



Allington Lane, Phase 3 Surface Water Maintenance and Management Plan

Vistry Western
July 2025

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1. INTRODUCTION

- 1.1. This Surface Water Maintenance and Management Plan has been prepared on behalf of Vistry Southern in connection with proposals for a residential development in Fair Oak, Eastleigh. The residential development is located east of Allington Lane in the village of Fair Oak, Eastleigh. The location of the site is shown edged red on **Figure 1.1** below.



Figure 1.1: Site Location Plan

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- 1.2. A full planning permission for the development of 35 no. dwellings supported by the provision of associated infrastructure, hard and soft landscaping, open space and drainage was granted on 27 October 2022, subject to a number of planning conditions (Planning Ref: F/21/91132).

1.3. Planning condition 14 states:

“Prior to the first occupation of the development hereby approved, details of the long-term maintenance arrangements for the surface water drainage system shall be submitted to and approved in writing by the Local Planning Authority. The submitted details shall include the following and once approved shall be adhered to in full for the lifetime of the development: a) Plan(s) detailing the ownership of each drainage feature; b) Maintenance schedules for each drainage feature type and ownership; and c) Details of the company or body who will be responsible for the ongoing management and maintenance of the SuDS system.”

- 1.4. The purpose of this report is to provide sufficient information to support the discharge of planning condition 14. The management and maintenance plan for the surface water drainage scheme is for the use of owners, occupiers, operators and maintainers. The surface water drainage scheme for the site prepared by PFA Consulting is set out in Drawing No. V063/55 and a copy is contained in **Appendix A** and described below.

2. SURFACE WATER MAINTENANCE AND MANAGEMENT SCHEME

Surface Water Management Summary

- 2.1. A sustainable drainage strategy, involving the implementation of attenuation SuDS, is proposed for managing the disposal of surface water runoff from the proposed development on the site. Runoff is collected onsite and conveyed by onsite drains, lateral drains and the permeable subbase of shared private drives and on the southern end of main access road, to attenuation SuDS features in the eastern part of the site. Attenuation SuDS features in the form of attenuation tanks and a detention basin are proposed. The detention basin is a landscaped vegetated depression that is periodically wet. Runoff is temporarily stored within the attenuation tanks and detention basin and released at a controlled flow rate to the watercourse on the eastern side of the site.
- 2.2. The detention basin contains a sediment forebay adjacent to the inlet of the basin. The sediment forebay is created by a 300mm high berm within the base to constrain the first flush of runoff from a rainfall event into the detention basin. Runoff is temporarily constrained allowing sediments to settle in this discrete area of the detention basin, in larger rainfall events flows would overtop the berm and fill up the detention basin.
- 2.3. The forebay allows sediment build-up to be easily monitored, and concentrates any required sediment removal activities within a smaller area of the detention basin reducing disturbance to the remainder of the detention basin.
- 2.4. During extreme rainfall events, runoff would drain into the basin. Due to a controlled outflow rate runoff would accumulate in the detention basin and water level would rise. Depending on the size of the rainfall event the water level would vary and the peak water level could be up to 1.176m deep in the extreme rainfall event (with a 1% (1 in 100) probability of occurring in any year).
- 2.5. Outflow rates from the basin are controlled by a means of a vortex flow control located in a manhole in the south east corner of the detention basin. The vortex flow control (hydrobrake) is passive and the design and geometry of the flow control unit varies the outflow rate depending on the water level in the upstream system. The design flow of the hydrobrake is 2.7 l/s. Due to the nature of the device there would be minimum maintenance needs of the flow control.

Maintenance Responsibilities

- 2.6. Paragraph 182 of the NPPF states that sustainable drainage systems used should have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development.
- 2.7. In terms of the maintenance strategy for the proposed drainage measures, the surface water drainage systems would remain private and be maintained by a management company. This includes the attenuation tanks, the detention basin, the permeable subbase and all surface water drains with the exception of those located within individual property curtilages.
- 2.8. The management company details are as follows:

Gateway Property Management Limited
Gateway House
10 Coopers Way
Southend-on-Sea
Essex
SS2 5TE
Contact name: Grace Whitehouse
Tel: 01702 443 555

- 2.9. Individual householders would be responsible for drainage serving their dwelling located within their curtilages.

