

JAMES BLAKE

A S S O C I A T E S

BIODIVERSITY NET GAIN - LANDSCAPE AND ECOLOGICAL MANAGEMENT AND MAINTENANCE PLAN

Guide to the Management of Landscape and Ecological Areas at Land at Lucas Lane, Hitchin

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ON BEHALF OF
HILL GROUP

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Landscape Design

Landscape Planning

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Ecology

Biodiversity Net Gain

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Land Adoption

Weed Eradication

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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE OF DOCUMENT

- 1.1.1 The Management Plan shall be taken to include this document and any supporting plans, reports and specifications approved as part of the planning application for the residential development on land at Lucas Lane, Hitchin. This includes any documentation containing quantitative and qualitative information about the external areas of the site that will be useful to those responsible for managing and maintaining them.
- 1.1.1 A Landscape Management Plan has been produced to supplement the Planning Application No. 22/00516/FP.
- 1.1.2 The detail landscape proposals demonstrate the intent to use a variety of retained vegetation, proposed trees, hedges, shrubs and seed mixes some native and some ornamental, the final plan
- 1.1.3 should look to maximise the biodiversity of the plants and provide for seasonal interest.
- 1.1.4 The purpose of this document is to schedule all required maintenance regimes, operations and works necessary for the satisfactory management of the landscape in perpetuity. The Management Plan sets out the management aims and objectives for the site 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 works that will be required every year, such as watering, weeding and cleaning. The Occasional Works are those that will be required on an irregular or cyclical basis, such as repairs and renewals.

1.2 THE GROUNDS

- 1.2.1 The site is located to the west of Hitchin at the junction of Lucas Lane and Gray's Lane. It is presently a small, level field with mature hedgerow and trees to the boundaries on the south, east and west and punctuated vegetation along the north of the boundary. An area of vegetation in the northwest of the site is covered by a Tree Preservation Order (TPO). There is vehicular access from the byway Lucas Lane (Public Byway 7) and Gray's Lane is a bridleway with vehicular access to the Headlands. See Figs 1 and 2.

1.2.2 Site Description and Development Proposals

The proposals for the site consist of a small residential development, together with amenity area and landscaping, with the provision of vehicular access from Lucas Lane. The boundaries of the site are defined by significant existing hedgerows and some trees to the south, east and west. A new access road is proposed from the south east corner of the site and the existing area of vegetation in the north west of the site with the TPO will be enhanced to improve its ecological condition. Landscaping to the front of plots will enhance

the street scene. All low-quality vegetation is to be removed and replaced as part of a comprehensive detailed landscape scheme (refer to drawing JBA 24/555-01 Detailed Landscape Proposals).

Fig 1. Location plan: Road Map: Not to scale

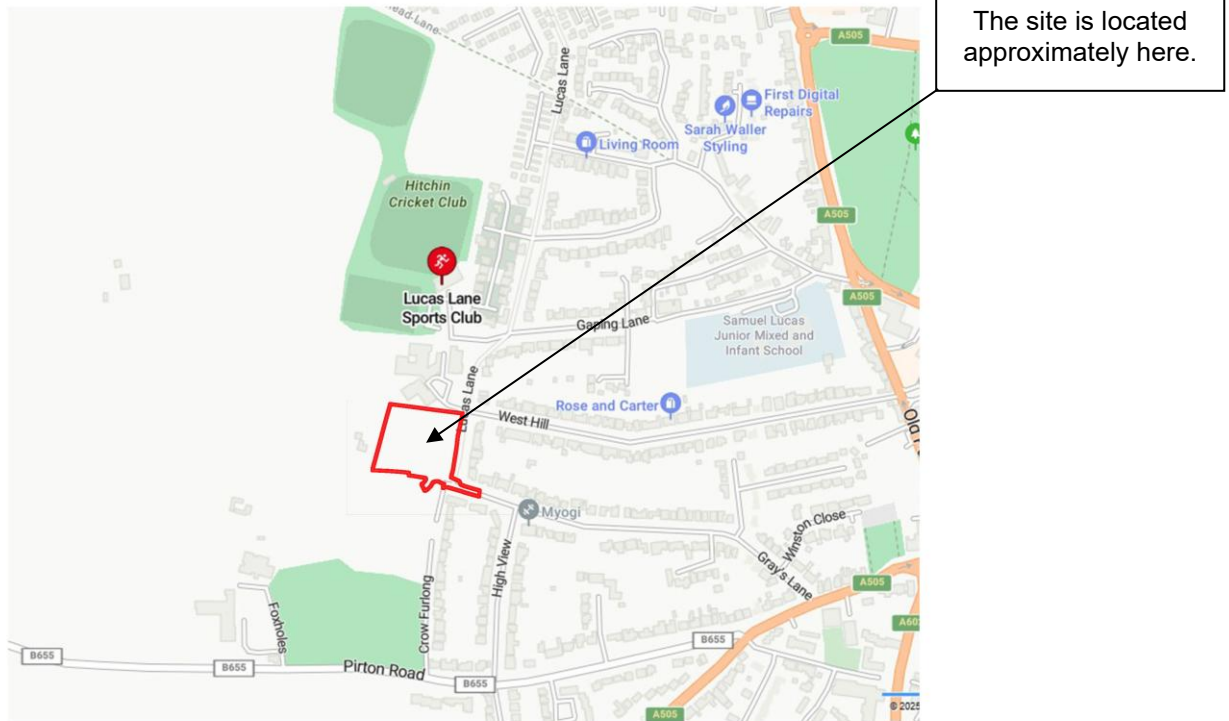


Fig 2. Location plan: Site Boundary: Not to scale



1.2.3 Management Plan Areas

The purpose of this management plan document is to ensure the appropriate management of the retained and proposed landscape areas on the site following the construction and completion of the development. The landscape areas include existing boundary vegetation along with all new planting (trees, hedges, shrubs and grass) and other hard or soft landscape components.

