



Newbarn Lane

Drainage Maintenance Schedule

TO	Bellway Homes	FROM	WSP
REVISION	P05	CONFIDENTIALITY	Public

Regular inspection and maintenance are required to ensure the effective long-term operation of all drainage features. A suggested S38 Drainage Maintenance Schedule. All drainage features at the site will be under the ownership of Bellway Homes' appointed Private Management Company (PMC). The PMC will be funded by a monthly charge on residents.

AQUA SWIRL

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
Remedial actions	If any litter/sediment falls into the Aqua Swirl, Management to be notified	As required
Monitoring	Inspect/check that the unit is operating as designed	3 Months, 6 months, 12 months and then annually or as deemed necessary from previous inception
End of life	Final inspection and replacement if needed	100 years

ATTENUATION TANK

- Typically as below:

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)	As per Bellway Homes' PMC road sweeping schedule
	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 to check for root penetration and sediment build-up and remove if necessary. If roots are found within tank, impermeable membrane to be replaced.	Every 5 years or as required
End of life	Final inspection and replacement if needed including concrete cover slab (Tank 1 only)	50 years

Maintenance Schedule	Required Action	Typical Frequency
Regular maintenance	Remove litter and debris	Monthly (or as required)
	Cut the grass – public areas	Monthly (during growing season)
	Cut the meadow grass	Half yearly (spring, before nesting season, and autumn)
	Inspect marginal and bankside vegetation and remove nuisance plants (for first 3 years)	Monthly (at start, then as required)
	Inspect inlets, outlets, banksides, structures, pipework etc for evidence of blockage and/or physical damage	Quarterly
	Inspect water body for signs of poor water quality	Quarterly
	Inspect silt accumulation rates in any forebay and in main body of the pond and establish appropriate removal frequencies; undertake contamination testing once some build-up has occurred, to inform management and disposal options	Half yearly
	Hand our submerged and emergent aquatic plants (at minimum of 0.1 m above pond base; include max 25% of pond surface)	Annually
	Remove 25% of bank vegetation from water's edge to a minimum of 1 m above water level	Annually
	Tidy all dead growth (scrub clearance) before start of growing season (Note: tree maintenance is usually part of overall landscape management contract)	Annually
	Remove sediment and planting from one quadrant of the main body of ponds without sediment forebays	Every 5 years, or as required
Occasional maintenance	Remove sediment from the main body of big ponds when pool volume is reduced by 20%	With effective pre-treatment, this will only be required rarely, e.g. every 25–50 years
Remedial actions	Repairs erosion or other damage	As required
	Replant, where necessary	As required
	Aerate pond when signs of eutrophication are detected	As required
	Realign rip-rap or repair other damage	As required
	Repair / rehabilitate inlets, outlets and overflows.	As required

FILTER TRENCH

Maintenance Schedule	Required Action	Typical Frequency
Regular maintenance	Remove litter (including leaf litter) and debris from filter drain surface, access chambers and pre-treatment devices	Monthly (or as required)
	Inspect filter drain surface, inlet/outlet pipework and control systems for blockages, clogging, standing water and structural damage	Monthly
	Inspect pre-treatment systems, inlets and perforated pipework for silt accumulation, and establish appropriate silt removal frequencies	Six monthly
	Remove sediment from pre-treatment devices	Six monthly, or as required
Occasional maintenance	Remove or control tree roots where they are encroaching the sides of the filter drain, using recommended methods (e.g. NJUG, 2007 or BS 3998:2010)	As required
	At locations with high pollution loads, remove surface geotextile and replace, and wash or replace overlying filter medium	Five yearly, or as required
	Clear perforated pipework of blockages	As required

GULLIES, CATCHPITS AND BELOW GROUND SURFACE WATER PIPES

- Typically as below:

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 bi-annually (late autumn then early spring) or immediately following a large storm event
Remedial actions	Repair/rehabilitate inlets, outlet, gully sucker	As required
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed	Annually
	CCTV survey of surface water drainage network	Every 5 years
End of life	Final inspection and replacement if needed	40 years

HYDROBRAKE

- Typically as below:

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 bi-annually with hose down if required
Remedial actions	Repair/rehabilitate inlets, outlet	As required
Monitoring	Inspect/check the approach unit are operating as designed	Annually
End of life	Final inspection and replacement if needed	50 years

ROOT BARRIER

- Typically as below:

Maintenance schedule	Required action	Typical frequency
Monitoring	Hand dug trial holes completed at each tank location to check condition of root barrier	Every 10 years
End of life	Final inspection and replacement if needed	50 years



DITCHES WITHIN RIPARIAN OWNERSHIP

- Typically as below:

Maintenance schedule	Required action	Typical frequency
Regular maintenance	Litter removal at banks	Bi-annually (late autumn then early spring)
	Cutting of grass and vegetation clearance of banks	Annually
	Inspection of outlets	Monthly for the first 3 months, then annually or after a large storm event for blockages
	Inspection of banksides, structures pipework etc for evidence of physical damage	Monthly
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	Tidy dead growth	Annually
	Ditch desilting	Every 5 years or immediately following a bank collapse/damaged
Remedial actions	Remove sediment from outlet	Annually
	manage wetland plants in immediate vicinity of outlet	Annually
Monitoring	Inspection of inlets and facility surface for silt accumulation and establish appropriate silt removal frequencies	Monthly for first 3 months, then at 6 months then annual

FOUL WATER PUMPING INFRASTRUCTURE

- Typically as below:

Maintenance schedule	Required action	Typical frequency
Regular maintenance	Pump station supplier to maintain the pump station as per the requirements the cost of which will fall to the home buyers/owners. If required, take remedial action	Monthly
Monitoring	Pump station supplier to monitor the pump station as per the requirements the cost of which will fall to the home buyers/owners.	Monthly

HEADWALLS

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 bi-annually with hose down if required
Remedial actions	Repair/rehabilitate inlets, outlet	As required
Monitoring	Inspect/check the approach unit are operating as designed	Annually
End of life	Final inspection and replacement if needed	50 years