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Housing Development

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Surface Water Disposal Maintenance Plan

SURFACE WATER DRAINAGE MAINTENANCE PLAN

1 Why is a maintenance plan is needed

- 1.1 Regular maintenance is required to ensure that the surface water drainage system operates efficiently and does not cause flooding to the property or surrounding buildings and land.
- 1.2 Such work is part of the day-to-day responsibility of all owners and occupiers.
- 1.3 Maintenance is most effective when carried out regularly, on a planned cycle.
- 1.4 Good maintenance needs the regular investment of small amounts of time and money, but the cost of preparing and carrying out a planned maintenance programme should be far less than the costs resulting from a series of unplanned major repairs, and will help plan future financial commitments.

2 What is maintenance?

- 2.1 Maintenance is the routine work which is necessary to protect the drainage system.
- 2.2 When carried out on a planned basis, maintenance helps to prevent the types of failure which occur predictably within the life drainage system
- 2.3 Maintenance falls into three main categories:
 - Inspection to assess condition, report any problems and decide whether repair or other work is necessary.
 - Specific tasks such as clearing debris from inspection chambers and pipes.
 - Minor repairs such as fixing loose covers.
- 2.4 Maintenance differs from repair which is work carried out to put right defects or damage and work to return the drainage system to a good condition on a long-term basis.

3 Rainwater Goods

- 3.1 Rainwater goods are to be inspected twice a year preferably in May and November
- 3.2 Clear debris from gutters and ensure outlets are free running.
- 3.3 Inspect for cracks and leaks and repair or replace as necessary.

4 Below Ground Drainage

- 4.1 Below ground drainage, manholes, inspection chambers, surface water retention tanks and flow controls are to be inspected twice a year preferably in May and November or after an intense storm for blockages.
- 4.2 Manholes and inspection chambers are to be opened up and checked that they are free from silt and debris and that water discharges freely to the drainage outfall.
- 4.3 On completion of cleaning operations to the manholes and inspection chambers the underground drainage pipes should be flushed through with water to ensure that they are free from silt and debris and that water discharges freely.

- 5 Green Roof
- 5.1 Inspect all components including substrate, vegetation and drains annually and after severe storms.
- 5.2 Membranes and roof structures are to be inspected annually and after server storms for proper operation, integrity of waterproofing and structural stability.
- 5.3 Debris and litter is to be removed twice a year preferably in May and November to prevent clogging of outlet pipes and interference with plant growth.
- 5.4 Inspect soil substrate annually or after server storms for evidence of erosion channels.
- 5.5 Inspect drain outlet pipes annually or after server storms to ensure unrestricted run-off from the drainage layer to the roof drainage system.
- 5.6 Inspect underside of roof for evidence of leakage annually and after serve storms.
- 5.7 Replace dead plants as required in the autumn.
- 5.8 Remove fallen leaves in the autumn.
- 5.9 Remove nuisance and invasive vegetation including weeds every six months.
- 5.10 Mow grasses, prune shrubs and manage other planting every six months. Clippings should be removed and not allowed to accumulate.

6 Summary

6.1 The following summary chart is produced for easy reference and is to be read in conjunction with the maintenance instructions above.

MAINTENANCE SUMMARY			
Reference	Element	Maintenance Task	Frequency
3.2	Rainwater Goods	Clear debris from gutters and outlets	Twice a year
3.3	Rainwater Goods	Inspect for cracks and leaks	Twice a year
4.1	Below Ground Drainage	Inspect for blockages	Twice a year or after intense storm
4.2	Below Ground Drainage	Remove silt and debris from manholes and inspection chambers	Twice a year or after intense storm
4.3	Below Ground Drainage	Flush underground pipes with water	Twice a year or after intense storm
5.1 5.2	Green Roof	Inspect all componets and planting for proper operation, waterproofing and structural stability	Annually or after intense storm
5.3	Green Roof	Remove debris and litter	Twice a year
5.4	Green Roof	Inspect soil substrate	Annually or after intense storm
5.5	Green Roof	Inspect drainage system	Annually or after intense storm
5.6	Green Roof	Inspect underside of roofs for leaks	Annually or after intense storm
5.7	Green Roof	Replace dead plants	Annually in the autumn
5.8	Green Roof	Remove fallen leaves	Annually in the autumn
5.9	Green Roof	Remove weeds and invasive vegitation	Twice a year
5.1	Green Roof	Mow grasses, prune shrubs and manage planting	Twice a year