Operation and Maintenance Requirements

- 2.10. Guidance on the operation and maintenance requirements of sustainable drainage systems is contained in The SuDS Manual 2015 (CIRIA C753). There are three categories of maintenance: regular, occasional and remedial.
- 2.11. Regular maintenance consists of basic tasks including litter and debris removal, grass cutting, and vegetation management, and includes inspections and monitoring to identify potential system failures such as blockages, silt and sediment build-up, eroded or damaged areas, and condition of inlets and outlets.
- 2.12. Occasional maintenance comprises tasks that are likely to be required periodically for example sediment removal.
- 2.13. Remedial maintenance comprises intermittent tasks to rectify faults and would comprise inlet/outlet repairs, erosion repairs and re-aeration of vegetated surfaces.
- 2.14. Maintenance inspections must be undertaken by personnel with at least the minimum health and safety experience, and where appropriate, qualification requirements for the particular inspection type. The results of the inspections shall be recorded in the Maintenance Plan Records. Any deficiencies shall be reported for review and remediation.
- 2.15. In addition, remedial inspections should be undertaken as soon as possible as a result of notification of a defect by a third party. The purpose of remedial inspections is to identify obvious deficiencies which represent, or might lead to, a danger to the public and, therefore, require immediate or urgent attention.

SuDS Feature Maintenance Requirements

- 2.16. The management company would be responsible for implementing the maintenance plan set out below for the permeable paving, attenuation tanks and detention basin in accordance with the recommendations in CIRIA C753 'The SuDS Manual'.
- 2.17. Maintenance access to the detention basin would be achieved from the development roads and across the adjacent public open space.
- 2.18. The operation and maintenance requirements for the detention basin, attenuation tanks and permeable subbase including required actions and typical frequency are shown in **Table A** below.

Table A: Detention Basin Maintenance Procedures

Maintenance Schedule	Required action	Typical frequency
Regular maintenance	Remove litter and debris	Monthly
	Cut grass – for spillways and access routes	Monthly during growing season or as required
	Cut grass – meadow grass in and around basin	Half yearly (spring – before nesting season and autumn)
	Manage other vegetation and remove nuisance plants	Monthly (at start then as required)
	Inspect inlets, outlets and overflows for blockages and clear if required	Monthly
	Inspect banksides, structures and pipework etc for evidence of physical damage	Monthly
	Inspect inlets and facility surface for silt accumulation. Establish appropriate silt removal frequencies	Monthly (for first year), then annually or as required
	Check any penstocks and other mechanical devices	Annually
	Tidy all dead growth before start of growing season	Annually
	Remove sediment from inlets, outlet and forebay	Annually (or as required)
	Manage wetland plants in outlet pool – where provided	Annually (as set out in Chapter 23 of SuDS Manual)
	Inspect life rings or any other public rescue equipment (PRE) for damage. If required, take remedial action	Monthly or as required
Occasional maintenance	Reseed areas of poor vegetation growth	As required
	Prune and trim any trees and remove cuttings	Every 2 years, or as required
	Remove sediment from inlet, outlets, forebay and main basin when required	Every 5 years, or as required
Remedial actions	Repair erosion or other damage by reseeding or re-turfing	As required
	Realignment of rip-rap	As required
	Repair/rehabilitation of inlets, outlets and overflows	As required
	Relevel uneven surfaces and reinstate design levels.	As required

Maintenance Schedule	Required action	Typical frequency
	Replace any stolen, damaged or vandalised PRE	As required

Table B: Attenuation Tank Maintenance procedures

Maintenance Schedule	Required action	Typical frequency
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action	Monthly for 3 months then annually
	Remove debris from the catchment surface (where it may cause risks to performance)	Monthly
	For systems where rainfall infiltrates in to the tank from above, check surface of filter for blockage by sediment, algae or other matter; remove and replace surface infiltration medium as necessary	Annually
	Remove sediment from pre-treatment structures and/ or internal forebays	Annually or as required
Remedial actions	Repair/rehabilitate inlets, outlet, overflows and vents	As required
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed	Annually
	Survey inside of tank for sediment build-up and remove if necessary	Every 5 years or as required

Table C: Permeable Subbase Maintenance Procedures

Maintenance Schedule	Required action	Typical frequency
Regular maintenance	Brushing and vacuuming (standard cosmetic sweep over whole surface)	Once a year after autumn leaf fall, or reduced frequency as required based on site-specific observations of clogging or manufacturer's recommendations – pay particular attention to areas where water runs onto pervious surface from adjacent impermeable areas as this area is most likely to collect the most sediment
	Trimming any roots that may be causing blockages	Annually (or as required)
	Inspect for sediment and debris in pre-treatment components and floor of inspection tube or chamber.	Annually
Occasional maintenance	Stabilise and mow contributing and adjacent areas	As required