1.2.4 All of the landscape areas of the site will be the subject of the Landscape Management Plan.

1.3 RECITALS

1.3.1 Parties Involved

- **The Developer:** Hill Group is responsible for the construction of this development. The developer will be responsible for the protection and management of existing landscape components through the construction phase and the implementation of the hard and soft landscape works in accordance with the planning drawings, including any contractual maintenance period associated with these works.
- **The Local Planning Authority:** This term (abbreviated to LPA) shall refer to North Hertfordshire District Council and its Planning and Landscape Officers who are involved in the process of the approval of landscape and other documentation.
- **The Adopting Organisation:** This is the organisation that will adopt ownership of the landscape areas and is therefore responsible for their management and maintenance including all landscape components and features within them. The Adopting Organisation for the site will be a Private Management Company to be appointed by the Developer. The Adopting Organisation shall also be taken to mean any employee or representative of the organisation in ownership of the grounds.
- **The Landscape Management Contractor:** the company who may be appointed by the Adopting Organisation to carry out the landscape maintenance works.

1.3.2 Status of the Landscape Management Plan

Prior to the commencement of development (or such other date or stage in development as may be agreed in writing with the LPA) a detailed long term Landscape Management and Maintenance Plan for all landscape areas shall be submitted to and approved by the LPA in writing. The plan shall include:

- Aims and Objectives;
- A description of Landscape Components;
- Management Prescriptions;
- Details of maintenance operations and their timing; and
- Details of the parties/organisations who will be maintain and manage the site, to include a plan delineating the areas that they will be responsible for.

The plan shall demonstrate full integration of landscape, biodiversity and Arboricultural considerations. The areas of planting shall thereafter be retained and maintained in perpetuity in accordance with the approved Landscape Management and Maintenance Plan, unless any variation is approved in writing by the Local Planning Authority.

- 1.3.3 The LPA will approve this document as part of the planning process and this document therefore forms part of the approved planning documents. Management shall therefore be carried out in accordance with this document following completion of the implementation management plan (and any contractual maintenance periods associated with these works). This document will outline the minimum standard of maintenance to ensure a safe, comfortable, attractive, biodiverse and sustainable landscape is achieved in perpetuity.

1.3.4 **Supportive Information**

This Management Plan is submitted together with the Detailed Soft Landscape Proposals (JBA 24/555-01 Detailed Landscape Proposals), the Management Areas plan (Appendix 7.1), Schedule of Maintenance Operations, Appendix (7.2) Indicative Pruning Schedule for Plants, Appendix (7.3) and Progress Towards BNG Target conditions Form, Appendix (7.4) are attached to this document.

- 1.3.5 The document should be read in conjunction with the following planning documents:
- Tree Survey, Arboricultural Impact Assessment, Preliminary Arboricultural Method Statement and Tree Protection Plan, Hayden's Arboricultural Consultants, December 2021.
 - Preliminary Ecological Appraisal, Applied Ecology Ltd, May 2023
 - Biodiversity Enhancement Measures – James Blake Associates 2025
 - Biodiversity Net Gain Calculation and Measures – James Blake Associates 2025

2.0 AIMS AND OBJECTIVES OF THE LANDSCAPE MANAGEMENT PLAN

2.1 AIMS

- 2.1.1 The principal aims of this Landscape Management Plan are to secure a coordinated and high standard of landscape management for the landscape areas within the site, to ensure the successful integration of the residential development with the surrounding landscape and to protect and enhance nature conservation interests in accordance with the design objectives in the approved planning documents. This will include the appropriate maintenance of existing retained and proposed landscape components.
- 2.1.2 Furthermore, the purpose of the proposed works outlined within this document are to provide a management and monitoring plan of the habitats and hedgerows included within the biodiversity net gain (BNG) calculations (JBA, 2025). This will include: 30-year objectives in the form of target conditions of habitats, management responsibilities, maintenance schedules and a methodology to ensure the submission of monitoring reports in years 1, 5, 10, 20 and 30. from commencement of development, demonstrating how the BNG is progressing towards achieving its objectives, evidence of arrangements and any rectifying measures needed.

2.2 OBJECTIVES

- 2.2.1 The main objectives of the Landscape Management Plan are as follows:
- **To maintain and improved landscape character:** To protect and strengthen the landscape character and provide screening function of the development and to incorporate locally characterful species within landscape areas, to provide an attractive and robust landscape setting for the buildings on the site and reinforce local distinctiveness;
 - **The sustainable management of existing vegetation:** To retain existing trees and other vegetation that are worthy of retention, and to enhance their character, composition and age structure through positive management with consideration to long-term viability and health and safety;
 - **To achieve a high standard of maintenance:** To take measures to ensure the successful establishment and growth of new structural and incidental planting and to take appropriate long-term management measures to ensure the satisfactory appearance and sustainability of vegetation. To ensure that landscape components are replaced, augmented and/or improved over time as appropriate;
 - **To maintain and enhance biodiversity:** To protect and enhance the nature conservation interest of both existing and new habitats and to ensure the adoption of management practices that enhance the biodiversity value of the site. To fulfil all legal requirements in relation to the protection and management of ecological features and the protection and management of target species including birds and bats;

- **To ensure health and safety:** To uphold the duty of care that all landscape components are safe and that all reasonable steps are taken to minimise risk of injury and damage to people and property; and
- **To provide a mechanism or monitoring and review:** To ensure that management practices are monitored and where necessary reviewed on an annual basis in accordance with changing site circumstances and the views of key stakeholders (Adopting Authority, resident's representatives and LPA).

3.0 GENERAL ECOLOGICAL BACKGROUND

3.1 INTRODUCTION

- The development proposals for the site have been driven by the desire to create a form of development that respects the particular characteristics of the site and complements the character of the surrounding area. To that end the development includes retained 'green space' which provides a function both for recreation and for the protection of local biodiversity interests.
- A Preliminary Ecological Appraisal report for the site was produced by Applied Ecology Ltd in May 2023. This found that:
 - The grassland that comprised the majority of the Site was of low relative conservation or biodiversity importance and does not present a significant development constraint. The area of dense scrub and boundary hedgerows were of elevated ecological value. These habitats are proposed to be largely retained and, in the case of the scrub, to be enhanced through improved management.
- Reptiles

No evidence of reptile species was found from a survey of the grassland at the Site.
- Bats

While the overall value of the Site to foraging and commuting bats was considered to be limited, the retained scrub and boundary hedgerows were identified as habitats of potentially elevated value in this respect.
- Breeding birds

The scrub and hedgerows are likely to support a small assemblage of common garden and hedgerow breeding bird species.

