and channel drains, removing obstructions and silt as necessary. Check there is no physical damage.<br><br>Strim vegetation 1m min surround to structure and keep area free from silt and debris<br><br>Remove inspection chamber cover and inspect. Water should be free flowing and the exist route is unobstructed. Remove debris and silt. Undertake inspection after leaf fall in Autumn.<br><br>Check topsoil levels are 20mm above edges of chambers to avoid mover damage. | Monthly<br><br>Monthly<br><br>Annually<br><br>As necessary |
| Remedial Actions | Repair physical damage if possible or replace if required. | As required / annual |
| Monitoring | Visual inspections to check for damage as required . | As required |

**Below Ground Drainage Pipes**

Below ground drainage pipes convey water to the SuDS system. They should be free from obstruction at all times to allow free flow.

| Maintenance Schedule | Required Action | Recommended Frequency |
|---|---|---|
| Regular Maintenance | Inspect and identify any areas that are not operating correctly. If require take remedial action. | Monthly for the first 3 months following the construction phase, then annually. |
| | Remove debris from the catchment surface (where it may cause risks to performance). | Monthly |
| | Remove sediment from pre-treatment inlet structure and inspection chambers. | Annually or as required |
| | Maintain vegetation within the vicinity of the below ground drainage pipes and tanks to avoid damage. | Monthly or as required |
| | Trimming any roots that may be causing blockages. | As required / annually |
| Remedial Actions | Repair physical damage if possible or replace if required. | As required / annually |
| Monitoring | Inspect all inlets, outlets and vents to ensure that they are in good condition and operating as designed. | Annually |
| | Survey inside of pipe runs for sediment build up and remove if necessary. | Monthly for the first year, then annually. |

**Cellular Attenuation Tank**

Storage is provided within the SuDS system by cellular units. They should be free from obstruction at all times to allow free flow and maximum storage capacity.

| Maintenance Schedule | Required Action | Recommended Frequency |
|---|---|---|
| Regular Maintenance | Remove litter & debris from the catchment surface (where it may cause risks to performance).<br><br>Trimming any roots and surrounding grass blockages. | Monthly<br><br>As required |
| Remedial Actions | Repair physical damage if possible or replace if required. | As required / annual |
| Monitoring | Inspect all inlets, outlets and overflows for blockages.<br><br>Inspect inlets and outlets for silt accumulations<br><br>Inspect infiltration surfaces for compaction and ponding | Monthly / after a heavy storm<br><br>Bi-annually<br><br>Monthly |

**Hydro-Brake Flow Control**

Low amounts of maintenance is required for Flow Control as it contains no moving parts – blockages typically occurs at intake. Hydro-Brake Flow Controls are fitted with a pivoting by-pass door, allowing manhole chamber to be drained down should blockage occur.

| Maintenance Schedule | Required Action | Recommended Frequency |
|---|---|---|
| Regular Maintenance | Initial monthly inspection at the manhole once construction phase is completed. | Monthly |
| Monitoring | Inspect for blockages. | Annually / after a heavy storm |

**Design Life**

The design life of the development is likely to exceed the design life of each of the SuDS components listed above. During the routine inspections of any drainage components, it may become apparent that they have reached the end of their functional lifetime. In the interest of sustainability repairs should be the first-choice solution where possible. If this is not the case then it may be necessary for the property owners (if on their property) or the management company to undertake complete replacement of the component in question.

**Emergency Plan**

Key indicators to prevent flooding;

1. Manholes over flowing
2. Vent pipe overflowing
3. Gullies overflowing or water taking a long time to disperse
4. Aco channels overflowing or water taking a long time to disperse
5. Any other unusual visual items not normally seen such as waterlogged ground

In the event of the above occurring, action is required to be undertaken as outlined below;

1. Check for obvious blockages in area where flooding is occurring (blocked gullies / drains / flow control units etc).
2. If there is nothing obvious as to why there is a blockage, call the statutory wastewater provider – United Utilities to make them aware and report the problem on 0345 672 3723
3. Call a suitable drain inspection company such as 'Lanes for Drains' to survey and possibly jet any blockages. Local depot contact number – 0161 788 2222 and inform them of the problems.

Ensure that in the event of the above, the operation, maintenance and emergency plans as well as the drainage drawings for the development are available to the contractors.

**Spillage – Emergency action**

Most spillages on a development are of compounds that do not pose a serious risk to the environment if they enter the drainage system in a slow and controlled manner with available time for natural breakdown. Therefore, small spillages of oil, milk or other known organic substances should be removed where possible using soak mats as recommended by the Environment Agency, with residual spillage allowed to bioremediate in the drainage system.

In the event of a serious spillage, either by volume of unknown or toxic compounds, then isolate the spillage with soil, turf or fabric and block outlet pipes from chambers downstream of the spillage with a bung.

Contact the Environment Agency immediately. Tel: 03708 506 506