SuDS MAINTENANCE MANUAL

AT

CONNAUGHT HOUSE
5 - 9 CONNAUGHT GARDENS
HIGHGATE
N10 3LH

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Compiled by:

Jeff Horwood I Eng FCIPHE FRSPH MSoPHE
Mobile: 07725362220
Email: jeff@jdhconsulting.co.uk
Web: www.jdhconsulting.co.uk

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1.0 INTRODUCTION

1.1 This report has been prepared in connection with the above development and no responsibility is accepted to any third party for all or part of this study in connection with this or any other development.

1.2 The location, size, depth and identification of existing services that may be shown or referred to in this report have been assessed from non-intrusive observations, record drawings and the like. Any Contractor shall safely carry out intrusive investigations, trial holes or soundings prior to commencing any works to satisfy himself that it is safe to proceed and that the assessments are accurate. Any discrepancies shall be notified to the Client prior to the commencement of any works.

1.3 The SuDS (Sustainable Drainage System) Maintenance Schedule should be read in conjunction with the drainage drawings.

1.4 The SuDS installation is to be maintained in accordance with CIRIA C753 The SuDS Manual (2015). The SuDS installation comprises the following components:-

1.4.1 **Gravity drainage network** which collects rainwater from the above ground rainwater system, hard and soft landscape areas.

1.4.2 **Linear drainage channels and trapped gullies** intercept the surface water and discharge into the drainage network.

1.4.3 **Rodding eyes, inspection chambers (non-entry) and manholes** provide access points for inspection and maintenance.

1.4.4 **Catch pit chambers** intercept silt and debris.

1.4.5 **Attenuation tank** (offline) stores the surface water.

1.4.6 **Flow control chamber** contains the “Hydro-Brake” volumetric control.

1.5 The maintenance procedures for the basement “Delta” cavity wall/external retaining wall moisture drainage system and pumps are not included within this Manual. The “Delta” system is being designed and specified by others.

1.6 This manual is to be incorporated into a formal long term Maintenance Contract with a Specialist Company/Contractor.

2.0 SuDS COMPONENT DESCRIPTION/MAINTENANCE

2.1 Gravity drainage network

2.1.1 The drainage network is inspected and maintained by opening rodding eyes, inspection chambers (non-man entry manholes) and manholes.

2.1.2 Once the access points or covers have been opened, the pipework can be CCTV surveyed, drains rodded or drain cleaning jetting equipment inserted.

2.2 Linear drainage channels and trapped gullies

2.2.1 Drainage channels are inspected by removing the gratings or access covers.

2.2.2 Gullies are provided within the drainage channel and where required, at low points within the hard landscape.

2.3 Rodding eyes, inspection chambers and manholes

2.3.1 Access into the drainage system is generally carried out through non-man entry rodding eyes or inspection chambers.

2.3.2 Rodding eyes are used to allow drainage rods, CCTV cameras and jetting equipment to enter the system.

2.3.3 Inspection chambers are non man entry and allow inspection of the visible branch drains and main channel. Drainage rods, CCTV cameras and jetting equipment can also be inserted into the system at these points. If required, debris can be removed from the chamber.

2.3.4 Manholes are sized to allow man entry, which is restricted to specialist confined space working operatives only.

2.4 Catch pit chambers

2.4.1 Catch pits are like manholes, but have a sump catch pit and no benching. The sump is used to catch debris and will require to be pumped out to remove collected silt and if required, allow man entry.

2.4.2 Man entry is restricted to specialist confined space working operatives only.

2.5 Attenuation tank

2.5.1 The attenuation tank is a sealed unit and can only be accessed for inspection via the flow control chamber's interconnecting pipework.

2.6 Flow control chamber

2.6.1 The flow control chamber contains the “Hydro-Brake” flow control and high level overflow.

2.6.2 The “Hydro-Brake” has a cable with a ring pull fixed below the cover. The ring pull operates a bypass which would allow the chamber and the attenuation tank to empty should the vortex funnel become blocked.

2.6.3 The overflow should only operate in the unlikely event that the vortex funnel becomes blocked.

2.6.4 Man entry is restricted to specialist confined space working operatives only.

2.7 Health and Safety

2.7.1 Inspections and maintenance of the SuDS installation should only be carried out by suitably qualified Contractors, who are familiar with the installation and all the risks and hazards to its personnel and non-maintenance personnel within or adjacent to the working area, in accordance with the Construction (Design and Management) Regulations (CDM) 2015.

3.0 SuDS MAINTENANCE SCHEDULE

Maintenance schedule	Required action	Typical frequency
Regular maintenance	Inspect and identify any areas that are not operating correctly	Monthly for 3 months, then annually
	Inspect drainage channels, gullies and “Hydro-Brake” for blockages by sediment, algae or other matter	3 Monthly or if local flooding is reported
	Inspect and remove sediment from catch pit and gully silt traps	Annually
	Inspect “Hydro-Brake” and service bypass mechanism	Annually
Remedial Action	Repair/rehabilitate inlets, outlets, vents, overflows, gratings, access covers and manhole covers	As required
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operate as designed	Annually
	CCTV survey the drainage system and attenuation tank for sediment build-up and remove if necessary	Every 5 years or as required

4.0 ADDITIONAL REFERENCES

4.1 CIRIA C753 The SuDS Manual (2015) Chapter 32 - Operation and Maintenance.

4.2 Construction (Design and Management) Regulations (CDM) 2015.