

**LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN**  
**WITHYCOMBE FARM, BANBURY**

**Open Space Areas**

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The logo for Bloor Homes, featuring the company name in a white, serif font with a registered trademark symbol, set against a dark blue rectangular background. A thin white wave-like line is positioned below the text.

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## 1.0 INTRODUCTION

### 1.1 Scope and Purpose of the Document

1.1.1 This Landscape and ecological Management Plan (LEMP) has been prepared in support of the planning application by Bloor Homes Ltd for the proposed residential development at Withycombe Farm, Banbury (Phase 4).

This report is intended to discharge the requirements in reference to condition 10 of outline planning permission ref 22/02101/OUT The named planning permission granted approval for a residential development comprising up to 250 dwellings (with up to 30% affordable housing), public open space, landscaping and associated supporting infrastructure. Means of vehicular access to be determined via Edinburgh Way, with additional pedestrian and cycle connections via Dover Avenue and Balmoral Avenue. Emergency access provision also via Balmoral Avenue. All other matters reserved.

1.1.2

1.1.3 Condition 10 of the planning permission is worded as follows; No development shall commence unless and until a Landscape and Ecology Management Plan (LEMP), which shall also cover the construction phase of the development, has been submitted to and approved in writing by the Local Planning Authority. Thereafter, the development shall not be carried out or managed other than in accordance with the approved LEMP.

1.1.4 This report is to be read in conjunction with supporting documents, including:

- 'Arboricultural Method Statement (and accompanying plans)' prepared by FPCR, dated August 2023
- 'Proposed ecological enhancement plan', prepared by CSA Environmental, dated March 2024
- Biodiversity Net Gain Assessment, prepared Ecology Solutions, dated November 2023

1.1.5 The plan focuses on existing and proposed landscape elements within the design proposal and will consider the management required in order to maximise the nature conservation value, alongside the findings within the accompanying reports named above.

1.1.6 This report should also be read in conjunction with the detailed 'Site Landscaping' proposals on drawing numbers WE102-LS-002 to 007, WE102-LS-008 (Overall Plan) and subsequent revisions.

1.1.7 The purpose of this document is to schedule all required maintenance regimes, operations and works necessary for the satisfactory management of the site POS and Green Infrastructure landscape in perpetuity. This plan sets out the management aims and objectives, along with the specific management objectives for each landscape component, and the associated maintenance works required on an Annual and Occasional basis:

- The Annual Works are those that will be required every year, such as mowing, pruning, monitoring, watering, weeding and

- cleaning etc.  
• The Occasional Works are those that will be required on an irregular or cyclical basis, such as repairs and renewals, as required.

## **1.2 The Site**

1.2.1 The site is 14.09 ha and located to the west of Banbury. It is part of a wider proposed development (Phase 1 to 3). It is located approximately 2km to the west of Banbury town centre, and 3km from the M40 to the east. The site is access from Bretch Hill.

## **1.3 Development Proposal Summary**

1.3.1 The phase 4 development proposed is up to 250 residential dwellings including associated infrastructure, access, open space, landscaping, drainage and associated engineering works. There is an archaeological 'no build' area on land comprising the western portion of the site which is incorporated in the site's open space and ecological areas.

## **2.0 AIMS AND OBJECTIVES OF THE LANDSCAPE MANAGEMENT PLAN**

### **2.1 Aims**

2.1.1 The principal aims of this LMP are to secure a coordinated, high standard of landscape management for the none-private landscaped areas within the site, whilst also ensuring the successful integration of the residential development with the surrounding landscape. The nature conservation interests will be protected and enhanced in accordance with best practice and guidance for landscape operations, alongside the design objectives provided elsewhere within the planning documents.

Aims include:

- To employ site wide landscape management which will include the appropriate maintenance of existing and proposed landscape components;
- To maintain high standards of landscaped areas through considered management procedures;
- To maintain a neat tidy, safe, attractive landscape setting;
- To provide a publically accessible open space, and;
- To provide opportunities for biodiversity through appropriate management of the wildlife habitats created within the site.

### **2.2 OBJECTIVES**

2.2.1 The main objectives for this management plan are:

- To secure the long-term health of the existing trees and landscape features, across the site;
- To secure the establishment of the proposed landscaping scheme, both for public use, and providing wildlife and ecological benefits which are respectful of and to encourage wildlife, wherever possible;
- To establish an attractive, yet functional public open space network including surfaced pedestrian routes and informal recreational areas for the enjoyment by all users;
- To establish a robust planted buffer edge to the development (existing and proposed) which both provides separation from the site and its surrounding area whilst contributing to the visual amenity of the site, where necessary;
- To ensure best horticultural practice during implementation, management and monitoring practices, at all times;
- To ensure that the health and safety of management operatives is considered with the most practical management solution proposed, and;
- Defects in any element or feature within the landscape are identified early and addressed promptly.

### **3.0 ENVIRONMENTAL MANAGEMENT CONSIDERATIONS**

#### **3.1 General Landscape Considerations**

- 3.1.1 All chemical weed control must be carried out by trained staff in accordance with any manufacturer's recommendations and the legislation, including, but not restricted to:
- The Food and Environment Protection Act (1985);
  - The Control of Pesticides Regulations (1986);
  - The Control of Substances Hazardous to Health Regulations (2002);
  - The Environment Protection Act (1990)
- 3.1.2 It is the contractor's responsibility to ensure that all operatives are familiar and up to date with the current legislation and any other relevant Codes of Practice and British Standards.
- 3.1.4 All arising's (unless otherwise specified) will be removed from site and deposited at an approved tip or registered green compost facility.
- 3.1.5 However, where appropriate, arising's from the site could be recycled to support ecological proposals. In the case of fallen or lopped tree material, arising's can be located within areas of undergrowth, away from key public spaces, to dead wood stacks. The creation of such features must be carried out in accordance with the ecological recommendations stated within this report, or in consultation with the appointing local authority ecologist and should not be used as a measure to 'dump' arising's within the site.
- 3.1.6 Watering operations will be carried out as specified within this management plan. A water source should be identified. If no water source is available then watering will be carried out using a bowser.
- 3.1.7 Horticultural peat is not to be used as mulch on any beds or as a soil conditioner.

