

Condition 32 states -	<p><u>Surface water drainage</u></p> <p>The development hereby permitted shall not be commenced until a detailed surface water drainage scheme for the site, based on the agreed flood risk assessment (FRA) Agar Grove, Drainage and Flood Risk, December 2013, project reference 28732, FRA issue 3 and technical note, number 28732-C-TN03, dated 22.01.14, has been submitted to and approved in writing by the local planning authority. The drainage strategy shall include a restriction in run-off to 28.9l/s (as shown in the technical note, 28732-C-TN03) and surface water storage on site as outlined in the FRA. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed.</p>
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Further information has been requested in relation to aspects of Sustainable Urban Drainage Systems (SUDS). This document provides maintenance details for the SUDS as well as a schedule detailing who will be doing what maintenance, at what time of year and how frequently.

Elements

Permeable pavements

Storm Cell Attenuation Tanks

Living Roofs

Rain gardens, Bioretention Areas and Swales

Task	Frequency	Season	Actioned by
Permeable paving maintenance: Cleaning either by water jetting or agitation brushing. Remove silt.	As required – bimonthly inspections	All	London Borough of Camden, Supporting Communities, Property Management division
Replacement of concrete paving: Replacement of cracked elements considered a hazard.	As required – bimonthly inspections	All	London Borough of Camden, Supporting Communities, Property Management division
Maintenance of Drainage Pipes and Gullies: Visual check of underground pipes and gully pots to ensure clean from debris. Clean and empty as required.	2 x per annum	All	London Borough of Camden, Supporting Communities, Property Management division
Maintenance of Attenuation Tank: Inspect all areas (inlets, outlets, overflows, pre-treatment) are operational, check for debris, algae or sediment and remove as required.	Annually	All	London Borough of Camden, Supporting Communities, Property Management division
Maintenance of Internal Tank: Survey inside of attenuation tank for sediment.	Every 5 years	All	London Borough of Camden, Supporting Communities, Property Management division
Maintenance of Surface Drainage Grates and Channels: Remove any sediment, leaf or litter debris. Renew and replace bolts as required.	Monthly	All	London Borough of Camden, Supporting Communities, Property Management division
Brown Roof			London Borough of Camden,

<ul style="list-style-type: none"> Remove any excessive invasive weeds; Remove leaf litter, arisings and litter. 	<p>2x annually</p> <p>2x annually</p>	<p>Spring & Autumn</p> <p>Spring & Autumn</p>	Supporting Communities, Property Management division
<p>Intensive Green Roof</p> <ul style="list-style-type: none"> Remove any invasive weeds; Summer Trimming: Cut to 500mm; Autumn Trimming: Cut to 40cm-60cm. 	<p>2x annually</p> <p>1x annually</p> <p>1x annually</p>	<p>Spring & Autumn</p> <p>July-Aug</p> <p>Oct/Nov</p>	London Borough of Camden, Supporting Communities, Property Management division
<p>Extensive Green Roof</p> <ul style="list-style-type: none"> Apply organic fertiliser annually; Remove any excessive invasive weeds; Water during prolonged dry spells; Replace any failures to original specification; Remove leaf litter, arisings and litter. 	<p>1x annually</p> <p>2x annually</p> <p>Monthly</p> <p>1x annually</p> <p>2x annually</p>	<p>April</p> <p>Spring & Summer</p> <p>Spring-Summer</p> <p>Autumn</p> <p>Spring & Autumn</p>	London Borough of Camden, Supporting Communities, Property Management division
<p>Rain Gardens</p> <ul style="list-style-type: none"> Maintain weed free; Litter and Debris removal; Water during prolonged dry spells; Apply organic fertiliser on a bi-annual cycle; Replacement planting for failures. Inspect the soft landscape after any precipitation to ensure no displacement of any organic matter, particularly at the base of the RWP after large storm events. If ponding is not clearing after 24 hours, remove the soils and remove and clean or replace the open graded crushed rock drainage layer. Inspect the weep hole for blockages, remove debris littering hole/ preventing free flowing drainage. 	<p>Monthly</p> <p>Monthly</p> <p>During the horticultural growing season</p> <p>Bi-annually</p> <p>Annually</p> <p>As required</p> <p>As required</p> <p>As required</p>	<p>All</p> <p>All</p> <p>April</p> <p>Oct-Mar</p> <p>All</p> <p>All</p> <p>All</p>	London Borough of Camden, Supporting Communities, Property Management division
Bio-retention Beds			London Borough of Camden,

<ul style="list-style-type: none"> • Litter and Debris: Remove as necessary; • Hand remove pernicious weeds before they set seed; • Remove leaf litter as necessary • Clip Buxus hedge to encourage new growth; • Clip Buxus hedge to form 450mm plinth; • Clip Buxus hedge to remove any stray branches; • Inspect the soft landscape after any precipitation to ensure no displacement of any organic matter; • Inspect filter drain to ensure that the distribution pipework arrangement is operational and free from blockages. If required, take remedial action. 	<p>Monthly</p> <p>3-4x annually</p> <p>3-4x annually 1x annually</p> <p>1x annually</p> <p>2x annually</p> <p>As required</p> <p>As required</p>	<p>All</p> <p>All</p> <p>All May</p> <p>August</p> <p>Spring, Autumn</p> <p>All</p> <p>All</p>	<p>Supporting Communities, Property Management division</p>
<p>Swales</p> <ul style="list-style-type: none"> • Spring: Over-seed failed areas to original specification; • Summer: First cut mid-summer then subsequently maintain sward between 75-200mm removing all arisings; • Autumn: Last mowing; • Leaf & Litter Removal, Weed Control, Debris & Litter Removal; • Inspect the soft landscape after any precipitation to ensure no displacement of any organic matter; • Inspect filter drain to ensure that the distribution pipework arrangement is operational and free from blockages. If required, take remedial action. 	<p>1x annually</p> <p>Approx. 6x</p> <p>1x annually</p> <p>Monthly</p> <p>As required</p> <p>As required</p>	<p>April-May July-Oct</p> <p>Nov</p> <p>All</p> <p>All</p> <p>All</p>	<p>London Borough of Camden, Supporting Communities, Property Management division</p>

See also – Sustainable Drainage Systems Ltd, GEOLight, product sheet for the attenuation tank system enclosed.