Maintenance Schedule	Required action	Typical frequency
	Removal of weeds or management using glyphosate applied directly into the weeds by an applicator rather than spraying	As required – once per year on less frequently used pavements
	Remove sediment and debris from pre-treatment components and floor of inspection tube or chamber	As required, based on inspections
Remedial Actions	Remediate any landscaping which, through vegetation maintenance or soil slip, has been raised to within 50 mm of the level of the paving	As required
	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 (if infiltration performance is reduced due to significant clogging)
	Reconstruct porous sub-base and/or replace or clean void fill, if performance deteriorates or failure occurs	As required
	Replacement of clogged geotextile (will require reconstruction of porous sub-base)	As required
Monitoring	Initial inspection	Monthly for 3 months after installation
	Inspect for evidence of poor operation and/or weed growth – if required, take remedial action	Three-monthly, 48h after large storms in the first six months
	Inspect silt accumulation rates and establish appropriate brushing frequencies	Annually
	Monitor inspection chambers	Annually

- 2.19. A SuDS Maintenance Checklists, adapted from The SuDS Manual 2015 (CIRIA 753), is reproduced in **Appendix B**. This Checklist enables maintenance inspections to be recorded for review and remediation.

Pollution Incident Response

- 2.20. The SuDS Manual recommends the operation and maintenance manual should include an outline action plan for dealing with accidental spillages of pollutants and details of whom to contact in the event that pollution is visible or if the system is not working correctly.

Matters to be Reported to Adopting Authorities / Environment Agency

- 2.21. Spillages, sewage misconnections, fly tipping or vandalism have the potential to pollute the surface water runoff from the site which could lead to harm of onsite habitats and downstream watercourses.

- 2.22. The detention basin should be visually inspected for changes in colour, transparency, oil sheen, foam build up, unusual odours (chemical, fuel, sewage, solvent), nuisance insects or other indicators of pollution. If any deterioration in the quality of water contained in the detention basin is identified, or a spillage of a potential contaminant identified on the detention basin surface, this should be reported to the management company at the contact details in paragraph 2.8 above and the Environment Agency as per the contact details in the paragraphs below.
- 2.23. The Environment Agency are the regulator responsible for responding to incidences of water pollution in England. When reporting a potential pollution incident to the Environment Agency they will require details of the location and when you noticed it / time of the incident and a description of the pollution / effects. The location of the detention basin is at grid reference X: 345190 , Y: 160001 (ST 45190 60001). Pollution can be reported using an online tool <https://report-an-environmental-problem.service.gov.uk/water-pollution/water-feature> or via a 24 hour Environment Agency incident hotline Telephone: 0800 80 70 60.
- 2.24. Due to the nature of the upstream development (a small housing development) the risk of a significant pollution incident is considered to be limited. Nonetheless in the unlikely event that pollution results in a risk to life, fire, explosion or is suspicious then the emergency services should be notified via phoning 999.

Instructions to Pollution Response Operatives

- 2.25. The principles of stop, notify, contain and clean up should be applied by the operatives from either the management company or the Environment Agency responding to a pollution incident. Any incident response should be tailored to the nature of the pollution event and onsite conditions. Generic advice which could be implemented is set out below as per the steps below.

Stopping the source of pollution

- 2.26. Source of the pollution should be investigated and if it is safe to do so stopped as soon as feasible.

Containment of pollution with the detention basin

- 2.27. It is preferable to contain pollution within the detention basin rather than allow offsite discharges to continue which could have a detrimental effect offsite.
- 2.28. If feasible the outlet from the detention basin should be blocked. Water levels should be monitored and if water levels rise close to the detention basin's capacity the risk, and consequence of overflow compared should be assessed.
- 2.29. Containment and treatment measures could be considered including:
- Silt curtains/fences or sedimats
 - Oil absorbent booms, Absorbent/spill pads or granules
 - Creation of temporary barriers/bunds using sandbags, earth or other available material.

- 2.30. Discharge from the site should be monitored downstream until conditions return to normal.

Clean-up and Remediation of the detention basin

- 2.31. Once the pollution incident is contained and under control, the need for clean-up and remediation of the detention basin would be necessary.

