



GREAT WOLF LODGE, CHESTERTON, BICESTER

5 YEAR LANDSCAPE MAINTENANCE AND MANAGEMENT PLAN
FOR PLANNING

BMD.19.010.SP.P006A

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1. Introduction

1.1 Purpose Of The Document

This Landscape Maintenance & Management Plan (LMMP) has been prepared by BMD to cover the 5 year establishment period for the management and maintenance of the Landscape within the development at Great Wolf Lodge and should be read in conjunction with the Landscape & Ecological Management Plan (BMD.21.0056.RPE.MP.805) and its appended Habitat Management and Monitoring Plan (HMMP).

The overarching aim of this LMMP is to provide a framework that will ensure the continuing successful management of the site through which the landscape can be maintained and developed to contribute to the quality of the area and to ensure that the original concept and design intent is realised. Once implemented, this plan will help to maximise the overall quality and appearance of the development, its amenity and ecological value and its enjoyment by site users.

Design Documentation

The overall landscape proposals are shown on the following drawings:

Landscape:

- BMD.19.010.DR.P001 Overall Landscape General Arrangement
- BMD.19.010.DR.P101 - 104 Landscape General Arrangement (4 sheets)

Planting Plans & Schedule:

- BMD.19.010.DR.P301 - 304 Planting Plans (4 sheets)
- BMD.19.010.DR.P305 Planting Schedule

Details:

- BMD.19.010.DR.P601 - 604 & 607 - 608 Typical Tree Pit Details (6 sheets)
- BMD.19.010.DR.P605 & 609 Typical Soft Details (2 sheets)
- BMD.19.010.DR.P606 Typical Pond Detail & Section

Landscape Specification:

- BMD.19.010.SPP005 NBS Landscape Specification
- BMD.19.010.SPP006 Landscape Maintenance and Management Plan (LMMP)

Management Responsibilities

The maintenance operations outlined in this plan will run for a minimum of 5 years commencing on the date of certification of Practical Completion. After certification of Practical Completion, maintenance will be undertaken by the Landscape Contractor responsible for the implementation of these works based on the rectification period timeframes below. After certification of Final Completion, maintenance for the remaining duration of the 5 year establishment maintenance period will be undertaken by the Client or their appointed Estate Management Company.

This maintenance period will run concurrently with the Rectification Period. During this time the Landscape Contractor responsible for implementing the works will be liable for any defects.

The Rectification Period will run for;

- Grassland – 36 months
- Woodland planting, extra heavy standard trees and smaller – 36 months
- Semi-mature trees - 36 months

At the end of the 5 year establishment period, it is recommended that the management operations prescribed by this document are reviewed (alongside and with detailed consideration of the requirements set out in the LEMP and its appended HMMP and in consultation with a qualified ecologist). This will allow for amendment of the prescribed management operations, ensuring sustainable management in the medium and long term.

1.2 Relevant Standards

The following list includes a number of key standards to be adhered to when undertaking maintenance operations, however this is not exhaustive.

- BS 2998: Tree Work - Recommendations.
- BS 5837; Trees in relation to design, demolition and construction.
- BS 7370-1: Grounds maintenance. Recommendations for establishing and managing grounds.
- BS 7370-3: Grounds maintenance. Recommendations for maintenance of turf (other than sports turf).
- BS 7370-4: Grounds maintenance. Recommendations for maintenance of soft landscape.
- BS 8516: Recommendations for tree safety inspection.
- BS 8545: Trees from nursery to independence in the landscape.

1.3 Key Management Objectives

The following key objectives for maintenance and management set out the approach to maintenance operations throughout the site. Objectives specific to different landscape features have been detailed in the following sections.

Whilst the creation of optimum planting conditions (combined with high standards of implementation) are essential to give properly specified plant material the best start in life, the establishment and future success of the landscape will be dictated by the quality and frequency of the subsequent maintenance and management it receives.

The following key objectives have been informed directly by best practice guidance to ensure a robust regime will be adopted for the site both during the establishment period and thereafter.

Key objectives for maintenance and management include:

- To facilitate an efficient and sustainable landscape management and maintenance regime throughout the lifetime of the development, that avoids intensive long term maintenance requirements.
- To balance the objectives of ecology, hydrology, recreation and amenity functions.
- To provide a high quality external environment for all site users.
- To ensure that the landscape develops in a manner commensurate with the original design intent.
- To accommodate use of the site, by promoting a management regime which is appropriate to the site's role.
- To ensure the successful establishment and continued growth through to maturity of the trees and other planting identified on the Planting Plan drawings.
- To secure a long term future for the new trees and grasslands with particular emphasis upon achieving visual amenity and, where native & wildlife friendly planting is proposed, the enhancement of its ecological potential.
- To manage the landscape in a manner which ensures the safety of site users, such as maintaining visibility splays, maintaining good surveillance, removal of dead, dying or diseased trees and plants.
- To be flexible and adaptable to changing needs of the landscape through its establishment and long term management.