#### **3.2 SPECIFIC ECOLOGICAL CONSIDERATIONS**

- 3.2.1 The accompanying documents sets out the mitigation requirements to 'balance losses' of existing landscape structure to be removed. The site has previously been subject to a suite of ecological surveys included an extended Phase 1 habitat survey in September 2021.
- 3.2.2 Existing habitats considered for management include the following:
- Hedgerows – for foraging and commuting bats;
  - All breeding bird habitats are protected from deliberate destruction under the WCA 1981. Vegetation clearance should only take place outside on bird nesting season (generally March to August);

- Landscaping with understorey vegetation and long grass areas – for foraging small mammals;

3.2.3 Arboricultural works should consider British Standard BS 5837:2012 'Trees in relation to Design, Demolition and Construction' and method statements prepared as part of this application.

### **3.3 LANDSCAPE MANAGEMENT PREAMBLES**

3.3.1 The management contractor for this scheme will be – **TBC** (appointed by Bloor Homes, funded via each plot contributing an annual fee).

3.3.2 The appointed maintenance contractor must provide details of all necessary insurances and certification to carry-out the works specified within this management plan. It is the responsibility of the appointing authority/ developers preferred management contractor to ensure that all submitted insurances and certificates are up to date and provide the appropriate level of cover for the specified works.

3.3.3 The initial landscape contract should include 12 months maintenance and defect liability period, or where this is not set in place, an agreement on the defects responsibilities.

3.3.4 All dead and diseased material is to be removed and replaced by the landscape contractor at his own cost during this period. All areas are to be kept litter free. Following the initial 12-month maintenance defect liability period the landscape areas will be covered by a landscape contractor who will take responsibility for all hard and soft landscape elements on a running contract managed by Bloor Homes Ltd or otherwise agreed with the Local Planning Authority.

3.3.5 Prior to commencement of the operations, it is recommended that the contractor should visit the site and take note of all existing conditions including levels, condition of vegetation, soil conditions, and access. No claims that are based on a lack of understanding of the site or the nature of the work required to carry out the operations in this plan will be entertained.

3.3.6 At all times, care should be taken to avoid interference with the established levels and contours of the ground, and to avoid damage to footpaths, roads, drains, manholes and existing structures or vegetation. Any damage proven to have been caused is to be made good at the contractor's expense.

3.3.7 All work will be carried out by experienced and qualified operatives holding the necessary training certificates to undertake the operations, with a suitably experienced foreman/ manager overseeing the prescribed works.

3.3.8 All works detailed in the following specifications shall be carried out in accordance with good horticultural practice, using materials, plant and machinery, appropriate to the task. This should be undertaken in a manner that avoids damage and/or nuisance to the site's habitants and their surroundings. Any plant material that dies as a result of the contractors neglect will be replaced at their cost.

### **3.4 LANDSCAPE AREAS AND COMPONENTS**

3.4.1 The following sets out the landscape areas that contain the components detailed within this plan:

- **Northern boundary – containing existing boundary vegetation and grass seeding. No recreational use;**
- **Southern boundary and POS corridor – containing existing boundary vegetation, new planting and grass seeding. Informal use;**
- **Western POS corridor - containing existing vegetation, new planting and grass seeding. Informal use;**
- **Central (development eastern edge) open space – containing existing vegetation, grass seeding to attenuation area. Limited recreational use;**
- **North-western POS area – containing existing vegetation, new planting, grass seeding to no build area and attenuation areas. Informal use;**
- **Central (development) POS corridor – containing existing vegetation, new hedge planting and grass seeding. Informal use;**
- **South-western POS area – containing existing vegetation, new planting, grass seeding to no build area and attenuation areas and an equipped area of play. Informal use.**

3.4.2 The following sets out the landscape components that are considered in detail for management within this plan:

- **Existing trees and hedgerows;**
- **Proposed new tree and Hedgerow planting;**
- **Proposed native woodland (buffer) planting;**
- **Proposed ornamental, single species hedgerows;**
- **Proposed amenity grass/lawn seeding;**
- **Proposed wildflower meadow and seasonally wet grassland;**
- **Proposed marginal planting;**
- **Equipped area of play, and;**
- **Furniture and structures.**

### **MANAGEMENT PRESCRIPTIONS**

### **3.5 EXISTING TREES & HEDGEROWS**

#### **3.5.1 Description**

- The majority of the existing trees within the site are part of the (existing and retained) field hedgerows. The existing retained trees will be supported with the addition with a mix of new trees within the POS and development layout.



- The majority of existing hedgerows are on/adjacent to/ within the site boundaries will be retained where possible, as part of the landscape strategy for the development. Boundary hedgerows will be enhanced with additional planting. There is also a central hedgerow with trees which will be partially retained. These are all accessible from within the development.
- The site comprises of two fields which are bound by hedgerows to all sides with the exception of the western boundary, to provide access between the two fields, a short section of hedgerow c6m is required to be removed. In addition, another short section of hedgerow, c5m long, is required to be removed to accommodate the emergency access onto Balmoral Avenue

### 3.5.2 Management Objectives

The management objectives for retained trees and hedgerows are to:

- Maintain the trees and hedgerows in a healthy and attractive condition for as long as possible, to ensure continuity in tree cover and hedgerow corridors for their structure, biodiversity, and screening/amenity value of the site;
- Ensure that trees are healthy and safe, particularly in places in proximity to residential properties or adjacent to areas of public access, and;
- Arising's from any tree management activity will, where possible be used to provide opportunities for amphibians, invertebrates and bryophytes by forming micro-habitats from piles of dead wood or recumbent dead logs.

