

## **SuDS Maintenance Regime for Phase 9 off Camp Road, Upper Heyford March 2021**

### **Stormwater Maintenance Regime**

This Maintenance Regime defines the scope of inspections and maintenance that are to be carried out on surface water drainage elements such as pipes, manholes/catchpits, flow controls, storage crates, ponds, permeable paving and headwalls.

This document provides a methodology for maintaining the above and includes:

- Guidance on the scope of inspection and maintenance requirements, including suitable personnel and frequency of inspections.
- Guidance on recommended actions that arise from the inspections.

### **Scope of Inspections and Maintenance**

#### **- Type of Inspections**

During and following construction, regular inspections are required in order to assess their performance and to schedule any required maintenance.

Inspections are divided into two categories:

- Routine Inspections for Maintenance - which are to be carried out by any responsible person (with no professional engineering knowledge).
- Engineering Inspections for Maintenance - which are to be carried out by professional/qualified civil engineering personnel.

Item	Routine Inspections				Engineering Inspections	Renewal & Replacement Works
	Inspection	Min. Frequency	Action	Min. Frequency	Inspections & Action over the life of the development	
Pipes / Manholes / Catchpits	Inspect surface access points to underground storage crates, manholes and catchpits as well as the surrounding area. Particular attention should be paid to damage or blockage.  To be visually inspected after heavy rainfall events to ensure they are free of debris and litter.	6 monthly  As required	Clear accumulated sediment and debris	6 monthly	All manholes/catchpits will require to be inspected externally and internally.  External inspections will determine the overall condition of the access points, and should record deterioration of exposed concrete, access lids, restricted access due to overgrown vegetation/debris.	
Flow Control Device	Inspect flow control devices for blockages, damage and general condition.  To be visually inspected after heavy rainfall events to ensure they are free of debris and litter.	6 monthly  As required	Clear accumulated sedimentation  Repair/replace damaged pit covers and grates	6 monthly  As required	Inspections will determine the overall condition of the flow control device to ensure it is working efficiently and effectively.	Flow control to be replaced by a competent Contractor to the manufacturers specification
Storage Crates	Inspect storage crates via upstream/downstream manholes for silt/debris build-up and general condition.  To be visually inspected after heavy rainfall events to ensure they are free of debris and litter.	6 monthly  As required	Clear accumulated sedimentation via jetting & CCTV	As required	Inspections via inspection chambers/accesses and upstream/downstream manholes will determine the overall condition of the storage crates to ensure they are free from silt/debris build-up and should record any defects/deterioration.	50 year design life  Crates to be replaced by a competent Contractor to the manufacturers specification
Permeable Pavement	Inspect catchpit/silt traps for silt build-up, blockages, damage and general condition  To be visually inspected after heavy rainfall events to ensure organic matter hasn't settled on the surface.	6 monthly  As required	Surface to be brushed/vacuumed to prevent vegetation from growing in the joints.  Outfall and catchpit/silt traps to be inspected and cleared of sedimentation  Weeding of joints through use of approved weed killers	6 monthly (Spring & Autumn)  6 monthly  As required when weeds are actively growing	Inspections will determine the overall condition of the permeable pavement and associated catchpit/silt traps to ensure they are free from silt build-up and it is working efficiently and effectively.	When water starts to run-off the pavement: - Remove a suitable block along the perimeter or one with a larger joint width surround it to - Remove the remaining blocks and stack neatly nearby - Remove the laying course and aggregate onto suitable membranes to be stockpiled - Wash the aggregate and/or replace if necessary - Relay the aggregate, laying course and block paving to the manufacturers specification
Ponds / Swales	Inspect swale and ponds for level of silt build-up, general litter/debris build-up and erosion or damaged areas  To be visually inspected after heavy rainfall events to ensure they are free of debris and litter.	6 monthly  As required	Clear accumulated sedimentation  Clear accumulated debris  Grass cutting and vegetation management  Repair areas of erosion, other damage or re-seeding/re-turfing	6 monthly  Monthly  Monthly to start then as required  As required	Inspections will determine the overall condition of the ponds and swales to ensure they are free from silt/debris build-up, restricted access/flow due to overgrown vegetation/debris and should record any deterioration/erosion	Re-building of embankments due to erosion with suitable material
Headwalls	Inspect headwalls & flap valves for signs of deterioration (scouring), blockage or damage.  To be visually inspected after heavy rainfall events to ensure they are free of debris and litter.	6 monthly  As required	Repair/replace damaged flap valves  Clear vegetation/debris from outlet pipe/flap valve	As required  6 monthly	Inspections will determine the overall condition of the headwalls & flap valves and should record deterioration of exposed concrete, evidence of exposed reinforcement or concrete staining due to deteriorating reinforcement below the surface, damage to flap valves and restricted access/flow due to overgrown vegetation/debris.	