2.1 Existing Trees & Vegetation Retained

Maintenance (first 5 years after works)

- Existing mature trees retained should be risk assessed annually by qualified Arboriculturists using industry approved methods. Where risks are identified, remedial actions must be taken to eliminate or reduce any risk to an acceptable level.
- Maintenance of a weed free area around the base of each tree. Trees within grassland or planting should have all weeds around the trunk removed by hand or application of herbicide.
- Removal of any items that have been attached to trees, such as posters, signage, cable ties or bike locks/chain etc (leave bird and bat boxes).
- Inspect trees for dead, dying or diseased wood. Prune back to living wood, good growing points or main branches, do not leave any snags, cut back to branch collars avoiding any flush cutting. Avoid making any large spring cuts which could cause excessive bleeding.
- Remove suckers /epicormic growth.
- Formatively prune if necessary to achieve natural shape, healthy growth, remove crossing or rubbing branches, correct any potential weak attachments or narrow V crotches and to favour a strong single leader.
- Crown lift if needed to maintain clearance of circulation routes and visibility splays.
- Inspect trees for signs of pest and disease, in cases of serious attack employ appropriate control measures.
- Check tree for Ivy growth, when 80% of the crown is covered, cut ivy at the base, leave cut material in the tree.

Maintenance Schedule

The below schedule includes the initial maintenance operations as well as long term maintenance requirements. The frequency and timings of each operation has been indicated for a typical annual cycle or as required.

Maintenance Operation	Frequency	Time of year when maintenance operation is required or number of operations required												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Long Term Maintenance Operations														
Health and safety check of existing trees and vegetation	1 x Annually											1		
Weed control and removal	2 x Annually						1					1		
Pruning works (general)	Annually													
Removal of items attached to trees (except bird & bat boxes)	As required	All Year												
Inspect trees for pest and disease	1x Annually	1												
Check for nesting bird presence prior to any necessary remedial action.	As required													
Check Ivy growth in crowns, if 80% coverage in crown cut at base	As required	All Year												

Long Term Management (year 6 onwards)

It is recommended that the client undertake the relevant Long Term maintenance operations listed in the maintenance schedule and use these as a basis for a long term management plan / strategy, including the ongoing inspection and maintenance requirements. The type, extent and frequency of maintenance operations to be undertaken in the long term are subject to reviews and should be monitored in perpetuity to align with the design and management objectives, along with the requirements of the LEMP and HMMP.

2.2 Tree Planting

Establishment Maintenance (first 5 years after planting)

To ensure survival and optimal development these trees will be subject to intensive establishment maintenance.

- Trees adjacent to footpath cycleways are to have no branches that could impede the movement of cyclists or pedestrians.
- Trees in grass should have a circular area of bark mulch and be maintained weed free and topped up regularly to keep a 75mm layer. Trees within planting should have all weeds around the trunk removed by hand or application of herbicide.
- Watering to ensure moisture levels are maintained appropriate for optimum growth.
- Application of a slow release fertiliser in spring around the base of all trees to ensure soil fertility is maintained.
- The removal of any vandalised, unhealthy or dead specimens as soon as possible and replacement with trees of the same size to those adjacent where practicable, during the next available planting season.
- Inspection, adjustment and maintenance of anchors, stakes and ties. Stakes and ties to be removed when instructed and when the tree(s) has established successfully.
- Removal of any items that have been attached to trees, such as posters, signage, cable ties or bike locks/chain etc
- Re-firming of trees after strong winds, frost heave or other disturbances.
- Inspect trees for dead, dying or diseased wood. Prune back to living wood, good growing points or main branches, do not leave snags, cut back to branch collars avoiding any flush cutting. Avoid making spring cuts which could cause bleeding.
- Remove suckers /epicormic growth.
- Formatively prune if necessary to achieve natural shape, healthy growth, remove crossing or rubbing branches, correct any potential weak attachments or narrow V crotches and to favour a strong single leader.
- Crown lift if needed to maintain clearance of circulation routes and visibility splays.
- Any deadwood should be used to create small log piles to provide habitat in areas inaccessible or out of view of the public.
- Inspect trees for signs of pest and disease, in cases of serious attack employ appropriate control measures.
- Topping up mulch at the end of the rectification period to achieve a 75mm layer.

Maintenance Schedule

The below schedule includes the initial maintenance operations as well as long term maintenance requirements. The frequency and timings of each operation has been indicated for a typical annual cycle or as required.