3.2 GENERAL MANAGEMENT ADVICE (APPLYING TO ALL PHASES OF DEVELOPMENT)

- Some mature trees are found on site. A Tree Protection Plan has been produced for the site by Hayden's Arboricultural Consultants, which provides information on the locations of all important (Category A/B) trees as well as the dimensions of the required 'root protection areas' for these trees (to meet the requirements of BS 5837:2012, 'Trees in relation to design, demolition and construction').
- No Category A or B trees are to be removed unless otherwise agreed in writing by North Hertfordshire District Council.
- Any tree surgery works should be undertaken by a suitably qualified arboricultural contractor, registered with the Arboricultural Association Approved Contractor Scheme (AAAC).

- All tree surgery works shall be undertaken in accordance with the requirements of BS 3998:2010 'Tree Work - Recommendations' and BS 5837:2012 'Trees in Relation to design, demolition and construction'.
- All pruning/removal works to trees should ideally be undertaken outside the nesting season to ensure breeding birds are not disturbed; the bird nesting season is generally accepted to be from the 1st March to 31st August inclusive (though may extend into February and August for some species). Work during the nesting season could take place but only if an inspection by a suitably qualified ecologist/arboriculturalist confirms no nesting birds are present.
- Where tree surgery is planned as part of this management plan or in the situation where an approved tree surgeon has recommended remedial work for health and safety reasons, the potential for bats to be present must be assessed before work is carried out. It is recommended that this assessment be carried out by a suitably experienced and licensed bat worker to avoid unlawful harm to these protected species.
- If at this time any bats are found further advice should be obtained by the ecologist from Natural England.

4.0 BIODIVERSITY NET GAIN ASSESSMENT

4.1 BIODIVERSITY NET GAIN BACKGROUND

- 4.1.1 Defra's Biodiversity Statutory Metric provides a way of measuring and accounting for biodiversity losses and gains resulting from development or land management change. The metric encompasses both area (e.g. grasslands) and linear habitats (such as hedgerows, rivers and streams). Note that 'material' enhancements for species, such as bat/bird boxes, reptile hibernacula, hedgehog 'highways' etc. cannot currently be factored into the calculation.
- 4.1.2 At present, national policy states '*To protect and enhance biodiversity and geodiversity, plans should:*
- a) *Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national, and locally designated sites of importance for biodiversity⁶¹; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation⁶²; and*
 - b) *promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity'* (NPPF, 2024).
- 4.1.3 The figure of 10% net gain as the minimum has now been highlighted as mandatory with the emerging Environment Bill, from February 2024.

4.2 BIODIVERSITY NET GAIN METHODOLOGY AND EVALUATION

- 4.2.1 A biodiversity net gain calculation has been carried out using Defra Biodiversity Statutory Metric (updated November 2023). For more information on the metric, please see [here](#). The areas for habitat to be retained and/or created were taken from the JBA 24/555-01 Detailed Landscape Proposals.
- 4.2.2 The habitats and linear features currently present within the site boundary are used to calculate the baseline biodiversity units; the percentage gain that the proposed development can deliver is calculated using the detailed landscape plans (JBA 24/555-01 Detailed Landscape Proposals) for the development and assumptions made by the assessor (where necessary). However, some discrepancies have been identified and corrected within the calculations with reference to the Arboricultural Impact Assessment by Hayden's Arboricultural Consultants.
- 4.2.3 Baseline habitats consist of mainly poor semi-improved neutral grassland, dense scrub, species-poor native intact hedge and scattered mature trees.
- 4.2.4 The strategic significance of the location was checked against the North Herts Local Plan 2011-2031. The location is mentioned in the Strategy under 'Housing Site' HT5.

- 4.2.5 New habitats and enhanced habitats have been proposed on site which include species-rich hedges with trees and improved woodland ground flora within the scrub area, as well as ornamental shrubs, native hedging and trees. Furthermore, the existing tree lines will be retained as part of the development.

4.3 BIODIVERSITY NET GAIN RESULTS

- 4.3.1 Based on the detailed landscape design (JBA 24/555-01), baseline habitats and assessor assumptions, it is concluded that the development can deliver a biodiversity net loss of 37.30% for habitat units and a net gain of 129.64% gain for hedgerows/linear features.
- 4.3.2 The following landscape and ecological management plan is required to secure the potential benefits for biodiversity covering a minimum period of 30 years.
- 4.3.3 A *Schedule of Maintenance Operations* which includes the delivery of BNG elements is provided within Appendix 7.2.

4.4 BIODIVERSITY NET GAIN MONITORING

- 4.4.1 On site monitoring is required in order to ensure the created habitats achieve the desired conditions within the expected target time. Given the site is within an urban setting, the only habitats which require monitoring is the proposed grassland and trees. It is therefore considered that monitoring visits will only be required during years 1, 5, 10, 20 and 30.
- 4.4.2 Monitoring should be undertaken by an ecologist who is competent in undertaking BNG metric condition assessments.
- 4.4.3 A form to be completed in each monitoring year can be found in Appendice 7.4, which will aid in the monitoring of progression towards target conditions of each habitat. The form and audit report will be submitted to the LPA after each monitoring visit.
- 4.4.4 Any remedial measures should be appended to this Management Plan.
- 4.4.5 Ongoing management is to be implemented by the Site Management Team and suitable appointed contractors, such as landscape contractors.
- 4.4.6 BNG habitat monitoring should be undertaken by a suitability qualified ecologist appointed by the landowner, as appropriate.

5.0 SPECIFIC ELEMENTS REQUIRING MANAGEMENT AND MAINTENANCE

5.1 LANDSCAPE AREAS AND LANDSCAPE COMPONENTS

5.1.1 The landscape areas subject to this Landscape Management Plan include the following components:

- Existing / Mature Trees
- Existing Scrub Vegetation
- Existing Native Hedgerows
- Proposed Tree Planting
- Proposed Native Whip/Shrub and Buffer Planting
- Proposed Native Hedgerows;
- Proposed Native Woodland Bulbs and Ground Flora
- Proposed Amenity Grass
- Hard landscape areas.

5.1.2 The information includes a description and specific management objectives for each component along with the annual and occasional management regimes required.

