Maintenance Schedule	Required Action	Recommended Frequency
At Commission	Inspect all areas to ensure free from construction debris and silt	Once at commission
Regular Maintenance at Commission	Inspect and identify any areas that are not operating correctly. If required, take remedial action	Annually inspections based on manufacturers guidance
	Debris removal from catchment surface (where may cause risk to performance)	Monthly
	Where rainfall infiltrates into blocks from above, check surface filter for blockage by silt, algae, or other matter. Remove and replace surface infiltration medium as necessary	Monthly (and after large storms)
	Remove sediment from pre treatment	Annually or as required
Remedial Actions	Repair/rehabilitation of inlets, outlet, overflows, and vents	As required
Monitoring	Inspect/ check all inlets, outlet, overflows, and vents to ensure in good condition and operating as required	Annually and after large storms

Maintenance Strategy

In order to protect geocelluar installations from damage, siltation and reduce onerous maintenance and inspections, systems are designed to product the tanks from direct damage and intercept suspended solids. Recommended design measures and good practice to include in the specification for the installation are given below.

- Tanks are recommended to be designed to be offline but online tanks incorporating a low flow bypass pipeline usually 150mm in diameter is usually acceptable
- Silt traps, hydrodynamic separators or similar should be installed upstream of the tank inlets
- Allowance should be made for siltation and a percentage loss of capacity agreed over the design life of the installation
- Where direct connections are to be made a temporary geotextile is recommended to be placed over/around the unit inlet pipes to prevent silt ingress during construction. this is removed prior to final commissioning.
- Isolation/ Penstock control units should be provided to isolate the installation for maintenance and prevent/ control contamination flows.
- Geocelluar installation pipework/ manifolds shall be CCTV accessible for inspection
- No large shrubs to be planted over the geocelluar installation plus or within 3m in all directions and 6m from small/medium specimens. Large trees such as Oaks should not be planted within 20m of the installation
- Geocelluar installation should not be constructed beneath the existing or the predicted full mature canopy of trees
- A specialist contractor must be used for the sealing of the membrane which should be by automatic heat welding units. use of taped seams even on soakaway installations are not recommended
- Warning tape or a grid should be provided 300mm above the installation to visually indicate that there is a buried structure
- Permanent above ground signage detailing location and depth should also be provided.
- Pre-agreed maintenance and inspection regimes should be in place at handover to the client.

HYDRO-BRAKE® FLOW CONTROL

MAINTENANCE AND SAFETY DATA SHEET

MAINTENANCE

Normally, little maintenance is required as there are no moving parts within the Hydro-Brake® Flow Control. Experience has shown that if blockages occur they do so at the intake, and the cause on such occasions has been due to a lack of attention to engineering detail such as approach velocities being too low, inadequate benching, or the use of units below the minimum recommended size. Hydro-Brake® Flow Controls are fitted with a pivoting by-pass door, which allows the manhole chamber to be drained down should blockages occur. The smaller type conical units, below the minimum recommended size, are also supplied with roding facilities or vortex suppressor pipes as standard.

Following installation of the Hydro-Brake® Flow Control it is vitally important that any extraneous material i.e. Building materials are removed from the unit and the chamber. After the system is made live, and assuming that the chamber design is satisfactory, it is recommended that each unit be inspected monthly for three months and thereafter at six monthly intervals with hose down if required. If problems are experienced please do not hesitate to contact the company so that an investigation may be made.

Hydro-Brake® Flow Controls are typically manufactured from grade 304 Stainless Steel which has an estimated life span in excess of the design life of drainage systems.

COSHH

Hydro-Brake® Flow Controls are manufactured from Stainless Steel, which is not regarded as hazardous to health and exhibits no chemical hazard when used under normal circumstances for the stated applications.

MANUAL HANDLING

The handling of Hydro-Brake® Flow Controls should be in accordance with current legislation and regulations:

- The Health and Safety at Work Act 1972.
- The Management of Health and Safety at Work Regulations 1992.
- The Manual Handling Operations Regulations 1992.

All published and printed by the Health and Safety Executive.