Maintenance Operation	Frequency	Time of year when maintenance operation is required or number of operations required											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Establishment Maintenance Operations (years 0-5 only)													
Re-firming of trees	As required	All Year											
Replace damaged / vandalised / unhealthy stock	Annually												
Apply slow release fertiliser to base of tree	Annually			1									
Watering of area to ensure moisture levels are appropriate	As required												
Top up mulch	1 x Annually			1									
Establishment & Long Term Maintenance Operations													
Weed control and removal (Long term frequency to be reviewed and reduced as required)	2 x Annually						1					1	
Pruning (general)	As required												
Inspect trees for pest and disease	1x Annually	1											
Check for nesting bird presence prior to any necessary remedial action.	As required												
Removal of items attached to trees (except bird & bat boxes)	As required	All Year											

Long Term Management (year 6 onwards)

Following the establishment maintenance period, it is recommended that the Client undertake the relevant Long Term maintenance operations listed in the maintenance schedule and use these as a basis for a long term management plan / strategy, including the ongoing inspection and maintenance requirements. The type, extent and frequency of maintenance operations to be undertaken in the long term are subject to review, and should be monitored in perpetuity to align with the management objectives, along with the requirements of the LEMP and HMMP.

2.3 Native Woodland Planting

Establishment Maintenance (first 5 years after planting)

- Control and removal of weeds by hand weeding or application of herbicide.
- Monitoring of any invasive or unwanted non native species, carry out control measures according to best practice at the time.
- Re-firming of plants/trees after strong winds, frost heave or other disturbances.
- Inspect and replace any missing or defective shelters, guards and stakes.
- Inspect trees/shrubs for dead, dying or diseased wood. Prune back to living wood, good growing points or main branches, do not leave any snags, cut back to branch collars avoiding any flush cutting. Avoid making any large spring cuts which could cause excessive bleeding.
- Prune if necessary to achieve natural shape, healthy growth, remove crossing or rubbing branches, correct any potential weak attachments or narrow V crotches and to favour a strong single leader.
- Any deadwood should be used to create small log piles to provide habitat in areas inaccessible or out of view of the public.
- Any fallen deadwood should be left in situ unless this poses a risk to the public.
- The removal of any failed, vandalised, unhealthy or dead specimens as soon as possible and provide replacements of the same size to those adjacent, where practicable during the next available planting season.
- Watering of plants to ensure moisture levels are maintained appropriate for optimum growth.
- Removal of litter from all planting areas to maintain site in a tidy condition.
- Inspection for signs of pest and disease, in cases of serious attack employ appropriate control measures.

Maintenance Schedule

The below schedule includes the initial maintenance operations as well as long term maintenance requirements. The frequency and timings of each operation has been indicated for a typical annual cycle or as required.

Maintenance Operation	Frequency	Time of year when maintenance operation is required or number of operations required											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Establishment Maintenance Operations (years 0-5 only)													
Re-firming plant /trees	As required	All Year											
Selective pruning for optimum growth	Annually												
Watering of area to ensure moisture levels are appropriate	As required												
Replace damaged / vandalised / unhealthy stock	Annually												
Establishment & Long Term Maintenance Operations													
Monitor and control invasive and non-native species.	As required												
Weed control and removal (Long term frequency to be reviewed and reduced as required)	2 x Annually						1				1		
Removal of litter from planting beds (Long term frequency to be reviewed and reduced as required)	2 x Annually				1					1			
Inspect for pest and disease	1x Annually	1											
Check for nesting bird presence prior to any necessary remedial action.	As required												

Long Term Management (year 6 onwards)

Following the establishment maintenance period, it is recommended that the Client undertake the relevant Long Term maintenance operations listed in the maintenance schedule and use these as a basis for a long term management plan / strategy, including the ongoing inspection and maintenance requirements. The type, extent and frequency of maintenance operations to be undertaken in the long term are subject to review, and should be monitored in perpetuity to align with the management objectives, along with the requirements of the LEMP and HMMP.

2.4 Native Hedgerows

Establishment Maintenance (first 5 years after planting)

- Control and removal of weeds by hand weeding or application of herbicide.
- Application of a slow release fertiliser in spring.
- Regular trimming in the first three years to maintain a neat appearance, encourage bushy growth down to ground level and maintain hedge at desired height of at least; 1.2 - 1.5m between car park bays & 1.8-2m around the boundary of the carpark along the security & acoustic fence
- Beyond three years hedgerows should be cut on a three year rotation, with identified sections cut in different years to provide varied age and structure as well as allowing flowering and fruiting to be maximised. Hedgerows to be cut to form a flat topped A shape, other than formal hedgerows. Only cut either one half or one side of the hedgerows in any one year.
- Hedgerow cutting to be carried out outside of the bird nesting season (March-September). If additional cuts are required within the bird nesting season, a suitably qualified and experienced Ecologist shall inspect the hedgerow prior to cutting to ensure no nesting birds are present.
- Remove any failed, vandalised, unhealthy or dead specimens as soon as possible and provide replacements of the same size to those adjacent, where practicable during the next available planting season.
- Watering of plants to ensure moisture levels are maintained appropriate for optimum growth.
- Removal of litter to maintain site in a tidy condition.
- Top up mulch annually to achieve a 75mm layer.
- Inspect and restock areas where hedgerows have become thin. Species and stock size to match the original specification.