### 3.5.3 Annual Works

i) **Visual Inspection:** Trees should be regularly visually checked for the presence of any diseased or rotten wood; fungal or other infections/disease; and stability. If any such issues are identified then the advice of a qualified arboriculturist should be sought immediately.

ii) **Annual Arboricultural Assessment:** In any event, an Arboricultural Assessment should be undertaken once annually by a qualified arboriculturist inspecting the condition of existing trees including any cause of increased risk to people or property. Furthermore during the Arboricultural Assessment, the health of the trees shall be monitored and any works required for health and safety or to promote the health and sustainability of existing trees shall be identified, scheduled and actioned at a suitable time of year following application and granting of appropriate consents by the LPA (where required).

iii) **All boundary hedgerows are to be cut once annually.** Cutting should occur during the winter months, - ideally late winter when the majority of fruit has been taken by local wildlife. Cutting should not be undertaken during severe frosts, or during the bird nesting season (this is generally accepted as being from March to end of August inclusive). Accessible sides and ends of the hedgerow should be pruned where practicable, to achieve an appropriate shape and structure in relation to the height of the hedge. Additional hedgerow pruning during the growing season may be required where hedgerows adjacent to public footpaths prevent safe use of the footpaths. Minimum height of 1.8m.

### 3.5.4 Occasional Works

i) **Tree Work Consents:** Any works recommended for each tree (such as crown raising, crown reduction, substantial pruning, removal of limbs, pollarding or felling) should be documented and a formal application made to the LPA for approval (with the exception of the removal of dead wood) in advance of the works being undertaken wherever necessary. This includes trees protected by a Tree Preservation Order (TPO) or a condition of the planning consent (within 5 years).

ii) **Timeframes & Specialist Advice:** All works should be completed at an appropriate time of year and in accordance with relevant EU and UK wildlife legislation. Where possible this should be outside of the bird nesting season (i.e. between October through to March inclusive). In any event according to the nature of the works, there may be an additional requirement for monitoring or a watching brief by a qualified ecologist to ensure there are no nesting birds or bats present.

iii) **Tree Works: Any tree protection measures required for works near to or adjacent to existing trees should be carried out as per the recommendations made in the Arboricultural Assessment.** All works shall be carried out by a skilled, qualified and approved Arboricultural Contractor in accordance with BS3998: 2010 'Tree Work - Recommendations'. Where possible, and where health and safety constraints permit, arising's may be formed into habitat piles and standing dead wood maybe left to provide additional dead wood habitats to maximise invertebrate biodiversity. All other brushwood and logs that result from surgery and felling of trees on site shall be removed off site. Brushwood may be chipped on site, but all wood chippings resulting from these operations shall be raked up, bagged and removed. Where surgery works affect a highway, the Arboricultural Contractor shall ensure the relevant permissions and road control permits are obtained, and all necessary health and safety parameters are met. All works within the site will be undertaken in accordance with the Environment Agency Pollution Prevention Guidelines PPG5. All personnel will be familiar with the content of these guidelines prior to commencing work within the site.

iv) **Tree replacement and enhancement of tree cover:** Any tree that dies or is necessarily felled, but which is not removed as part of a programme of thinning or coppicing, shall be replaced with a tree of appropriate species and stock size. Such replacement shall be with a tree of either the same or similar species as those existing. The option for replacing with a different species is to allow some flexibility avoiding problems encountered with 'Same Species Disease' and to ensure sustainable tree cover in the interests of visual amenity. Possible damage to drainage/services and adjoining building foundations must be considered before choosing a replacement tree species and location. Where alternative species are being considered, then the species should be suitable to the character of the location, either native (in the case of structural planting on the boundary of the site) of a source of local provenance where possible or if ornamental, then appropriate to the type of trees adjacent to them. Once annually the site shall be considered for the need for any strategic replacement or enhancement planting, to broaden the age class of trees and tree groups, in the interests of the long-term sustainability of strategically important vegetation. All trees should be a minimum stock size of standard (10-12cm girth), and

implemented and maintained in accordance with good horticultural practice. Replacement and enhancement planting is best undertaken during the planting season (October through to March).

### 3.6 PROPOSED NEW TREE AND HEDGEROW PLANTING

#### 3.6.1 Description

- New tree planting is incorporated into the proposed development within gardens, streets, communal parking areas and public open space, to provide landscape structure, and amenity value. Such tree planting will define focal points, enclose streets and spaces and soften the built form;
- Native tree planting is included where appropriate, throughout POS areas. Within the development parcels, some centrally located open spaces are accentuated by tree planting, with other less formal lines, groups and individual trees located where possible;
- Large, long-lived tree species have been included to the POS areas to provide a strong statement within key locations adding to green structure, screening, way-finding and adding to the ecological benefit of the site;
- Plant between October and March.

#### 3.6.2 Management Objectives

The management objectives for the new tree planting are:

- Ensure the satisfactory establishment and growth of new tree planting typical of the respective species;
- Promote conditions so that trees are healthy and safe, and;
- Ensure continuity of the design approach and to the amenity and wildlife value of the site.

#### 3.6.3 Annual Works

i) **General tree maintenance during establishment:** Check all trees for firmness and stability in the ground. Check and adjust tree ties, replacing if necessary. Top up bark mulch levels where necessary around the base of new trees, good quality bark mulch for PLOT areas and street planting to an appropriate depth of 50mm, and ornamental bark mulch 8-355mm for POS areas and to be maintained an approximate depth of 75mm to reduce competition from weeds and retain soil moisture. Where trees are in grass areas, remove weed growth by hand and retain a circle of bark mulch (approximate radius of 500mm) to aid mowing and prevent damage to the main stem. All trees shall be fertilised using a suitable and approved liquid feed (N10:P15:K10) at a rate of 60g/m<sup>2</sup> during early May and again in late September. Prune back any diseased or rotten wood (including the removal of main stems and limbs) back to sound wood as required. Remove all cut material from site.

ii) **Watering trees:** Water trees during dry periods (being any period without substantial rainfall for 14 days or more), until trees are successfully established. Water at a rate of 30 litres per tree position into watering tubes. Apply water at a frequency of once per fortnight from April to the end of September (to a maximum of 15 visits). Increase watering frequency during any continuous hot weather lasting more than 7 days. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits

according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water. The Landscape Management Contractor shall be responsible for any tree failures or excessive die back from drought stress during the management contract.

