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Harbour Village Northfleet

SURFACE WATER DRAINAGE MAINTENANCE AND MANAGEMENT STRATEGY

The following drainage maintenance and management strategy has been produced and builds on information provided within the SUDS Manual; the maintenance for the Proposed Development will be the responsibility of a management company nominated by Bellway Homes Ltd, in which a suitably qualified maintenance specialist will undertake the work as required.

The following strategy has been based on the main Fastrack Route being adopted by Kent Highways with the main drainage adopted by IWNL with the last manhole and the infiltration basins and areas around these being private.

General			
Remedial Maintenance	At the end of the construction maintenance period, remove all gully gratings and manhole covers and remove accumulated construction debris. Flush drainage system. Check that all pipes are not blocked and silt and debris removal from the forebay.		

Monthly Maintenance			
Litter Pick	Windblown litter can cause deterioration of the water condition and should be removed from any landscaped area.		
Grass Cutting	Grass cutting around the swales, forebay and basins. Removal of leaves.		
Vegetation	Manage vegetation around the basin and remove shopping trolleys and other debris from the dry basins that may have been deposited. Ensure excessive vegetation has not grown in the swale, forebay and basin areas generally and the overflow channels.		
Inlets and Outlets	Inspect the inlet and outlets of the SuDS feature. Remove debris and ensure the overflow is clear.		
Discharge Mattress with the Creek	The mattress is to be inspected every 3 months as a minimum and during the vegetation maintenance of the SUDS basin. The condition of the topsoil and reeds will vary, depending on the flow through the system, time of year and weather conditions. The anti-scour mattress where exposed should be inspected for integrity. If any element of the wire containment system is damaged this is to be locally repaired by adding additional galvanised tying wire to repair any areas of failure. If excessive damage has occurred, the engineer is to be advised.	Replace reeds at the edge of the scour mattress if these do not naturally establish .	Inspect every 3 months or after large storm.
Outlet Flap Valve	Every 3 months the outlet flap valve is to be checked to ensure that it is free moving . The hinge points are to have grease applied every 6 months.	Special care is to be undertaken when applying grease to ensure this is after a dry period and not after a sharp heavy downpour otherwise this could cause a hazard for maintenance personnel .	Inspect every 3 months

SuDS Feature	Check inter-connecting pipework between forebay and main basin. Check surrounding retaining walls for damage or water damage.		Inspect every 6 months or after large storm.
	Regular Maintenance	Occasional Maintenance	Monitoring
Drainage Channels/Gullies	Inspections will be frequent and regular, depending on local conditions, but at least annually by Site management. Inspections of all private drive areas will include gratings; covers including their locking bolts; sumps and sump buckets; exposed concrete surround and adjacent paving. ACO channels to the units on the lower slope of the development are to be flushed with water or high-pressure jetting (no boiling water or cleaning agent will be used). All silt buckets and sumps will be cleaned out and then replaced back into the units ensuring they are correctly fitted.	All channel surfaces and joints will be checked and repaired as necessary.	Inspect every 6 months or after large storm.
Manholes/Inspection Chambers	All manholes/inspection chambers will be checked every 6 months for the accumulation of debris and silt and cleaned as necessary. The discharge manhole is to have the decking removed and the chamber inspected and cleaned of debris and silt during a dry , no storm period.	All channel surfaces and joints will be checked and repaired as necessary.	Inspect every 6 months or after large storm.
Complex Chamber		Weir inspection, benching, siltation, access cover and step rungs checked and repaired as necessary.	Inspect every 3 months or after large storm.
Remedial Maintenance	Complex chamber will be checked every 3 months for the accumulation of debris and silt and cleaned as necessary.		
	Erosion repairs to the swale, forebay and basin	Record checks are to be kept of all	Record checks are to be kept of all

Records	generally. Repair damage caused by vandalism.	inspections noting frequency date and any actions.	inspections noting frequency date and any actions.
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NOTES

Ensure a Contact Sheet is maintained for the maintenance company together with additional guidance notes: - e.g. action plan for dealing with accidental spillages. Details of gully sucker company, fire brigade etc It would also be worthwhile to undertake photographic records of the inspections. This can pick up long-term changes that might not be apparent on a single visit, especially where inspections are carried out by different members of staff.

Ensure that maintenance is undertaken in conjunction with the overall scheme and Bevans and Heritage Park maintenance and all debris from these other operations does not accumulate in the basins.

Personnel are not to enter the SUDS basin or Creek area after heavy rainfall.