Maintenance Schedule

The below schedule includes the initial maintenance operations as well as long term maintenance requirements. The frequency and timings of each operation has been indicated for a typical annual cycle or as required.

Maintenance Operation	Frequency	Time of year when maintenance operation is required or number of operations required											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Weed control and removal	2 x Annually						1				1		
Apply slow release fertiliser.	Annually			1									
Trimming & cutting (on a 3 year rotation after year 3) Do not cut hedgerow trees	Annually												
Replace damaged / vandalised / unhealthy stock	Annually												
Watering of areas to ensure moisture levels are appropriate	As required												
Removal of litter	2 x Annually				1					1			
Top up mulch	1 x Annually			1									
Check for nesting bird presence prior to any necessary remedial action.	As required												

Long Term Management (year 6 onwards)

Following the establishment maintenance period, it is recommended that the Client undertake the relevant Long Term maintenance operations listed in the maintenance schedule and use these as a basis for a long term management plan / strategy, including the ongoing inspection and maintenance requirements. The type, extent and frequency of maintenance operations to be undertaken in the long term are subject to review, and should be monitored in perpetuity to align with the management objectives, along with the requirements of the LEMP and HMMP.

2.5 Amenity /Ornamental Planting (Shrubs, Grasses and Herbaceous)

Establishment Maintenance (first 5 years after planting)

- Control and removal of weeds by hand weeding and /or application of herbicide.
- Application of a slow release fertiliser.
- Pruning of shrubs for floral, foliage and stem colour effect and to remove weak, dead and diseased branches.
- Pruning of species to ensure correct bushy, dense and compact form, to promote flowering/berry production/retention (where appropriate).
- Remove dead growth and trim herbaceous perennial and ornamental grass plants, avoiding damage to any new shoots that have emerged.
- The removal of any failed, vandalised, unhealthy or dead specimens as soon as possible and provide replacements of the same size to those adjacent, where practicable during the next available planting season.
- Watering of plants to ensure moisture levels are maintained appropriate for optimum growth.
- Removal of litter from all planting beds to maintain site in a tidy condition.
- Top up mulch annually to achieve a 75mm layer.
- Lift, divide and replant perennials, dispose of weak /dead central sections.

Maintenance Schedule

The below schedule includes the initial maintenance operations as well as long term maintenance requirements. The frequency and timings of each operation has been indicated for a typical annual cycle or as required.

Maintenance Operation	Frequency	Time of year when maintenance operation is required or number of operations required												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Establishment Maintenance Operations (years 0-5 only)														
Apply slow release fertiliser.	Annually			1										
Replace damaged / vandalised / unhealthy stock	As required													
Selective pruning of shrubs for optimum growth any encourage flowing, fruiting and stem colour	As required													
Top up mulch	1 x Annually			1										
Establishment & Long Term Maintenance Operations														
Weed control and removal (Long term frequency to be reviewed and reduced as required)	2 x Annually						1					1		
Removal of litter from planting beds (Long term frequency to be reviewed and reduced as required)	4 x Annually				1					1				
Watering of areas to ensure moisture levels are appropriate (Long term watering to be undertaken during drought only)	As required													
Pruning of shrubs	As required													
Pruning operations and trimming of herbaceous species (e.g. seed heads) & ornamental grass species (non evergreen)	As required													
Lift, divide and replant perennials	1x every 3 years													
Check for nesting birds prior to any management works	As required													

Long Term Management (year 6 onwards)

Following the establishment maintenance period, it is recommended that the Client undertake the relevant Long Term maintenance operations listed in the maintenance schedule and use these as a basis for a long term management plan / strategy, including the ongoing inspection and maintenance requirements. The type, extent and frequency of maintenance operations to be undertaken in the long term are subject to review, and should be monitored in perpetuity to align with the management objectives, along with the requirements of the LEMP and HMMP.