III) In order to assimilate the new development into the existing landscape, trees and shrubs have been planted within the POS areas, and along boundary edges. New hedgerows are to be maintained at an appropriate height and width. Suitable rabbit guard fencing, or shelters will be used to protect plants from damage until established. Until the new planting is established formative pruning will be undertaken once annually to keep the hedgerow tidy, the existing hedgerows should be maintained as explained below. Weeding by hand or using glyphosate as appropriate should be undertaken around the base of the plants, three times per year.

Once established the hedgerow should be cut once annually, during the winter months and ideally January or early February (but not during severe frosts). Cutting should not be carried out during the bird nesting season. Tree guards will be removed once the hedgerow is established.

Sides, ends and tops of the hedgerow should be pruned to an 'A' profile, where practicable, and dependant on access, to achieve an appropriate shape and structure in relation to the height of the hedge. Following pruning operations all arising's, should be removed from the site.

iv) Access to the hedgerows should be from the most appropriate locations including within the open space areas and/ or from the public footpaths in areas that are adjacent to the boundary edges. Access may need to be arranged and all appropriate health and safety precautions undertaken during operations.

v) Ground preparation would include to strim and spray of planting strip with glyphosate herbicide at least 3 weeks prior to planting.

vi) New planting should be regularly inspected during establishment to encourage healthy, vigorous condition. Areas of shrubs should be kept weed and grass free using hand/ hand tool weeding or where appropriate a glyphosate based herbicide such as Roundup or similar. Suitable rabbit guard fencing, or shelters will be used to protect vegetation from damage and will be removed once established.

#### 3.6.4 Occasional Works

i) **Checking and removal of tree stakes and ties:** Review the need for tree stakes and ties annually for up to 6 years. Remove stakes and ties between 4 to 6 years after planting, but be sure trees are firm and stable. Stakes and ties removed shall be cut at ground level, below lowest grass height (to prevent snagging mower blades) or pulled from the ground and the post holes filled with suitable topsoil. If the tree

is found to be weak or unstable after the stakes have been removed, then check the base of the tree for signs of rot. If rotten or unlikely to stabilise, remove the tree and replace. If the tree is free from rot or other cause of its instability, then reinstate a tree support, using 100mm diameter chestnut stake and single tie. The stake should be pushed into the ground with a post rammer, to a depth of 600mm and cut to one third the height of the tree. Fix the tree stem with a rubber tie and spacing device attached to at a point no more than 25-35mm below the top of the post, in order to prevent chaffing against the post in high winds. Remove old posts and ties and arising's and dispose off site.

ii) **Long-term tree surgery works:** After 10-20 years of maintenance as above (or earlier if required), newly planted trees will reach semi-maturity and at this time may be in need of corrective surgery. Trees should become subject to the annual Arboricultural Assessment and any works recommended shall be carried out in accordance with paragraphs 3.5.4.

iii) **Tree replacement and enhancement of tree cover:** Any tree that dies or is necessarily felled, but which is not removed as part of a programme of tree removals, shall be replaced with a tree of appropriate species and stock size. Such replacement shall be with a tree of either the same or similar species as those existing. The option for replacing with a different species is to allow some flexibility avoiding problems encountered with 'Same Species Disease' and to ensure sustainable tree cover in the interests of visual amenity. Possible damage to drainage/services and adjoining building foundations must be considered before choosing a replacement tree species and location. Where alternative species are being considered, then the species should be suitable to the character of the location and adjoining trees. Once annually the site shall be considered for the need for any strategic replacement or enhancement planting, to broaden the age class of trees and tree groups, in the interests of the long-term sustainability of strategically important vegetation. Trees should be a minimum stock size of standards (10-12cm girth), and implemented and maintained in accordance with good horticultural practice. Replacement and enhancement planting is best undertaken during the planting season (October through to March).

### 3.7 PROPOSED NATIVE WOODLAND (BUFFER) PLANTING

#### 3.7.1 Description

- Native woodland planting has been proposed along the within the POS areas, to the western and southern boundaries to soften, screen and break-up views to the proposed settlement edge. These are accessible from within the development.
- Native species are selected to provide flowering and fruiting varieties and provide general habitats and foraging for wildlife. The planting will enhance these boundaries.
- Plant between October and March with adequate rabbit protection.

#### 3.7.2 Management Objectives

The management objectives for native and semi native whip and shrub planting are to:

- Ensure the satisfactory establishment and growth of new planting;

- Maintain planting in a healthy and attractive condition and enhance the value of planting as a shelter and food source to wildlife; and
- Ensure continuity of the design approach and amenity value of planting

### 3.7.3 Annual Works

i) **Weeding:** Remove all weed growth by hand as necessary to ensure weed free and tidy planting areas. Six to eight visits are required per growing season. Visits should occur approximately monthly in the growing season, subject to weather conditions from April to October, with an extra visit outside of the growing season in December or January to inspect the condition of the beds. Take great care not to disturb bark mulch and top up bark mulch levels where necessary for the first 3 years, using the same or similar product to that previously supplied. Weeding frequency should be varied according to the site and density of vegetation cover. All weeds shall be removed from the site.