- 2.32. Any contaminated containment and treatment measures (such as absorbent materials) or sediment should be removed and disposed of appropriately using an appropriately licensed waste contractor to an appropriately permitted facility. It is possible that the material may be classified as 'hazardous' waste and there is a duty of care to ensure that the waste itself does not pose a pollution risk. Appropriate personal protective equipment (PPE) and safe working methods should be employed for working with contaminated material.
- 2.33. If suitable, contaminated waters could be pumped out for appropriate treatment onsite (e.g. silt busters) or for offsite treatment/disposal depending on the nature of the contaminant.
- 2.34. Once the detention basin is empty, it is recommended specialist advice of a suitably qualified landscape architect is sought to assess the implications for the landscaping scheme and if any remedial works are required (e.g. reseeded).
- 2.35. Once the detention basin is empty it is recommended specialist advice of a suitably qualified drainage engineer is sought to assess if any remedial works are required to ensure its functionality is maintained (e.g. sufficient attenuation storage).

3. SUMMARY

- 3.1. This Surface Water Maintenance and Management Plan clarifies the parties responsible for the management of the surface water drainage system, the role and function of the drainage system and guidance on pollution incident response.
- 3.2. The application of the maintenance measures set out in **Tables A, B and C**, alongside the use of the SuDS Maintenance Inspection Checklist in **Appendix B**, ensures there are clear long term maintenance arrangements in place for every element of the surface water drainage system.

ALLINGTON LANE, PHASE 3, FAIR OAK, EASTLEIGH

**CELLULAR STORAGE TANK, DETENTION BASIN AND PERMEABLE SUBBASE
MAINTENANCE INSPECTION CHECKLIST**

1. Introduction

1.1. This Maintenance Inspection Checklist is based on Table B.25 of the CIRIA C753 'The SuDS Manual' and has been adapted to be site specific. It should be read in conjunction with the following documents:

- Surface Water Maintenance and Management Scheme (Document Ref: V063-DOC01)

Cellular Storage Tank, Detention Basin, Permeable Subbase Maintenance Inspection Checklist			
General information			
Elements forming the SuDS scheme	Cellular Storage Tank Detention Basin Permeable Subbase	Approved drawing reference(s)	V063/55
Additional Elements	Watercourses within site boundary	Approved drawing reference(s)	V063/55
Inspection frequency	At maintenance interval set out in Surface Water Maintenance and Management Scheme (Document Ref: V063-DOC01) or half yearly	Approved specification reference	TBC
Type of development	Residential	Specific purpose of any parts of the scheme (e.g. biodiversity, wildlife and visual aspects)	N/A

Inspection date								
	Details	Y / N	Action required	Date completed	Details	Y / N	Action required	Date Completed
General inspection items								
Is there any evidence of erosion, channelling, ponding (where not desirable) or other poor hydraulic performance?								
Is there any evidence of accidental spillages, oils, poor water quality, odours or nuisance insects?								
Have any health and safety risks been identified to either the public or maintenance operatives?								

	Details	Y / N	Action required	Date completed	Details	Y / N	Action required	Date Completed
Silt/sediment accumulation								
Is surface clogging visible (potentially problematic where water has to soak into the underlying construction or ground (e.g. underdrained swale or infiltration basin)?								

	Details	Y / N	Action required	Date completed	Details	Y / N	Action required	Date Completed
Does permeable or porous surfacing require sweeping to remove silt?								
System blockages and litter build-up								
Is there evidence of litter accumulation in the system? If yes, is this a blockage risk?								
Is there any evidence of any other clogging or blockage of outlets or drainage paths?								
Vegetation								
Is the vegetation condition satisfactory (density, weed growth, coverage etc)? (Check against approved planting regime.)								
Does any part of the system require weeding, pruning or mowing? (Check against maintenance frequency stated in approved design.)								
Is there any evidence of invasive species becoming established? If yes, state action required								

	Details	Y / N	Action required	Date completed	Details	Y / N	Action required	Date Completed
Infrastructure								
Are any inlets/overflows in good condition?								
Is there evidence of any accidental damage to the system (eg wheel ruts?)								
Is there any evidence of cross connections or other unauthorised inflows?								
Is there any evidence of tampering with the infrastructure?								
Are there any other matters that could affect the performance of the system in relation to the design objectives for hydraulic, water quality, biodiversity and visual aspects? (Specify.)								
Other observations								
Information appended (e.g. photos)								
Suitability of current maintenance regime								
Continue as current Increase maintenance Decrease maintenance								
Next inspection								
Proposed date for next inspection								