5.2 EXISTING MATURE TREES

5.2.1 Description

- A number of existing trees around the boundary of the site will be retained as part of the landscape strategy for the development. A few have been identified as being in need of removal – refer to the arboricultural report.
- The existing trees on and adjacent to the site are set out in the Arboricultural Report. The Tree Survey Schedule and Tree Protection Plan (TPP) identify the location, species, size and condition of the existing trees to be retained by the proposed development and identify any initial works to be completed by the Developer during the construction phase as well as any on-going monitoring which may be required.
- Before any works are carried out trees, it is good practice to check if they are covered by a TPO, within a conservation area or planning status.

5.2.2 Management Objectives

The management objectives for retained trees are to:

- Maintain the trees in as healthy and attractive condition for as long as possible, to ensure continuity in tree cover and their contribution to the landscape structure, biodiversity, and screening/amenity value of the site; and

- Ensure that trees are healthy and safe, particularly in places in proximity to residential properties and with public access along the site boundary.

5.2.3 Annual Works

- 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.
- 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), refer to Occasional Works in paragraph 4.2.4 below.

5.2.4 Occasional Works

- 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), Conservation area (CON area), or a condition of the planning consent (within 5 years). **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.
- Tree Works:** All works shall be carried out by a skilled, qualified and approved Arboricultural Contractor registered with the Arboricultural Association Approved Contractor Scheme (AAAC) in accordance with BS3998: 2010 'Tree Work - Recommendations'. All brushwood and logs that result from surgery and felling of trees on site shall be removed off site, unless needed to enlarge or renew hibernacula or eco piles. 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.
- 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 (November through to March inclusive).

5.2.5 Biodiversity Net Gain Requirements

- i) In the additional to the above works, any deadwood or broken limbs should ideally be left in situ (unless it poses a health and safety risk) to provide natural ecological niches.
- ii) Vegetation under the trees should not be cleared so that at least 20% of the tree canopy area is oversailing vegetation beneath.
- iii) There should be little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity).

5.3 EXISTING HEDGEROWS (AND ASSOCIATED GROUND FLORA)

5.3.1 Description

- The existing vegetation on and adjacent to the site is set out in the Arboricultural Report. The Tree Survey Schedule and Tree Protection Plan (TPP) identify the location, species, size and condition of the existing vegetation to be retained by the proposed development and identify any initial works to be completed by the Developer during the construction phase as well as any on-going monitoring which may be required. This includes the renovation of the hedgerow as advised by the Arboricultural Report to aid future management.
- Hedgerows are a key retained habitat, which support protected species on site and provide connectivity between newly created habitats and the wider countryside.

5.3.2 Management Objectives

The management objectives for the existing hedgerow are to:

- To maintain and enhance where appropriate the screening value, augmenting any hedgerow gaps; and
- To traditionally manage the hedgerow to develop its structure and to develop its wildlife value, particularly for birds and bats.

5.3.3 Annual Works

- Annual Cutting of Native Hedgerows:** To maintain a natural profile, hand trim or cut the top and sides of native hedges one third every year, in late November (outside of the bird nesting season once leaves have started to drop), in a rotational manner to ensure there is always a supply of good quality habitat, berries and nuts throughout the winter to an approximate height of 3m to form an even and tidy hedge line, retaining individual hedgerow trees. Cut larger stems, and prune any diseased rotten wood back to sound wood. Remove all cut material from site.
- Hedgerow Ground Flora:** Leave the vegetation beneath the hedge line uncut to allow ground flora to develop. Avoid the use of herbicides and pesticides in the vicinity of native hedgerows. Once developed management of the ground flora should also be on a rotational basis with margins cut every 2 to 3 years. Where possible this should be a 3m wide strip of wildflower or existing ground flora to either side of the hedge, except where hard landscape elements are abutting or within 3m of the hedge.
- Annual Arboricultural Assessment:** An Arboricultural Assessment should be undertaken once annually by a qualified Arboriculturist to inspect the condition of existing vegetation. The health of existing hedgerows shall be monitored and any works required for health and safety or to promote the health and sustainability of existing hedgerows shall be identified, scheduled and actioned at a suitable time of year, refer to Occasional Works in paragraph 5.3.4.i below.

5.3.4 Occasional Works

- i) **Occasional Works to Native Hedgerows:** Where identified by the annual Arboricultural Assessment e.g. where native hedgerows have become overgrown or require more extensive work, carry out recommended remedial work, including coppicing or hedge laying (in sections) to thicken and rejuvenate the hedge line. All extensive works shall be carried out by a skilled, qualified and approved Arboricultural Contractor in accordance with BS3998: 2010 'Tree Work - Recommendations'. All arisings that result from such management works shall be removed off site, unless needed to enlarge or renew hibernacula or eco piles.
- 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) **Gapping up native hedges:** Where sections of hedgerow become thin or fail, gap up hedgerows with an appropriate mix of native species to an approximate density of 6 plants/linear metre, planted in a double staggered row during the planting season (November through to mid-March inclusively). Plants should be a minimum size of open ground whips 600-900mm high or 3L container grown stock for evergreen species (such as holly). Gap up areas of less dense growth with additional plants as required to achieve a continuous hedge line taking due allowance for natural growth and regeneration of cut material. All plants should be native (from a source of local provenance where possible), appropriate to the character of the area and should be selected to increase the species diversity of the existing hedgerow and maximise ecological value.

5.4 EXISTING SCRUB VEGETATION

5.4.1 Description

- The existing vegetation on and adjacent to the site is set out in the Arboricultural Report. The Tree Survey Schedule and Tree Protection Plan (TPP) identify the location, species, size and condition of the existing vegetation to be retained by the proposed development and identify any initial works to be completed by the Developer during the construction phase as well as any on-going monitoring which may be required. This includes the enhancement of the existing scrub to improve its BNG condition, as advised in the Preliminary Ecological Appraisal.
- Scrub is a key retained habitat, which support protected species on site and provide connectivity between newly created habitats and the wider countryside.
- In this vegetation zone to the north west of the site, native shrub sub canopy species planting are present.
- Native whip and shrub planting has established enhancing the existing native vegetation.
- Native species provide general habitats and foraging for wildlife including flowering and fruiting varieties.