ii) **Spot Herbiciding:** Where required, persistent perennial weeds can be controlled using herbicide. For planting beds containing herbaceous plants and shrubs, apply a suitable folia-acting systemic translocated herbicide using a weed wiper device to avoid killing wanted plants. The use of herbicides should only be made following a risk assessment to consider potential effects on the environment and on human health, but also spray drift killing the wrong plants. The purchase, transport and storage of herbicides are regulated by Part III of the Food and Environment Protection Act 1985, Control of Pesticides (Amendment) Regulations 1997; the Health and Safety at Work Act 1974; the COSHH Regulations, the product COSHH sheet and EC Directive 91/414/EEC (the "Authorization Directive") and the Plant Protection Products Regulations 1995 as amended by the Plant Protection Products (Basic Conditions) Regulations 1997. All herbicides must have an appropriate full or "off-label" approval for use in a relevant situation. Refer to the Pesticide Safety Directive, for which the website is given here for your assistance: [www.pesticides.gov.uk](http://www.pesticides.gov.uk). All pesticides shall be applied in suitable calm weather conditions; allow for repeat spraying as required to achieve a complete kill. DO NOT HERBICIDE WITHIN CLOSE PROXIMITY OF BALANCING POND OR DITCHES. Apply herbicide as required and at intervals to ensure no regeneration of weed, usually equating to four sprays per year during the growing season at 6 week intervals, from late April onwards. The timing of visits may vary according to weather conditions. Extreme care must be taken to avoid damage to surrounding plants and grass, and to avoid spray drift. Any damage resulting from incorrect usage, spillage, and spray drift, to be rectified at the Landscape Management Contractor's expense.

iii) **General planting maintenance:** At each visit firm in and straighten any loose plants. Top up bark mulch levels where necessary for the first 3 years, using the same or similar product to that previously supplied to maintain an approximate depth of 75mm to reduce competition from weeds and retain soil moisture.

iv) **Pruning of planting:** New planting should be regularly inspected during establishment to encourage healthy, vigorous condition. During establishment (the first 2 years after planting) the base of trees and shrubs, circa 500mm radius, should be kept weed and grass free using a glyphosate based herbicide such as Roundup or similar. Suitable rabbit guard fencing, or shelters will be used to protect vegetation from damage and will be removed once established. Over vigorous weeds such as brambles and nettles are to be removed. Long grass growing between the trees and shrubs should be strimmed twice yearly until plants are established. Pruning of dead, diseased or

damaged branches should be carried out as appropriate to promote healthy growth and natural shape, and to favour a single central leading shoot.

Once established, prune back shrubs once annually in the period between October to March in accordance with sound horticultural practices, pruning back to a node, shoot or bud; prune out dead, leggy and broken branches, without damage to the natural habit or appearance of plant without box clipping or rounding off plants. Prune out crossover branches, invasive suckers, dead wood, damaged stems, any spindly growths and any epicormic growth that will weaken the plant. Prune back quick and leggy growing plants much harder than other species, but prune back by no more than 30% in any one-year.

v) **Watering:** For the first year after planting water both shrubs and whips during dry periods (being any period without substantial rainfall for 14 days or more). Water all shrubs to field capacity (minimum 20 litres per m<sup>2</sup>) and water all large specimens at 10 litres each. Apply water at a frequency of up to 2 times per week from April to the end of September (to a maximum of 15 visits in any one calendar year) as required during any continuous hot weather lasting more than 7 days. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water. The Landscape Management Contractor shall be responsible for any plant failures or excessive die back from drought stress during the management contract. Following the first year after planting watering should be unnecessary as all of the species are native and should be tolerant of drought conditions.

#### 3.7.4 Occasional Works

i) **Replacement and enhancement planting:** Cut back any shrubs where they have become old, misshapen, leggy or they have lost their vigour. Specimens, shrubs or herbaceous plants that fail to show growth or develop full foliage (including plants damaged during management operations), where such plant failure leaves a gap in the foliage not filled by adjacent plants, shall be replaced with stock of the size, species and quality originally specified. Include any plants that are destroyed by vandalism, theft or similar cause through no fault of the Landscape Management Contractor, up to and not exceeding 5% of the plant stock. Specimens, shrubs or herbaceous plants so replaced shall be the same as those specified, previously supplied and approved. Nursery stock shall be open grown whips (60-80 cm high) or where containerised species a minimum stock size of a 2L pot. Planting should be implemented and maintained in accordance with good horticultural practice. Include any works necessary to enable planting to be properly carried out i.e. removal and disposal of dead material off site and for topping up/replacement of bark mulch. Once annually the site shall be considered for the need for any strategic replacement or enhancement planting, to broaden the age class of vegetation in the interests of the long-term sustainability of strategically important vegetation.

ii) **Thinning and Coppicing:** Thinning and coppicing will allow trees and shrubs to develop diversity of form and different types of nesting, feeding and foraging habitat and extend the potential life of individual plants. Additional thinning of the buffer planting areas may be required at intervals following an initial selective thin. The timing of thinning should be informed by the arboricultural survey, which should

include a visual inspection, checking if crowns are overlapping and thinning is needed. Any trees, apart from understory species, which have failed to reach the canopy and have been suppressed, will need removal. Thin on a phased basis in blocks. The aims should be to create a 'ring of sky' around each tree that is retained, into which it can spread. Protect coppice stools from deer/rabbit browsing by piling brush over them. Monitor coppice periodically, noting any stools that fail to regrow and replant the following autumn. Remove weeds and invasive species as required. A competent person, such as a qualified arboriculturist should plan thinning and coppicing operations in advance by identifying and marking all trees for removal and coppicing in winter. All thinning operations should be undertaken between October and February.

### 3.8 PROPOSED ORNAMENTAL AND SINGLE SPECIES HEDGEROWS

#### 3.8.1 Description

- New ornamental hedgerows are proposed throughout the site, within the housing area they provide enclosure to front gardens, soften the built form and define the edges between residential and some open space areas. These are accessible from within the development.
- New hedgerows will use a range of species of value to wildlife (as a result of providing shelter and food e.g. flowers and berries), including some ornamental and flowering private boundary hedgerows.
- Plant between October and March with adequate rabbit protection.