2.6 Amenity Grassland, Mown Path & Verge Strips

Establishment Maintenance (first 5 years after planting)

- Regular mowing between March and October to maintain between a height of 30 - 50mm.
- Verge strips to be maintained adjacent all paths and hard landscape areas, cut to maintain between a height of 30 - 50mm.
- Trim edges to hard standing, planting beds & tree pit mulch circles.
- Do not cut areas containing bulbs until 6 weeks after flowering has finished.
- Control and removal of aggressive self seeded weeds.
- Reform edges once per year with edging tool to create clean straight lines and flowing curves, form clean edge and remove soil as required.
- Application of a slow release fertiliser as necessary to ensure soil fertility is maintained at appropriate levels.
- Watering to ensure moisture levels are maintained appropriate for optimum growth.
- Repair damaged or failed areas by re-seeding and top dressing or turfing.
- Removal of litter to maintain the site in a tidy condition.
- Aerate soil by spiking or hollow tines once a year to depth of 75mm. Spike when needed to relieve compaction and areas of ponding.
- Remove leaves regularly in autumn.

Maintenance Schedule

The below schedule includes the initial maintenance operations as well as long term maintenance requirements. The frequency and timings of each operation has been indicated for a typical annual cycle or as required.

Maintenance Operation	Frequency	Time of year when maintenance operation is required or number of operations required											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Establishment Maintenance Operations (years 0-5 only)													
Replacement of damaged or worn grass areas by seeding and top dressing or turfing	As required												
Trim edges to hard standing and tree mulch circles	As required or every two weeks in growing season												
Watering of area to ensure moisture levels are appropriate	As required												
Apply slow release fertiliser	2x Annually				1					1			
Establishment & Long Term Maintenance Operations													
Mowing of grass areas	As required or every two weeks in growing season												
Reform edges	1x Annually			1									
Aerate soil by spiking or hollow tines	1x Annually or as required			1									
Application of selective herbicide	1x Annually				1								
Removal of litter	At time of each grass cut or maintenance visit												
Removal of leaves	As required												

Long Term Management (year 6 onwards)

Following the establishment maintenance period, it is recommended that the Client undertake the relevant Long Term maintenance operations listed in the maintenance schedule and use these as a basis for a long term management plan / strategy, including the ongoing inspection and maintenance requirements. The type, extent and frequency of maintenance operations to be undertaken in the long term are subject to review, and should be monitored in perpetuity to align with the management objectives, along with the requirements of the LEMP and HMMP.

2.7 Grassland (Wetland, Woodland & Wildflower)

Establishment Maintenance (first 5 years after planting)

- Regular mowing within the first growing season to max. height of 75-100mm, approx every 6 weeks.
- Cutting 2x annually after first growing season to height of 50-75mm.
- Cutting regime to vary, sections should be cut at different times ranging from late July to late August. An additional cut should take place before November to ensure grassland is left short over winter.
- To protect reptiles, only cut grassland during conditions when reptiles are active and able to move away from machinery (air temperatures above 9 °C). Cut from the centre outwards to encourage movement of reptiles into adjacent suitable habitat and avoid trapping reptiles in the path of machinery.
- Trim edges to hard standing and tree pit mulch circles.
- Arisings to be left in situ for several days to allow seed to fall, before removing.
- Undesirable weeds species will be removed or managed by spot treatment with herbicides.
- Watering to ensure moisture levels are maintained appropriate for optimum growth.
- Repair damaged or failed areas by re-seeding.
- Removal of litter to maintain the site in a tidy condition.
- Review and remove areas of encroaching scrub.

Maintenance Schedule

The below schedule includes the initial maintenance operations as well as long term maintenance requirements. The frequency and timings of each operation has been indicated for a typical annual cycle or as required.

Maintenance Operation	Frequency	Time of year when maintenance operation is required or number of operations required												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Establishment Maintenance Operations (years 0-5 only)														
Mowing in first growing season	As required													
Trim edges to hard standing and tree mulch circles	As required or every two weeks in growing season													
Repair of damaged & failed areas	As required													
Removal of weeds	As required													
Watering of area to ensure moisture levels are appropriate	As required													
Establishment & Long Term Maintenance Operations														
Weed control and removal (Long term frequency to be reviewed and reduced as required)	2 x Annually				1				1					
Removal of Litter	At time of each maintenance visit													
Removal of scrub	1x Annually												1	
Check for nesting birds prior to any management works	As required													

Long Term Management (year 6 onwards)

Following the establishment maintenance period, it is recommended that the Client undertake the relevant Long Term maintenance operations listed in the maintenance schedule and use these as a basis for a long term management plan / strategy, including the ongoing inspection and maintenance requirements. The type, extent and frequency of maintenance operations to be undertaken in the long term are subject to review, and should be monitored in perpetuity to align with the management objectives, along with the requirements of the LEMP and HMMP.