5.4.2 Management Objectives

The management objectives for the existing scrub are to:

- To maintain and enhance where appropriate through selective felling, coppicing, supplementary planting and the seeding of a diverse, shade-tolerant ground-layer in order to increase the species, structural and age diversity of the stand from its current dense, relatively uniform structure to something more open, with soft edges grading into grassland that will meet the relevant criteria for good condition.
- Maintain planting in a healthy and attractive condition and enhance the value of planting as a food source to wildlife; and
- Ensure continuity of the design approach and amenity value of planting.
- To create a mosaic of habitats in a variety of growth stages.

5.4.3 Annual Works

5.4.4 Weeding: Remove all weed growth by hand as necessary to ensure weed free and tidy planting areas. One annual visit is required per growing season. Outside of the growing season in December or January to inspect the condition of the scrub. Weeding frequency should be varied according to the site and density of vegetation cover. All weeds shall be removed from the site.

5.4.5 Spot Herbiciding: Where required, persistent perennial weeds can be controlled using herbicide. 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.

- 5.4.6 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 WATER FEATURES. 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.
- 5.4.7 Pruning of planting: Prune back shrubs 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 Rosaceous and quick and leggy growing plants much harder than other species, but prune back by no more than 30% in any one-year. Prune Cornus varieties back to 200mm above ground every 3rd year, but retaining any young growths.

5.4.8 Occasional Works

- i) **Replacement and enhancement planting:** Cut back any shrubs and herbaceous plants where they have become old, misshapen, leggy or they have lost their vigour. 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 understorey 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 brash 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.

5.5 PROPOSED TREE PLANTING

5.5.1 Description

- New tree planting is incorporated into the proposed development within communal amenity areas to provide landscape structure and amenity value and the private plots. Such tree planting will define focal points, enclose views and spaces and soften the built form.

5.5.2 Management Objectives

The management objectives for new tree planting is to:

- 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 amenity value of tree planting.

5.5.3 Annual Works Years 1-4

- 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, using the same or similar product to that previously supplied to maintain an approximate depth of 50mm 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/m² 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.
- 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 25 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.

5.5.4 Occasional Works Years 1-6

- 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 re-instate 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 arisings 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 4.2.3 and 4.2.4.
- 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 (November through to March inclusive).

5.5.5 Biodiversity Net Gain Requirements

- i) In the additional to the above works, any deadwood or broken limbs should ideally be left in situ (unless it poses a health and safety risk) to provide natural ecological niches.

- ii) Vegetation under the trees should not be cleared so that at least 20% of the tree canopy area is oversailing vegetation beneath.
- iii) There should be little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity).

5.6 PROPOSED NATIVE WHIP/SHRUB AND BUFFER PLANTING

5.6.1 Description

- In the proposed vegetation zone to the north of the site, creation of a species rich native shrub sub canopy species planting are proposed.
- Native whip and shrub planting has been proposed strategically to enhance the existing native vegetation.
- Native species will be selected to provide general habitats and foraging for wildlife including flowering and fruiting varieties.
- Specific varieties chosen for their flowers and berries to provide foraging opportunities for mammals, birds and bats.

5.6.2 Management Objectives

The management objectives for 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 food source to wildlife; and
- Ensure continuity of the design approach and amenity value of planting.
- To create a mosaic of habitats in a variety of growths stages. Management to be on a rotation of 1/3 cut each year.

5.6.3 Annual Works

- 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. Note: For planting using a non-biodegradable weed suppressant membrane, reduce visits to 4 times per year in the growing season. 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 and in any event should be between 4 and 8 i.e. whatever is required to achieve a weed free scheme. All weeds shall be removed from the site.
- 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.

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 WATER FEATURES.** 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 50mm to reduce competition from weeds and retain soil moisture.
- iv) **Pruning of planting:** Prune back shrubs 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 Rosaceous and quick and leggy growing plants much harder than other species, but prune back by no more than 30% in any one-year. Prune Cornus varieties back to 200mm above ground every 3rd year, but retaining any young growths. Ensure the scrub area maintains a minimum 5m depth to achieve a 'Good' condition according to BNG categorisation.
- 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 10 litres per m²) 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 tree 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.

5.6.4 Occasional Works

- iii) **Replacement and enhancement planting:** Cut back any shrubs and herbaceous plants 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 (60-90 cm high) or where evergreen species a minimum stock size of a 3L 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.
- iv) **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 understorey 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 brash 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.

5.6.5 Biodiversity Net Gain Requirements

The scrub should be managed to achieve the following characteristics;

- i. There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA5) and species indicative of suboptimal condition make up less than 5% of ground cover.
- ii. At least 80% of scrub is native
- iii. There are at least three native woody species
- iv. No single species comprises more than 75% of the cover (except hazel *Corylus avellana*, common juniper *Juniperus communis*, sea buckthorn *Hippophae rhamnoides* (only in its restricted native range), or box *Buxus sempervirens*, which can be up to 100% cover).

5.7 PROPOSED NATIVE HEDGEROW

Description

- A native hedgerow is proposed around the southern and eastern boundary of the existing scrub and as an extension to the existing native hedges along the southern and eastern boundaries of the site to enhance and protect the existing scrub define the boundary of the site, improve the landscape character and provide a soft landscape edge.

Management Objectives

- To maintain existing and new native hedgerows to a naturalistic appearance and to a given predetermined ultimate height, shape and minimum width of 1.5m.
- To ensure continuity of form and density through under or inter-plant any gaps or sparse areas using species mixes to match as required.
- To ensure that leggy and unkempt growth is pruned back and maintained at a functional size so that the hedge does not hold litter or present Health and Safety problems

Annual Works

- i) General native hedge maintenance: Top up mulch levels for new hedges where necessary, using the same or similar product to that previously supplied. Prune new native hedges once or twice annually; once in January and, if required, again in September. Single cuts will provide a more natural appearance and a second cut will ensure a neater profile – more suitable to urban areas. Native hedges associated with the amenity areas will be maintained to an eventual height of 3m.
- ii) Pruning native hedges: Prune any diseased or rotten wood (including the removal of main stems and limbs) back to sound wood. Remove all stems and limbs which are unsafe or are in danger of falling or breaking up during gales. Remove all cut material from site and cart away to tip. Do not site burn. Top out native hedgerows to the above intended eventual height, and face up the sides, using a hedge cutting device, to form an even and tidy hedge alignment. Cut larger stems with a shrub pruning tool. Long rural native hedges can be flailed once annually if there is suitable access.