#### 3.8.2 Management Objectives

The management objectives for new ornamental hedgerow planting within public spaces is to:

- Ensure the satisfactory establishment and growth of new hedgerow planting with a typical hedge height, form and density according to species;
- Maintain planting in a healthy and attractive condition of value to wildlife;
- Maintain natural and informal surveillance of the street from adjoining properties; and
- Ensure continuity of the design approach and amenity value of planting

#### 3.8.3 Annual Works

i) **Weeding:** Remove all weed growth by hand as necessary to ensure weed free and tidy planting areas. Six to eight visits are required per growing season. Visits should occur approximately monthly in the growing season, subject to weather conditions from April to October, with an extra visit outside of the growing season in December or January to inspect the condition of the beds. Take great care not to disturb sheet or bark mulch; top up bark mulch levels where necessary for the first 3 years, using the same or similar product to that previously supplied. Where a biodegradable weed suppressant fabric has been used, this will have disappeared within the establishment phase. Weeding frequency should therefore be varied according to the site and density of vegetation cover. All weeds shall be removed from the site.



ii) **Cutting / trimming of ornamental hedges:** Cut ornamental hedges at least twice annually, once in February and again in late November. Ornamental hedges associated with front garden areas will be regularly maintained to an approximate height of 600mm to form a square, even and tidy hedge that is formal in character. Cut larger stems, and prune any diseased rotten wood back to sound wood. Remove all cut material from site.

iii) **Watering of ornamental hedges:** Water ornamental hedges during dry periods (being any period without substantial rainfall for 14 days or more). Water shrubs to field capacity (minimum 20 litres per m<sup>2</sup>) applying water in the morning or early evening to reduce evaporation.

Apply at a frequency of up to 2 times per week from April to the end of September (to a maximum of 20 visits in any one calendar year) as required during any continuous hot weather lasting more than 7 days. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water. The Landscape Management Contractor shall be responsible for any tree failures or excessive die back from drought stress during the management contract.

#### 3.8.4 Occasional Works

i) **Gapping up and replacement of ornamental hedges:** Remove failed plants and replace with a plant of the same species, to a minimum size of a 10L pot with a minimum height and spread of 60cm. Gap up areas of less dense growth with additional plants as required planted in a single row to achieve a continuous hedge alignment, taking due allowance for the natural growth and regeneration of cut material. Include any works necessary to enable planting to be properly carried out i.e. removal and disposal

### 3.9 PROPOSED AMENITY GRASS

#### 3.9.1 Description

- Open, more formal areas of public open space and the POS corridors with footpath routes, will be managed as closely mown grass. These are accessible from within the development;
- The mowing frequency will be related to the grass mix and function of each area. Although grass areas will generally be subject to a regular cutting regime for aesthetic reasons and recreational use, the height of the sward can be varied according to amenity and to ensure nature conservation benefits;
- Sow during autumn, winter or spring. The mowing regime in the first year should allow for establishment.

#### 3.9.2 Management Objectives

The management objectives for amenity grass areas will be to:

- To ensure the satisfactory establishment of the grass sward; and to maintain;
- Maintain areas of bulb planting to ensure healthy plants and provide seasonal displays of colour.

### 3.9.3 Annual Works

i) **Mowing and edging:** Prior to cutting all areas will be cleared of litter and debris in accordance with the section detailed above.

Amenity grass areas shall be regularly mown in order to maintain the visual amenity of the area. All operations will be carried out using machinery appropriate to the task, cylinder, rotary or mulch mowers. Mowing operation will only be carried out during appropriate weather conditions avoiding sustained periods of rain, or heavy frost, snow, and waterlogging.

- Close mown lawns shall be cut weekly at peak growing times (mid-March to mid-June and September to October), reducing to once a fortnight in hot and dry summer weather, usually between mid-June and late-August. In mild autumns, one further cut may be needed in November. Allow for a maximum of 20 cuts per year. Cut to a height of 30mm, but increase height to 50mm in hot dry weather;
- Soft edges between grass areas and planting beds shall be kept free from grass by cutting the grass with a 'half-moon' edging tool to ensure a neat, clean-cut finish once per year at the start of the growing season. The edge of paving and shrub beds shall be kept free of grass using strimmer's or edge clippers once per month during the growing season;
- Grass cutting will be avoided in areas planted with bulbs during late winter/early spring when bulbs are growing/flowering and for a period 6-8 weeks after flowering to allow bulbs to regain nutrients, after which a normal mowing regime can resume.

ii) **General lawn care:** Apply an approved turf fertilizer, selective weed killer and moss retardant in May and September, applying strictly in accordance with the manufacturer's instructions, Control of Pesticide Regulations, COSHH Regulations and product COSHH sheet in suitable weather conditions. Otherwise amenity grass areas shall be weeded either by hand or (especially persistent weeds) herbicide treated in order to maintain the visual amenity of the area.

iii) **Watering amenity grass areas:** During the first 3 years water amenity grass areas during periods of extreme drought (2 or more weeks without substantial rainfall) to a maximum of 15 occasions. After establishment continue to water only if deemed to be required. To aid the natural establishment of grass areas, only water where unavoidable, where the grass is going brown and appears to be suffering from severe drought stress. When watering, water to field capacity (minimum 20L/m<sup>2</sup>) in the morning or in the evening to reduce water evaporation, when the water is more likely to reach the roots. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water.

### 3.9.4 Occasional Works

i) **Replacement of failed turf:** Small areas of dead, dying or failing grass shall initially be made good through changes to the mowing regime or through temporary protection of high wear areas using temporary fencing or similar. Larger areas of degradation may require re-cultivating and reseeded. Cut out sections of distressed and failing or dead areas of turf using a suitable turf-stripping machine or for

small areas by hand. Supply and lay new turf of a suitable standard and lay flush with existing sward, filling any cracks and top dressing with a 70:30 ratio mix of sand and screened topsoil. This sand/soil mix shall also contain grass seed of the same or similar species to the turf. For more wholesale degradation of the turf sward, the entire area will require to be re-seeded. Cultivate or powerharrow the affected area until a fine tilth is achieved (removing stones greater than 20mm) and grade until level with adjoining areas. Apply a pre-seeding fertilizer at a rate of 70g/m<sup>2</sup> and seed with a general amenity seed mix, raking until the seed is a few millimetres below the surface. Water thoroughly and maintain the soil in a moist condition, removing stones, weeding and mowing until the grass is established.

