

Permeable Paving and Storm Water system Maintenance Schedule

For

Residential Development

Wensley Road Reading

Client:

Redaing Borough Council

Drainage Engineer:

WFBA
The Old Hayloft,
Pucknall Farm,
Dores Lane,
Braishfield,
Romsey,
Hampshire, SO51 0QJ

Job Ref:

19195

Report Reference:

Maint-001

PROJECT TITLE	Wensley Road Reading	PROJECT No.	19195	SHEET No.	1/01
		ENG'R	WFB	DATE	Feb 2021
ELEMENT	Storm Drainage and Permeable Paving Maintenance Schedule	CHK'D	PT	DATE	Mar 21

Maintenance Schedule

INTRODUCTION

Regular inspection and maintenance is important for the effective operation of pervious pavements and below ground drainage networks. Maintenance responsibility for a pervious pavement and its surrounding area should be placed with an appropriate responsible organisation. The facility should be inspected regularly, preferably during and after heavy rainfall to check effective operation and to identify any areas of ponding. Planned maintenance should be regularly undertaken on the piped system to optimise on its long-term performance.

Pervious surfaces need to be regularly cleaned of silt and other sediments to preserve their infiltration capability. Experience in the UK is limited, but advice issued with permeable precast concrete paving has suggested a minimum of three surface sweepings per year. Manufacturers' recommendations should always be followed.

A brush and suction cleaner, which can be a lorry-mounted device or a smaller precinct sweeper, should be used and the sweeping regime should be as follows:

- End of winter (April) – to collect winter debris.
- Mid-summer (July/August) – to collect dust, flower and grass-type deposits.
- After autumn leaf fall (November).

Care should be taken in adjusting vacuuming equipment to avoid removal of jointing material. Any lost material should be replaced.

Operation and maintenance requirements for permeable paving are described below.

The storm water drainage system design is a combination of elements which need to act together to adequately drain the development.

Prior to the development being handed over the whole system should be cleaned with debris removed and items such as the Hydrobrake being cleaned thoroughly. It is a contract requirement that the completed system is scanned using a CCTV system prior to handover.

Silt traps in Catchpits must be emptied at regular intervals to prevent debris entering the public sewer system.

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PERMEABLE DRAINAGE

Maintenance Schedule	Required Action	Frequency
Regular Maintenance	Brushing and vacuuming.	Three times/year at end of winter, mid-summer, after autumn leaf fall, or as required based on site-specific observations of clogging or manufacturers' recommendations.
Occasional maintenance	Stabilise and mow contributing and adjacent areas.	As required.
	Removal of weeds.	As required.
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.	As required.
	Rehabilitation of surface and upper sub-structure.	As required (if infiltration performance is reduced as a result of significant clogging).
Monitoring	Initial inspection.	Monthly for three months after installation
	Inspect for evidence of poor operation and/or weed growth. If required take remedial action.	3-monthly, 48 h after large storms.
	Inspect silt accumulation rates and establish appropriate brushing frequencies.	Annually.
	Monitor inspection chambers.	Annually.

UNDERGROUND STORM WATER PIPED SYSTEM

Maintenance Schedule	Required Action	Frequency
Regular Maintenance	Removal of silt from Catchpits. Remove debris from grilles of outfalls.	Three times/year at end of winter, mid-summer, after autumn leaf fall, or as required based on site-specific observations of clogging or manufacturers' recommendations.
Occasional maintenance	Clean and service Hydrobarke unit.	As manufacturers guidance.
	Grass cutting to adjacent areas	As required.
Remedial actions	Remediate any landscaping which, through vegetation maintenance or soil slip, has been raised 50 mm or more to the bed of the swales.	As required.
	Remedial work to any depressions or rutting considered detrimental to the performance of the swales or a hazard to users.	As required.

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	Rehabilitation of surface and upper sub-structure in the grass areas.	As required (if performance is reduced as a result of significant clogging).
Monitoring	Initial inspection.	Monthly for three months after installation
	Inspect for evidence of poor operation and/or weed growth. If required take remedial action.	3-monthly, 48 h after large storms.
	Inspect silt accumulation rates and establish appropriate maintenance frequencies.	Annually.
	Monitor inspection chambers.	Annually.

RETAINING WALLS & DRAINAGE

Maintenance Schedule	Required Action	Frequency
Regular Maintenance	Brushing and vacuuming.	Annually clean any moss, mould or similar debris off wall faces and coping
Occasional maintenance	Inspect weep holes in retaining wall stems for accumulation of debris – remove as necessary	As required.
	Copings affected by moisture, frosts etc	As required.
Remedial actions	Clear out any blocked weep holes	As required.
	Repair mastic seals to movement joints	As required.
Monitoring	Initial inspection.	Monthly for three months after installation
	Inspect for evidence of poor operation and/or weed growth. If required take remedial action.	6-monthly
	Inspect graffiti accumulation rates and establish appropriate cleaning frequencies.	Annually.
	Monitor movement joints	Annually.

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