Occasional Works

- i) Gapping up native hedges: Remove failed plants for new native hedges and replace with a plant of the same species, to a minimum size of an open ground whip, 0.9-1.2m high, planted between the months of December and mid-March inclusively, unless the plant is either Ilex, Ligustrum or other native evergreen species, when the height can be 500mm minimum and be supplied in a 3L pot. Gap up areas of less dense growth with additional plants as required to achieve a continuous hedge alignment, taking due allowance for natural growth and
- ii) Occasional surgery to larger native hedges: Native hedges which have grown out into tree lines, should be faced up only, retaining taller trees,

unless there are weaknesses in the root stock and stumps from rot. Such trees shall be pollarded to the given hedge height above. Retain any sound stems.

5.7.1 Biodiversity Net Gain Requirements

Planting and management of new hedgerow to meet the following criteria over time;

- i. >1.5 m average height along length
- ii. >1.5 m average width along length
- iii. Gap between ground and base of canopy <0.5 m for >90% of length
- iv. Gaps make up <10% of total length; and no canopy gaps >5 m
- v. >1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length
- vi. >90% of the hedgerow or undisturbed ground is free of damage caused by human activities
- vii. >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA3) and recently introduced species.
- viii. There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient⁸), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.
- ix. At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.

5.8 PROPOSED WOODLAND BULBS, GROUND FLORA AND MEADOW

5.8.1 Description

- Proposed native bulbs, ground flora and woodland meadow seed mix will be planted under the canopies of existing trees and along existing and proposed native hedgerows wherever possible. This existing scrub remains from the former open field and with careful management has a potential to become a suitable terrestrial habitat for a variety of species.
- To maximise biodiversity, the area will be strimmed once annually or once every three years for shady areas.
- Additional wildflower mix seeding will further enhance the areas. To minimise the impact on hedgerows, any new recreational paths will be bark mulched pathways in sufficient distance from the hedgerows, thereby reducing the use of these areas and minimising the impact of the new cultivation and establishment of new landscape features.

5.8.2 Management Objectives

The management objectives for the existing grassland will be:

- To maintain the grassland as a habitat providing food source for wildlife, while simultaneously providing informal amenity value to local residents.
- To maintain a healthy and biodiverse sward suitable for a range of wildlife.
- To reduce impact and incursion into the hedgerows by maintaining a buffer.

5.8.3 Initial Works

- i) **Habitat and landscape enhancement:** As part of the wider landscape improvements to the site, the enhancements proposed for the existing scrub are limited to hand surface cultivation to open up the sward to receive wildflower overseeding, additional tree and shrub whip planting to reinforce the scrub and hedgerows, native bulb and plug planting where seeding is not going to be effective and the bark mulch of informal paths through the scrub. For further information, refer to Detailed Soft Landscape Proposals by JBA and Preliminary Ecological Appraisal by Applied Ecology Ltd.

5.8.4 Annual Works - Year 2 onwards

- i) **Cutting of wildflower areas:** Meadow grass and wildflower areas shall be strimmed only once a year to a height of 100mm in late August. To ensure that soil fertility is reduced, rake up the arisings immediately, or in hot dry weather, they can be left in situ for a maximum of 2 days to set seed before raking. In a warm and wet year, a second cut may be required and if so, this should be carried out either in October or March as appropriate. The timing of all cutting operations should take into consideration any protected species 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 arisings shall be collected and removed off site as agreed.

- ii) **General care:** Hand weed pernicious, ruderal and aggressive or invasive weeds in order to maintain the visual amenity of the area. 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.

5.8.5 Occasional Works – Year 2 onwards

- i) **Replacement of failed wildflower grassland 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 arisings 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 an appropriate seed mix (80% grasses: 20% wildflowers) selected to the microclimatic and soil conditions at the specified rate. Carefully rake in thoroughly to ensure that the seed is a few millimetres below the surface and roll using a very light roller or a cylinder mower, 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.

5.9 PROPOSED AMENITY GRASS

5.9.1 Description

Areas of cultivated amenity grass are located across the amenity areas.

The mowing frequency will be related to the grass mix and function of the area. The height of the sward can be varied according to amenity and to ensure nature conservation benefits.

5.9.2 Management Objectives

- The management objectives for amenity grass areas will be to:
- To ensure the satisfactory establishment of the grass sward; and
- To maintain healthy and suitable grass areas appropriate to function and use.

5.9.3 Annual Works

- i) **Mowing and edging:** Amenity grass areas shall be mown in order to maintain the visual amenity of the area. Mowing frequency and height shall be adjusted the function and use of each area. All grass shall be mown initially with a rotary mower once during the spring (mid-March), to

a height of 50mm and thereafter using a cylinder mower, collecting the arisings each time, and removing off site. 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 strimmers or edge clippers once per month during the growing season.

- 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 (refer to paragraph 4.6.3).
- iii) Watering amenity grass areas: During the first 3 years following initial seeding or following re-seeding operations, 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/m²) 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.

5.9.4 Occasional Works

- i) Replacement of failed turf: Small areas of dead, dying or failing grass and bulbs 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 power-harrow 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/m² and seed with a general amenity seed mix such as "EG22" Mix by Emorsgate Seeds or other equal and approved, 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.

5.9.5 Biodiversity Net Gain Requirements

- i) In the additional to the above works, there will be an absence of invasive non-native plant species (as listed on Schedule 9 of WCA4).
- ii) Physical damage is evident in less than 5% of total grassland areas. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.
- iii) Any scrub and/or bracken growth will account for less than 20% of the total grassland areas.

5.10 SITE FURNITURE

5.10.1 Description

- There is a bench positioned to the edge of the retained scrub in an area of amenity grassland.

5.10.2 Management Objectives

The management objectives for street furniture are:

- To ensure these elements of street furniture, are safe, functional, clean and free from dilapidations, bird faeces dust, graffiti and grime.

5.10.3 Annual Works

i) General maintenance for street furniture.