### **3.10 PROPOSED WILDFLOWER MEADOW**

#### **3.10.1 Description**

- The large public open space to the Northwest and Southwest areas of the site, plus the northern (existing) hedgerows margin include grasslands of wildflower meadow. These will incorporate a diversity of flower and grass species (appropriate to the microclimate and soil type) to benefit a variety of species including birds, bats and invertebrates. The wildflower meadows will increase terrestrial foraging for reptiles and amphibians. These are accessible from within the development;
- To maximise biodiversity the area will be cut once annually.
- Dry infiltration basins are proposed within the Site. The design of these basins will provide grassland habitat and varying topography of value to foraging badger, bats, reptiles and invertebrates. 'Self-set' plants from nearby ditches and grassland are also likely to naturally colonise areas;
- To maximise biodiversity the areas will be cut twice annually in mid-summer and in October, with additional cuts undertaken as necessary.
- Sowing during autumn, winter or spring;

#### **3.10.2 Management Objectives**

The management objectives for wildflower meadow areas will be to:

- To ensure the satisfactory establishment of the grass sward; and
- To maintain a healthy and biodiverse sward suitable for a range of wildlife.

#### **3.10.3 Annual Works**

i) **Cutting of wildflower areas:** Mow newly sown meadows once in the first year of establishment to a height of 40-60mm, removing cuttings if dense. This will control annual weeds and help maintain balance between faster growing grasses and slower developing wild flowers. In the second and subsequent years, meadow grassland is not cut or grazed from spring through to late July/August to give the sown species an opportunity to flower. After flowering in July or August take a 'hay cut': cut back with a scythe, petrol strimmer or tractor mower to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow or graze the re-growth through to late autumn/winter to c 50mm and again in spring if needed.

The timing of all cutting operations should take into consideration any protected species (such as reptiles) that may be present. There may be an additional requirement for monitoring or a watching brief by a qualified ecologist to ensure that no protected species are present. Once cut and raked up, all arising's shall be collected and removed off site as agreed.

ii) General care: Hand weed pernicious, ruderal and aggressive or invasive weeds in in order to maintain the visual amenity of the area (refer to paragraph 3.6.3). Do not herbicide or fertilise. Hibernacula should be left undisturbed. Arising's from tree surgery work can be retained on site and used to create new hibernacula as required.

#### 3.10.4 Occasional Works

i) **Replacement of failed meadow/wetland areas:** Meadow grass and wildflower sward that is species poor shall be enhanced. In areas of low fertility, closely strimming or mow the existing sward and remove all cuttings in August. Rake or scarify to disturb the ground and overseed with a suitable mix of wildflowers selected to the microclimatic and soil conditions and repeatedly tread over the area. After sowing mow the grass to a height of 60mm in height to allow light and air to the emerging seedlings for a full growing season. In areas where soil fertility is too high or the sward has failed the area will require re-cultivating and re-seeding. Remove dead material and re-cultivate the topsoil to a depth of 100mm. Small areas may be reseeded following the autumn cut by spreading the cut arising's onto the bare soil to set seed. For more wholesale degradation, cultivate the affected area until a fine, level tilth is achieved, removing stones greater than 20mm diameter. **Do not fertilise or herbicide.** Evenly seed with the same seed mix specified originally and carefully rake in thoroughly to ensure that the seed is a few millimetres below the surface and roll using a very light roller ensuring the surface is even and level. Water thoroughly and maintain the soil in a moist condition, removing stones, weeding and mowing until the grass is established.

### 3.11 PROPOSED MARGINAL PLANTING (to edges of attenuation basins)

#### 3.11.1 Description

- Within the open space areas, attenuation basins are proposed which will support some marginal planting mixes.

#### 3.11.2 Management Objectives

The management objectives for the marginal basin areas will be to:

- To ensure the satisfactory establishment of the planting; and
- To maintain a healthy and biodiverse plants suitable for habitat provision

#### 3.11.3 Annual Works

i) **Cutting of marginal areas:** Planting within and around the perimeter of the basin will be managed to create habitat for wildlife and aid the healthy condition of any standing water. Once established these plants to be cut annually or bi-annually depending upon rate of growth as necessary to maintain a healthy, weed free area of marginal planting with all arising's removed immediately. Any dead or dying marginal planting should be replaced and monitored to ensure the correct conditions for establishment.

- ii) Litter picking will be necessary to maintain an attractive feature.

### **3.12 PROPOSED EQUIPPED CHILDREN'S PLAY AREA**

- 3.12.1 During each maintenance visit all areas will be cleared of litter and debris in accordance with the section set out above. This should include collection and emptying of all dog waste bins and standard waste bins.
- 3.12.2 All equipped areas for play will be inspected and maintained in accordance with requirements of BS EN 1176/77 and best practice guidelines from the Royal Society for the Presentation of Accidents (ROSPA).
- 3.12.3 Recorded inspections will be carried out at an appropriate frequency to be agreed with the adopting authority.
- 3.12.4 A visual assessment of all play facilities will be undertaken at each site visit by the Contractor. Any defects or hazards considered dangerous are to be dealt with immediately and the play facilities will be closed until appropriate measures have been taken to make the facilities safe and fit for purpose.
- 3.12.5 All inspections as set out above are to be carried out by a suitably qualified person (please refer to the ROSPA inspection qualifications).
- 3.12.6 Contact details for the maintenance contractor will be displayed in a suitable location at each play facility. The contact information must include a direct telephone number so that any faults can be reported and dealt with in an appropriate timeframe.
- 3.12.7 Maintenance of equipment and safety surfacing will be undertaken in strict accordance with the manufacturer's recommendations.
- 3.12.8 All replacement parts must be sourced from an accredited manufacturer/supplier and be appropriate for the intended use.
- 3.12.9 The Contractor is to retain a record of all warranty inspections, maintenance, repairs and modifications carried out to any part of the play apparatus and/or associated safety surfacing.

### **3.13 PROPOSED HARD SURFACE ROUTES AND STREET FURNITURE**

- 3.13.1 The Contractor will check at each visit that all the hard surfaces and street furniture is safe and fit for purpose. All street furniture such as bins and seats should be kept in a clean, safe and usable state at all times. Any damage should be reported and/ or repaired/ replaced promptly.