2.8 Wetland Marginal & Emergent Aquatic Planting

Establishment Maintenance (first 5 years after planting)

- Selective removal of undesirable self seeded weeds;
- Cut back and remove selected areas of vegetation every 2-3 years in rotation;
- Cutting regime to vary in different areas by varying time and height of cut to help with habitat creation;
- Selectively thin dense stands of single species e.g reeds, water mint & yellow iris;
- Arisings to be used on site to create compost heaps and hibernacula;
- Watering to ensure moisture levels are maintained appropriate for optimum growth;
- Repair damaged or failed areas by re-seeding;
- Remove any failed, unhealthy or dead plug plants as soon as possible and provide replacements of the same specification, during the next available planting season;
- Removal of litter to maintain the site in a tidy condition.

Maintenance Schedule

The below schedule includes the initial maintenance operations as well as long term maintenance requirements. The frequency and timings of each operation has been indicated for a typical annual cycle or as required.

Maintenance Operation	Frequency	Time of year when maintenance operation is required or number of operations required											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Removal of undesirable weeds	As required												
Selectively thin areas of planting	1 x every 2 years												
Cut back and removed areas of vegetation on rotation	1 x every 2 years												
Remove scrub and woody species	As required												
Cut reed beds	1 x every 4 years												
Excessive Algal, submerged and emergent plant growth to be removed	At time of each grass cut or maintenance visit												
Monitor for invasive non-native species, removal or control	At time of each grass cut or maintenance visit												
Replacement of damaged or failed seeded areas by re-seeding or plug planting	As required												
Replace damaged , failed or unhealthy plug stock	As required												
Watering of area to ensure moisture levels are appropriate in periods of drought (establishment period only)	As required												
Removal of Litter	At time of each grass cut or maintenance visit												
Check for nesting birds prior to any management works	As required												

Long Term Management (year 6 onwards)

Following the establishment maintenance period, it is recommended that the Client undertake the relevant Long Term maintenance operations listed in the maintenance schedule and use these as a basis for a long term management plan / strategy, including the ongoing inspection and maintenance requirements. The type, extent and frequency of maintenance operations to be undertaken in the long term are subject to review, and should be monitored in perpetuity to align with the management objectives, along with the requirements of the LEMP and HMMP.

2.9 Play Areas & Play Features

Maintenance (first 5 years after implementation)

Post Installation Inspection

Once the play area is completed and before Practical Completion can be certified, a suitably qualified independent body such as RoSPA must undertake a post installation inspection. This to ensure that the play area meets modern standards and has been correctly installed. A full written report must be provided including photographs, a risk assessment and recommendations for any additional actions required and recommended maintenance requirements. The Contractor responsible for installation shall rectify any items identified in the report and comply with all actions required. The management company must take note of any maintenance recommendation made in the report and keep a log book of any remedial actions taken by the installation contractor.

Ongoing Inspections

The play area operator has a responsibility to the guests to ensure the play area or play features are kept in a safe condition. This requires periodic inspection, maintenance and risk assessment. To ensure the play area is maintained and kept in a safe condition the Management Company will either undertake the following inspections and operations as necessary or organise for them to be carried out on their behalf in perpetuity after Practical Completion has been achieved:

- Routine Inspections (Weekly): inspection should be undertaken weekly as a minimum by a suitably qualified person such as a Register of Play Inspectors International qualified persons. More frequent inspections might be required once equipment has aged or where either heavy use or frequent vandalism are identified. Inspections to be carried out by competent persons in accordance with the manufacturer's instructions or maintenance check lists. All equipment shall be checked for faults and hazards. The play surface will be checked for damage and both play surface and surrounding area shall be checked to ensure they are free of debris and fouling that would cause a hazard. Inspections to be recorded in a log book or other form of inspection sheet by the management company.
- Operational Inspections (Quarterly): inspection should be undertaken every 3 months. Inspections to be carried out by Register of Play Inspectors International qualified persons in accordance with the manufacturer's instructions or maintenance check lists. All equipment, surfacing, ancillary items and surrounding site will be thoroughly inspected in accordance with good practice guides such as those provided by RoSPA. All necessary repairs, maintenance operations and servicing to equipment and surfacing should be undertaken. Records of inspections and all operations and repairs undertaken to be recorded in a log book by the management company.
- Annual Inspection: in accordance with BS EN1176 play areas to be inspected by a suitably qualified independent body such as RoSPA once every year. A written report will be supplied covering site safety and condition, equipment, surfacing, and ancillary item safety and condition, and compliance with BS EN1176 where relevant. Recommendations for any remedial action required are given together with risk ratings for each item. Records of all operations and repairs undertaken in response to the inspection report to be recorded in a log book by the management company.
- Risk assessment: A risk assessment should be undertaken annually as part of the annual inspection above. Further risk assessments must be undertaken if play areas are altered in any way from the design inspected post installation, this includes replacement of equipment and any new additional areas of play or equipment being added.

