Land adjacent to No. 46 Maresfield Gardens and 39a Fitzjohn's Avenue Camden, London

Drainage Statement

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Date	Revision	Notes/Amendments/Issue Purpose
August, 2024	1	Draft

This statement has been compiled in response to Camden Lead Local Flood Authorities comment on the management of SuDS features for the proposed development at 46 Maresfield Gardens and adjacent site 39a Fitzjohn's Gardens.

The comment listed below has been sent from Camden's Lead Local Flood Authority in response to the planning application.

" No maintenance actions have been proposed for the pond, water butts or hydro brakes. The private management company and site owner responsible for the maintenance of the SuDS features have not been named."

1 Maintenance Schedule

The successful implementation and operation of a SuDS system depends on a robust and clear maintenance strategy being implemented. The following measures will form part of the site's proposed management plan.

The drainage pipes, manholes, gullies, permeable paving pumps etc will be maintained by the site management company and will form part of the overall maintenance regime for the site.

The site will have its own maintenance team to undertake all minor maintenance works to the drainage system, including clearing blockages and cleaning gullies. Alongside this, the maintenance team will have a service contact with a specialist drainage subcontractor to deal with major maintenance issues.

Table 3.3: SuDS Maintenance Strategy as taken from the CIRIA SuDS manual

SuDS Element	Maintenance		
	Activity	**Required Action**	**Typical Frequency**
Swale	**Regular Maintenance**	Remove litter and debris	Monthly, or as required
		Cut the grass, manage vegetation and remove nuisance plants	Monthly at start, then as required
		Inspect inlets, outlets and overflows for blockages, and clear if required	Monthly
		Inspect for ponding, compaction and silt accumulation	Monthly or when required
		Inspect vegetation coverage	Monthly for 6 months, quarterly for 2 years, then half yearly
		Inspect inlets and facility surface for silt accumulation, establish appropriate silt removal frequencies	Half yearly
	Occasional Maintenance	Reseed areas of poor vegetation growth, alter plant types to better suit conditions, if required	As required or if bare soil Is exposed over 10% of more of the swale treatment area.

SuDS Element	Maintenance		
	Activity	**Required Action**	**Typical Frequency**
	Remedial Actions	Repair erosion or other damage by re-turfing or reseeding	As required
		Relevel uneven surfaces and reinstate design levels	
Bioretention Systems	**Monitoring / Inspections**	Inspect infiltration surfaces for silting and ponding, record de-watering time of the facility and assess standing water levels in underdrain to determine if maintenance is necessary	Quarterly
		Assess plants for disease infection, poor growth, invasive species etc. and replace as necessary	
		Inspect inlets and outlets for blockage	
		Check operation of underdrains by inspection of flows after rain	Annually
	Regular Maintenance	Remove litter and surface debris and weeds	Quarterly
		Replace any plants, to maintain planting density	As required
		Remove sediment, litter and debris build-up from around inlets or from forebays	Quarterly to half yearly
	Occasional Maintenance	Infill any holes or scour in the filter medium, improve erosion protection if required	As required
		Repair minor accumulations of silt by raking away surface mulch, scarifying surface of medium and replacing mulch	As required
	Remedial Actions	Remove and replace filter medium and vegetation above	As required but likely to be > 20 years
Rain Gardens	**Regular Maintenance**	Weed spray with environmentally friendly chemicals	Half yearly
		Clear leaves and litter	Half yearly
		Road sweeping to ensure rain garden inlets are swept	Half yearly
		Plants to be pruned	Half yearly
Attenuation Tank	**Monitoring / Inspections**	Inspect all inlets, outlets, vents, overflows and control structures to ensure they are working as they should	Annually or after severe storms
		Inspect and identify any elements that are not operating correctly.	Monthly for three months, then half yearly or as required.
	Regular Maintenance	Remove sediments / debris from catch pits / gullies and control structures	Annually, after severe storms or as required
	Remedial Actions	Repair inlets, outlets, vents, overflows and control structures.	As required

SuDS Element	Maintenance		
	Activity	**Required Action**	**Typical Frequency**
Permeable Paving	**Monitoring / Inspections**	Inspect for evidence of poor operation and/or weed growth – if required, take remedial action	Three-monthly, 48 hours after large storms in first six months
		Inspect silt accumulation rates and establish appropriate brushing frequencies	Annually
		Monitor inspection chambers	Annually
		Brushing and vacuuming -standard cosmetic sweep over whole surface	Once a year after autumn leaf fall
	Regular Maintenance	Rubbish and litter removal	As required
		Remediate any landscaping which through vegetation maintenance or soil slip, has been raised to within 50mm of the level of the paving.	As required
	Remedial Actions	Remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users, and replace lost jointing material	As required
		Rehabilitation of surface and upper substructure by remedial sweeping	Every 10 to 15 years or as required
Hydrobrake Chamber	**Monitoring / Inspections**	Check flow control to ensure emptying is occurring	Quarterly and following high intensity storm events
	Regular Maintenance	Remove sediment and debris from flow control chambers and upstream manholes	Monthly for first 12 months and then twice a year
	Remedial Actions	Replace of clean hydrobrake if performance deteriorates or failure occurs	As necessary