- 3.13.2 Hard surfaces are to be reviewed at each visit. Any damage is to be recorded and made good either during the visit or at the following visit. If the repairs cannot be carried out or completed the Contractor will make the area safe and/or cordon off any sections that present a hazard. Any such areas will be made good as soon as practically possible. Every effort should be made to match into the original materials, making sure line/levels are correctly adhered to. Any damage should be reported and repaired promptly.
- 3.13.3 All roads and paths will be treated with a suitable herbicide spray in accordance with Manufacturer's recommendations to remove weeds and moss. Hard surfaces will be swept at each visit.
- 3.13.4 All furniture will be maintained to a standard so that it is clean, safe and fit for purpose at all times. Any damage will be made good during the maintenance visit. Otherwise the item will be made safe and/or cordoned off and made good as soon as practically possible. All repairs to street furniture will be carried out using parts sourced from the supplying manufacturer and carried out in accordance with their guidelines.

### **3.14 LITTER PICKING**

- 3.14.1 Litter picks and general litter clearance should be carried out on all landscape areas on a regular basis in addition to every maintenance visit including emptying of litterbins and the removal of litter, glass, stones, and any other debris from the grassed areas. This should include the play area, existing hedge/tree groups and new planting blocks. The overall objective is to ensure that all landscape areas including the water course and pond are free from litter and fly tipping.

## **4.0 INITIATION, MONITORING AND REVIEW**

### **4.1 INITIATION**

- 4.1.1 The management company will undertake all management aspects relating to the external landscape areas that lie outside of private residential gardens.
- 4.1.2 The management company will coordinate all management of the site in perpetuity in accordance with this LMP and its maintenance schedules. A representative of the company will be appointed as the main point of contact for residents, relating to the management of the site.
- 4.1.3 The management company may employ specialist contractors as required to complete specialist operations and/or occasional works.
- 4.1.4 The Company may also appoint, from time to time, consultants to provide specialist advice, monitoring or to undertake a watching brief in relation to particular aspects of this site or specific maintenance operations. This may include suitably qualified ecologists, arboriculturists, landscape architects, engineers and/or health and safety.
- 4.1.5 All works, materials and operations will be in accordance with relevant legislation, British Standards, Regulations (including the CDM Regulations) and Codes of Practice.

### **4.2 PROCESS FOR MONITORING AND REVIEW**

- 4.2.1 This LMP and its maintenance schedules will be monitored and assessed for their effectiveness on an annual basis for the first five years following the completion of the development.
- 4.2.2 Each annual review will be coordinated and completed by a suitably qualified representative of the Adopting Authority or Developer. The review may include advice from specialist consultants as required (such as a qualified arboriculturist and ecologist), the Landscape management contractor, other stakeholders including representative(s) from the LPA and local residents.
- 4.2.3 To this end the review shall may include (as appropriate):
- Specialist reports - advising on particular aspects such as protected species, general silvicultural and health and safety issues;
  - Records or attendance sheets demonstrating the maintenance work undertaken; and
  - A walk over assessment of the landscape areas to assess landscape components and their condition, and the need for enhancement including minutes.

- 4.2.4 The review should identify any changes to site conditions and circumstances, whether the aims and objectives of the Landscape Management Plan are being met, and where identified changes are need to existing management practices and timeframes. Furthermore any strategic enhancements, including new planting should be identified and priorities established for undertaking these works.
- 4.2.5 Within 1 calendar month of the review, a revised Landscape Management Plan shall be produced (if appropriate), and circulated to stakeholders. Within 5years of the completion of the site, then the revised document shall be submitted to the LPA as a non-material amendment to the previously approved Landscape Management Plan.
- 4.2.6 After the first five years the LMP will be reviewed every five years, or as required to ensure the satisfactory management of the landscape in perpetuity.



## 5.0 MANAGEMENT OPERATIONS PROGRAMME

5.1 In order to ensure that the habitats created reach their maximum value for nature conservation, all landscape elements should be monitored as prescribed above. The results of monitoring should be used to inform possible revisions of this LMP.

5.1.2 This maintenance schedule should run for five years initially, planting will occur in the first growing season as the development phase allows, any replacement planting shall be undertaken in the months shown below.

### 5.1.3 MAINTENANCE SCHEDULE

OPERATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>EXISTING TREES &amp; HEDGEROWS</b>												
Inspect all existing trees												
Any works required to existing trees in accordance with BS 3998												
Prune boundary hedgerows once annually												
<b>TREE PLANTING</b>												
Planting between October and March												

Inspect all new planting and adjust/replace stakes/ties as needed												
Remove weeds and top-up bark mulch												
Water once per fortnight until established												
Apply fertiliser												
Any annual works required to proposed trees in accordance with BS 3998:2010												
<b>HEDGEROWS, BUFFER PLANTING whip tree planting)</b>												
Planting between October and March. Adequately protect from rabbits												
Remove weeds and top up bark mulch. If required, apply herbicide every 6 weeks												

Water twice a week until established												
Prune native hedge and buffer planting annually and remove any guards once established												
Prune ornamental hedge twice annually												
<b>AMENITY GRASSLAND</b>												
Sow during autumn, winter or spring. The mowing regime in the first year should allow for establishment												
Cut grass and remove arising's from site												
Control and remove weeds												
Repair worn areas												
Apply fertiliser, selective weedkiller and moss retardant												

<b>WILDFLOWER MEADOW &amp; SEASONAL WET GRASSLAND</b>												
Sow during autumn, winter or spring												
<u>First year</u> – cut grass once and remove arising's from site												
<u>Once established</u> - cut grass & remove arising's from site												
Control and remove weeds												
<b>MARGINAL PLANTING</b>												
Sow during autumn, winter or spring												
<u>Once established</u> - cut grass annually & remove arising's from site												
<b>LITTER &amp; DEBRIS REMOVAL</b>												
Pick up all litter from areas of hard & soft landscape and remove from site												