Maintenance

To ensure the play area is maintained and kept in a safe condition the Management Company will undertake the following Maintenance operations as necessary after Practical Completion has been achieved:

- Fix and repair all equipment and surfacing in accordance with the findings and actions identified in all ongoing inspections.
- Carry out surface maintenance in accordance with the surface maintenance section of this report.
- Removal of all litter and fouling to maintain the site in a tidy and safe condition.
- Natural play features such as logs or boulders to be inspected weekly at the time of routine inspections. Remove all moss, algae and loose objects. Monitor condition and stability of play features, taking action when required.

2.9 Play Areas & Play Features

Maintenance Schedule

The below schedule includes the initial maintenance operations as well as long term maintenance requirements. The frequency and timings of each operation has been indicated for a typical annual cycle or as required.

Maintenance Operation	Frequency	Time of year when maintenance operation is required or number of operations required											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Routine inspections	Weekly												
Operational Inspections	4x Annually			1			1			1			1
Annual inspection	1x Annually												1
Risk Assessments	1x Annually or as required if changes to equipment or layout are made												1
Removal of Litter and or fouling	Weekly at time of routine inspections												
Repair and maintenance identified through all ongoing inspections	As required												
Inspect natural play features, remove moss, algae and loss objects. Ensure features are firmly fixed. Replace logs if rotten.	Weekly												

Long Term Management (year 6 onwards)

Following the establishment maintenance period, it is recommended that the Client undertake the relevant Long Term maintenance operations listed in the maintenance schedule and use these as a basis for a long term management plan / strategy, including the ongoing inspection and maintenance requirements. The type, extent and frequency of maintenance operations to be undertaken in the long term are subject to review, and should be monitored in perpetuity to align with the management objectives.

2.10 Hard Surfaces

Maintenance (first 5 years after implementation)

Paving & Macadam:

- Collect and remove all litter at each scheduled maintenance visit.
- Brush surface to remove debris and either hose down or use a light pressure washer to remove dirt build once every year.
- Inspect surface for damage such as cracking or potholes, make good as required.
- Refill joints on block paving to original specification where required.
- Apply weed and moss removal treatments if required. Ensure treatments are suitable for use on asphalt surfaces.
- Inspect path edging for damage or failure, make good or replace as required.
- Collect and remove all litter at each scheduled maintenance visit.
- Autumn leaves are to be removed from the surface as required.

Self Binding Gravel:

- Collect and remove all litter at each scheduled maintenance visit.
- Inspect path edging for damage or failure, make good or replace as required.
- Inspect surface for damage such as potholes. Repairs should be carried out as soon as a pot hole appears. Cut out a neat square around the pot hole and remove all material in that square down to the Type 1 sub-base. Fill the area with new Breedon gravel and compact using wacker plate or roller in accordance with installation specification.
- Weeds: spray the area with a water non residual based weedkiller. Never pull the weeds up out of the gravel, this will loosen the bonded surface.
- Remove moss using a water based weedkiller or moss remover and apply this to the affected area when dry (and no rain expected for a few days) using either a watering can with a rose, a sprayer, a roller or a soft brush. This should take a few days to start working, then use a light rake to loosen the moss and sweep away, however take care not to put too much pressure on the surface and loosen up the bonded gravel itself.
- Autumn leaves are to be removed from the surface by using a blower or a vacuum. Alternatively a very soft broom can be used to gently sweep off the surface leaves. Never use a coarse hard brush.

Play Mulch:

- Collect and remove all litter and any fouling at each scheduled maintenance visit.
- Inspect edging for damage or failure, make good or replace as required.
- Surface clean: power wash top surface with low pressure hot water, wash down afterwards using medium pressure cold water. Carry out at least once a year.
- Remove any undesirable weed or grass growth by non-chemical means where possible. If spraying is required use a non residual herbicide suitable and safe for use in and around play areas.
- Inspect surface for wear and damage as part of all ongoing play area inspections (see play area maintenance section)
- Autumn leaves are to be removed from the surface as required.

2.10 Hard Surfaces

Maintenance Schedule

The below schedule includes the initial maintenance operations as well as long term maintenance requirements. The frequency and timings of each operation has been indicated for a typical annual cycle or as required.