Inspect all elements of the street furniture monthly taking great care to inspect posts, footings, fixings and paint work for planters, benches, seats, bins, bollards, signage etc., are safe, functional, clean and free from dilapidations, bird faeces dust, graffiti and grime. Check that posts are upright and firm and that footings are intact. Ensure that paint work is complete and that there is no sign of rust. Ensure that all fixings are secure and in good repair. Any defect shall be carefully recorded and arrangements for repair made within seven days with the Street Furniture Company or other suitable and approved contractor. All painted, electrostatic powder coated, or stained surfaces (or other similar surface treatments) shall be closely inspected, and any damage, chipping, flaking, abrasion or fading made good with matching treatment, applied strictly in accordance with the manufacturer's instructions, product COSHH sheet and latest COSHH Regulations. All graffiti shall be removed and surfaces made good if necessary. Street furniture shall be cleaned monthly, removing dirt, bird faeces, and grime using detergent and scrubbing sponges or brushes – as appropriate, rinsing and drying to leave a clean surface. Litter shall be collected at two-week intervals, and weekly between April and September inclusively, carting litter to licensed tip in sealed bags.

5.10.4 Occasional Works

i) Changes and renewals for street furniture.

Where scheduled inspections report detects to furniture, that are in need of wholesale replacement or alteration in order to function satisfactorily and to minimise risk of injury or harm, and where such items are found to be beyond repairable condition, then these changes or renewals should be effected immediately. Demolish and remove defective elements and replace or add new items as appropriate - including for carting away the failed and excavated or broken out materials to skip, ensuring all new elements match those existing in all respects, both the material type and gauge/ dimensions and the decorative finish and colour, unless a suitable alternative is agreed with stakeholders and suitable.

6.0 IMPLEMENTATION, MONITORING AND REVIEW

6.1 IMPLEMENTATION

- 6.1.1 A Private Management Company will be established for the site to undertake all management aspects relating to the external landscape areas that lie outside of private residential gardens.
- 6.1.2 The Private Management Company will coordinate all management of the site in perpetuity in accordance with this Landscape Management Plan and the accompanying maintenance schedules. A representative of the Private Management Company will be appointed as the main point of contact for residents, relating to the management of the site.
- 6.1.3 The Private Management Company may employ a Landscape Management Contractor to carry out general maintenance operations. Specialist Contractors may be used on an as needs basis to complete specialist operations and/or occasional works.
- 6.1.4 The Private Management 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 executives.
- 6.1.5 All works, materials and operations will be in accordance with relevant legislation, British Standards, Regulations (including the CDM Regulations) and Codes of Practice.

6.2 PROCESS FOR MONITORING AND REVIEW

- 6.2.1 The Landscape Management Plan and 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.
- 6.2.2 Each annual review will be coordinated and completed by a suitably qualified representative of the Adopting Authority. The review will include advice from specialist consultants as required (such as a qualified Arboriculturist and ecologist), the Landscape Management Contractor and other stakeholders including representative(s) from the LPA and local residents.
- 6.2.3 **To this end the review may include (as appropriate):**
 - Specialist reports - advising on particular aspects such as protected species, general silvicultural husbandry 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.

- 6.2.4 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.
- 6.2.5 Within 1 calendar month of the review, a revised Landscape Management Plan shall be produced (if appropriate), and circulated to stakeholders. Within 5 years 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.
- 6.2.6 After the first five years the Landscape Management Plan will be reviewed every five years, or as required to ensure the satisfactory management of the landscape for a minimum of 30 years and thereafter in perpetuity.

7.0 APPENDICES

7.1 MANAGEMENT AREAS PLAN (Not to Scale)

 Public Open Space Landscape Areas to be managed * Areas subject to confirmation of conveyance by Others



7.2 SCHEDULE OF MAINTENANCE OPERATIONS (including BNG delivery)

Maintenance Operation	Number of Visits (to be dependent on season – where not dependent on season, if appropriate, the timing shall be agreed between the Adopting Organisation and the Contractor. Indicative timings are shown with a *)					Total number of visits per year	Standard time to BNG target condition (years)	Additional Comments
	Jan – March (13 weeks)	April – June (13 weeks)	July – Aug (9 weeks)	Sept – Oct (9 weeks)	Nov –Dec (8 weeks)			
	GENERAL							
Collection and removal of litter and other debris	Once per month	Once per month	Once per month	Once per month	Once per month	12		All hard and soft areas. Cart away litter/debris and remove off site to licensed tip.
	PAVING							
Inspection and sweeping	Once per month	Once per month	Once per month	Once per month	Once per fortnight while leaves dropping	14		Document any defects, recommend methodology and carry out remedial works as required.
	STREET FURNITURE & ENCLOSURES							
	EQUIPMENT & STRUCTURES							
Inspect surfacing (path, road)	Once per month	Once per month	Once per month	Once per month	Once per month	12		Implement remedial works where required.
	SOFT WORKS							
Visual inspection of mature trees	Once per month	Once per month	Once per month	Once per month	Once per month	12		On each visit or as required.
Annual Arboricultural Assessment of mature trees and hedgerows		*	*	*		1 (plus additional visits as required)		To be completed by a qualified Arboriculturist annually when trees are in leaf or as required when visual inspections identify a health and safety risk.
Tree planting to take place winter 2025-26 or							27	BNG target condition: Moderate. Methods within

Maintenance Operation	Number of Visits (to be dependent on season – where not dependent on season, if appropriate, the timing shall be agreed between the Adopting Organisation and the Contractor. Indicative timings are shown with a *)					Total number of visits per year	Standard time to BNG target condition (years)	Additional Comments
	Jan – March (13 weeks)	April – June (13 weeks)	July – Aug (9 weeks)	Sept – Oct (9 weeks)	Nov – Dec (8 weeks)			
2026/2027 (depending on construction works)								this LEMP shall be followed in order to meet this condition in the standard timing.
Tree Surgery and significant works to boundary vegetation/hedgerows	*				*	1		As identified by arboricultural assessment following approvals from LPA. To be carried out outside of the bird nesting season and following advice from an ecologist.
Cutting/trimming of native hedgerows	*				*	1	1	To be carried out outside of the bird nesting season. BNG target condition: Poor. No specific measures required to achieve stated condition; however, the methods within this LEMP shall still be followed.
Cutting of ornamental hedgerows			Once in June	Once in late November		2	1	Or as required to maintain a formal appearance. BNG target condition: Poor. No specific measures required to achieve stated condition; however, the methods within this LEMP shall still be followed.
Hand weeding		Once per month	Once a month	Once per month	*	4-8		Weed by hand taking care not to disturb sheet or bark mulch. Remove arisings off site.