Maintenance Operation	Frequency	Time of year when maintenance operation is required or number of operations required											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Remove litter, debris and fouling from fall hard surfaces.	1x per month or at each scheduled maintenance visit	1	1	1	1	1	1	1	1	1	1	1	1
Paving & Macadam: Brush and wash surface	1x Annually			1									
Removal or treatment of weeds, moss and algae from all surfaces	1x Annually									1			
Remove Autumn leaves from all surfaces	As required												
Inspect all surfaces and edging, make good, repair or replace.	2x Annually or as part of play area inspections.			1						1			
Play Mulch: pressure washing	1x Annually			1									

Long Term Management (year 6 onwards)

Following the establishment maintenance period, it is recommended that the Client undertake the relevant Long Term maintenance operations listed in the maintenance schedule and use these as a basis for a long term management plan / strategy, including the ongoing inspection and maintenance requirements. The type, extent and frequency of maintenance operations to be undertaken in the long term are subject to review, and should be monitored in perpetuity to align with the management objectives.

2.11 Street Furniture & Fencing

Establishment Maintenance (first 5 years after implementation)

Seating and benches:

- Inspect all fixings every 3 months, repair and replace as required to maintain seating in a safe and fit for purpose condition.
- A visual check should be completed twice annually, any splinters or sharp edges of wood to be lightly sanded to remove them. Apply wood stain if needed post sanding.
- Wood should be coated with a proprietary wood treatment on an annual basis so as to preserve its appearance and longevity.
- Inspect all timber for signs of rot and decay twice yearly. Any benches or seats identified as no longer fit for purpose should be removed and replaced with a product either to the original specification or an equivalent product.
- Inspect all ground fixing to ensure benches and seating are secure and free from movement. Re-secure and make good as needed.

Cycle stands:

- Visually inspect every month for signs of damage. Repairs to be made in accordance with manufacturer's instructions.
- Clean every three months using mild soapy water or car wash and wax products using a soft brush or sponge, then rinsing with clean water.
- Remove graffiti using non-solvent cleaners such as car t-cutting compound or other specialist cleaner.

Litter bins:

- Empty bins every two weeks or to a scheduled time period agreed to meet usage requirements.
- Visually inspect every month for signs of damage. Repairs to be made in accordance with manufacturer's instructions.
- Clean every three months using mild soapy water or car wash and wax products using a soft brush or sponge, then rinsing with clean water.
- Remove graffiti using non-solvent cleaners such as car t-cutting compound or other specialist cleaner.

Signage, way-markers and interpretation boards:

- A visual check should be completed twice annually, any splinters or sharp edges of wood to be lightly sanded to remove them. Apply wood stain if needed post sanding.
- Wood should be coated with a proprietary wood stain system on an annual basis so as to preserve its appearance and longevity
- Inspect all timber for signs of rot and decay twice yearly. Any items identified as no longer fit for purpose should be removed and replaced with a product either to the original specification or an equivalent product.
- Inspect all ground fixing to ensure they are secure and free from movement. Re-secure and make good as needed.
- Remove graffiti as required using methods recommended by the manufacturer.

Fencing:

- Inspect all fixings every 3 months, repair and replace as required to maintain fencing in a safe and fit for purpose condition.
- Inspect all timber for signs of rot and decay twice yearly. Any members identified as damaged should be replaced as soon as possible.
- Metal fencing repaint every 5 years or in accordance with the manufacturers instructions.

2.11 Street Furniture & Fencing

Maintenance Schedule

The below schedule includes the initial maintenance operations as well as long term maintenance requirements. The frequency and timings of each operation has been indicated for a typical annual cycle or as required.

Maintenance Operation	Frequency	Time of year when maintenance operation is required or number of operations required											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
All Street Furniture: Visually inspect for signs of damage. Repairs to be made in accordance with manufacturer's instructions.	12x Annually												
Seating & benches: Inspect all fixings, repair and replace as required.	4x Annually												
All timber street furniture: check for any splinters or sharp edges of wood to be lightly sanded to remove them.	2x Annually												
All timber street furniture: apply wood stain	1x Annually												
All timber street furniture: inspect for sign of decay, Repair or replace	2x Annually												
All Street Furniture: Inspect ground fixings, re-secure as required.	12x Annually												
Powder coated steel street furniture: wash down with soapy water	4x Annually												
Remove graffiti	As required												
Empty bins	Every two weeks or as agreed												
Fences: inspected and repair all fixings	4x Annually												
Fences: inspect fro decay and replace	2x Annually												
Metal Fences: repaint	1x every 5 years												

Long Term Management (year 6 onwards)

Following the establishment maintenance period, it is recommended that the Client undertake the relevant Long Term maintenance operations listed in the maintenance schedule and use these as a basis for a long term management plan / strategy, including the ongoing inspection and maintenance requirements. The type, extent and frequency of maintenance operations to be undertaken in the long term are subject to review, and should be monitored in perpetuity to align with the management objectives.

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