Maintenance Operation	Number of Visits (to be dependent on season – where not dependent on season, if appropriate, the timing shall be agreed between the Adopting Organisation and the Contractor. Indicative timings are shown with a *)					Total number of visits per year	Standard time to BNG target condition (years)	Additional Comments
	Jan – March (13 weeks)	April – June (13 weeks)	July – Aug (9 weeks)	Sept – Oct (9 weeks)	Nov – Dec (8 weeks)			
Spot Herbiciding	Once in late March		Once in late June, once in mid-August	Once in mid-October		4		To occur at approximately 6 week intervals only if required.
Watering		Once per fortnight	Once per fortnight	Once per fortnight		15		Water once per fortnight from April to September until trees/plants/grass areas are established. Watering frequency should be adjusted by the Landscape Management Contractor depending on climatic conditions. Increase watering during hot and dry weather until plants have established.
General maintenance of planted areas	*	Optimum time for application of bark mulch	*	*	*	12		Check at each visit. Apply bark mulch as and when required within the first 3 years.
Fertilising trees and shrubs		Once in early May		Once in mid-September		2		Fertilize new trees and planting, once in early May and once in late September. Use a slow release product, ideally granular.
Checking, adjusting, replacing or removing tree stakes and ties	*	*	*	*	*	12		At each visit as required
Pruning trees and shrubs	Optimum time for Buddleia & Cornus				Optimum time for most species	1		As required to sound horticultural practice between October and

Maintenance Operation	Number of Visits (to be dependent on season – where not dependent on season, if appropriate, the timing shall be agreed between the Adopting Organisation and the Contractor. Indicative timings are shown with a *)					Total number of visits per year	Standard time to BNG target condition (years)	Additional Comments
	Jan – March (13 weeks)	April – June (13 weeks)	July – Aug (9 weeks)	Sept – Oct (9 weeks)	Nov – Dec (8 weeks)			
								March. Cut back grasses in spring.
Edging lawns and amenity grass areas		Once per month	Once per month	Once per month		7	1	Re-profile and edge shrub beds at start of growing season with half moon tool, then strim or cut margins with edging shears throughout growing season. BNG target condition: Poor. No specific measures required to achieve stated condition; however, the methods within this LEMP shall still be followed.
General lawn care		Once		Once		2		Apply a fertiliser, selective weed killer and moss retardant in May and September.
Cutting wildflower grassland	*			Once in late September		1	4	In hot dry weather leave cuttings to set seed for 2 days before collecting and removing off site. Cut again in October or in March if required due to weather conditions. Cutting may be varied by ecologist if reptiles are present. BNG target condition: Moderate. Methods within this LEMP shall be followed in order to meet

Maintenance Operation	Number of Visits (to be dependent on season – where not dependent on season, if appropriate, the timing shall be agreed between the Adopting Organisation and the Contractor. Indicative timings are shown with a *)					Total number of visits per year	Standard time to BNG target condition (years)	Additional Comments
	Jan – March (13 weeks)	April – June (13 weeks)	July – Aug (9 weeks)	Sept – Oct (9 weeks)	Nov – Dec (8 weeks)			
								this condition in the standard timing.
Replacement of amenity grass and wildflower areas				Optimum time		1		As required.
Replacement of tree, hedgerow and shrub planting	*				Optimum time for most species	1		As required. To include enhancement planting.
Replacement of amenity grass				Optimum time		1		As required.
Thinning & coppicing								To be informed by the annual arboricultural survey
	AMENITY AREAS:							
Operational Inspection of features & hard surfacing	As recommended	As recommended	As recommended	As recommended	As recommended			To be adjusted as required
Visual and Operational Inspection of features & hard surfacing	Once every 2 weeks	Once every 2 weeks	Once every 2 weeks	Once every 2 weeks	Once every 2 weeks	1		Any defect recorded and arrangements for repair made within seven days

7.3 INDICATIVE PRUNING SCHEDULE FOR PLANTS

Plant Species	Pruning dates	Pruning amount	Crown raising	Additional Comments
<i>Betula pendula</i>	Dec/Jan	n/a	every 5 years	Thin by 50% in year 15
<i>Cornus sanguinea</i>	Feb/March	Reduce by 20%	Never	Coppice - 4 years
<i>Corylus avellana</i>	Dec/Jan	Reduce by 10%	If required	Coppice - 8 years
<i>Crataegus monogyna</i>	Dec/Jan	Reduce by 5%	Every 5 years	Thin at 15 years (30%). Coppice 8 years
<i>Ligustrum vulgare</i>	Dec/Jan	Reduce by 10%	Never	Prune leggy growth only
<i>Prunus spinosa</i>	Dec/Jan	Reduce by 5%	If required	Coppice - 8 years
<i>Prunus avium</i>	Dec/Jan	n/a	Every 5 years	Thin at 15 years
<i>Quercus robur</i>	Dec/Jan	n/a	Every 5 years	Thin at 15 years
<i>Rosa canina</i>	Dec/Jan	Reduce by 10%	Never	Coppice - 4 years
<i>Sorbus aucuparia</i>	Dec/Jan	n/a	Every 5 years	Thin at 15 years
<i>Viburnum opulus</i>	Dec/Jan	Reduce by 5%	Never	Coppice - 8 years

7.4 PROGRESS TOWARDS BNG TARGET CONDITIONS FORM

Year	Have habitats been appropriately managed via maintenance schedule?	Have habitats met/maintained target condition? - If no, continue to next question.	Are habitats progressing towards target condition? - If no continue to next question.	What rectifying measures have been/can be taken to correct progress towards target condition?
1				
5				
10				

Year	Have habitats been appropriately managed via maintenance schedule?	Have habitats met/maintained target condition? - If no, continue to next question.	Are habitats progressing towards target condition? - If no continue to next question.	What rectifying measures have been/can be taken to correct progress towards target condition?
20				
30				