

Land North of Highover Farm, Hitchin

BDW North Thames

Phase 1 Landscape and Ecological Management Plan

Pursuant to Condition 21 of Outline Proposal 18/01154/OP

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1. Introduction

- 1.1 Ecology Solutions was commissioned in April 2025 by BDW North Thames to complete a Landscape and Ecological Management Plan (LEMP) for Phase 1 of the development of the land north of Highover Farm, Hitchin (see Plan ECO1).
- 1.2 The proposed outline application for this development, with all matters reserved other than access, comprises residential led development of up to 700 dwellings of use class C3 (dwellings), approximately 500 sqm of neighbourhood-level facilities (use classes A1, A2, A3, A4, A5), a new 2FE primary school, open space, play space, green infrastructure, and associated accesses (vehicular, pedestrian and cycle), including a new primary access off Stotfold Road with limited access off High Dane.
- 1.3 The development will be delivered in four phases, as detailed in Section 4 of this document.
- 1.4 The planning application for the development was submitted to North Hertfordshire District Council in April 2018, the outcome of which was the conditional planning permission granted in November 2024 (reference: 18/01154/OP) subject to the following planning conditions.
- 1.5 Condition 21 of the conditional decision notice requires the production of a LEMP:

No development apart from enabling works, and those associated with Phase 0 strategic infrastructure works (comprising the physical construction of the spine road and drainage infrastructure, but excluding the planning and landscape establishment of those features) shall take place on the site until an outline landscape and ecological management plan (OLEMP) has been submitted to, and approved in writing by, the local planning authority.

The OLEMP shall be informed by the Environmental Impact Assessment and the latest version of the biodiversity metric, having regard to the approved metric submitted with the outline application, and should include the following:

- a) measures to protect and enhance retained features (noting commitments secured at the outline application stage)
- b) identification of opportunities to create new biodiversity assets and links to existing off site ecological networks.
- c) a demonstration of how the above measures contribute to the achievement of a 10% minimum biodiversity net gain target for the overall development site, based on the approved metric (or an up to date statutory net gain metric), and
- d) a framework management and maintenance strategy.

Prior to or concurrent with the first reserved matters submitted in each subsequent phase (identified in condition 5 phasing and delivery plan) a LEMP for that phase, prepared in accordance with the approved OLEMP, shall be submitted to and approved by the local planning authority. The LEMP shall also include:

- a) Description, areas and evaluation of features to be managed, marked on plans for that phase
- b) Aims and objectives of management
- c) Demonstration of how the above measures contribute to the achievement of the minimum 10% net gain target for the overall development and what the percentage is in that phase

- d) **Appropriate management options for achieving target condition for habitats as described in the approved metric**
- e) **Details of the make, model, and location of a minimum of integrated bat and swift boxes in appropriate buildings has been supplied to and approved by the Local Planning Authority. These should be clearly marked on plans. Boxes shall be fully installed prior to occupation and retained as such thereafter.**
- f) **Confirm that all planting comprised in the approved details of landscaping shall be carried out in the first planting season following the commencement of each phase of the development (or within such extended period as may first be agreed in writing with the Local Planning Authority). Any planting removed, dying or becoming seriously damaged or diseased within five years of planting shall be replaced within the first available planting season thereafter with planting of similar size and species unless the Local Planning Authority gives written consent for any variation**
- g) **Details of the body or organisation responsible for implementation of the plan**
- h) **Details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery. The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details for a minimum of 30 years to deliver the required condition of habitats created**
- i) **The monitoring methodology and frequency in respect of the retained, created and/or enhanced habitats. The monitoring reports shall be submitted to the local planning authority in writing in accordance with the methodology and frequency specified in the approved LEMP for that phase. The created and/or enhanced habitat specified in the approved LEMP for that phase shall be managed and maintained in accordance with the approved LEMP for that phase.**

The approved plan will be implemented in accordance with the approved details.

Reason: To conserve and enhance biodiversity in accordance with the NPPF and North Hertfordshire Local Plan Policy NE4.

Purpose of this Report

- 1.6 This document sets out the management of features of ecological interest due to be retained and created within the Phase 1 area of the site, and describes the management strategies to be implemented over 30 years after project completion to align with requirements pertaining to Biodiversity Net Gain and measures set out in the OLEMP. This will address the requirements of Condition 21.
- 1.7 Ecology Solutions have liaised with Golby and Luck Landscape Architects ensuring that the landscape scheme and maintenance and management of the site realise the objectives of this LEMP from an ecology and nature conservation perspective. The LEMP has been written to ensure that the proposed development achieves a minimum of 10% net gain in biodiversity.
- 1.8 This LEMP has been written in accordance with BS 42020:2013 Section 11.1, with reference to published guidance from the Chartered Institute of Ecology and

Environmental Management (CIEEM)¹ and in accordance with Natural England guidelines for protected species.

1.9 The document is set out as follows:

- Ecological baseline and evaluation of important features within the whole site and Phase 1 area;
- Objectives of the report in order to maximise the ecological potential of features due to be retained within the site and to establish a public open space network for public use and enjoyment;
- Phasing Strategy; and
- Management prescriptions in order to achieve objectives and ensure a minimum of 10% net gain in biodiversity is attainable. These include any monitoring requirements.

¹ CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* Version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester.

2. Ecological Baseline and Evaluation

- 2.1 An extended Phase 1 habitat survey was previously undertaken of the site in 2014 and 2016 by WSP and updated in July 2019 by Tyler Grange Group Limited. The results of this survey are detailed within the Biodiversity Offsetting Metric², dated January 2023, and are summarised below. Ecology Solutions have been involved with the site since May 2023. Targeted surveys have been undertaken, including habitat surveys and protected species surveys in respect of bats, breeding birds, common reptiles, Great Crested Newts *Triturus cristatus* and Badger *Meles meles* by Ecology Solutions in 2023. An updated Biodiversity Net Gain Metric was produced by Ecology Solutions in 2025³. An updated walkover survey to assess the status of protected species on-site was undertaken in November 2025.
- 2.2 The wider application boundary is approximately 35ha in size and comprises mostly farmed arable land, with smaller areas of semi-natural habitat, including grassland, hedgerows, trees and a pond. It is bordered to the east by Stotfold Road, a rail line to the west, and a residential area of Hitchin to the south.
- 2.3 Phase 1 of the development covers an area of two parcels in the north of the site, separated by the proposed spine road to be created during Phase 0, and comprising almost entirely of farmed arable land with a small amount of modified grassland, as well as native hedgerows and native hedgerows with trees (see Plan ECO2).
- 2.4 Further details on habitats are provided within the WSP Preliminary Ecological Appraisal⁴ and in the Tyler Grange Biodiversity Offsetting Metric.
- 2.5 A brief summary of the results of the protected species surveys for the entire site is outlined below.

Bats

- 2.6 The site has been recorded as supporting foraging and dispersing bats with a number of species having been recorded including Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Nathusius' Pipistrelle *Pipistrellus nathusii*, Noctule *Nyctalus noctula*, Brown Long-eared Bat *Plecotus auritus*, Leisler's bat *Nyctalus leisleri*, Myotis *Myotis* sp. and Barbastelle *Barbastella barbastellus*. The buildings to the immediate south-east of the site boundary have been surveyed for roosting bats with a high level of activity but no roosts recorded. A number of trees within the site have been assessed as supporting moderate roosting potential, albeit with no confirmed roosts having been identified. The site is considered to be of local value for bats.

Badgers

- 2.7 For animal welfare reasons, Badgers are considered within a separate confidential document.

² Tyler Grange Group Limited (2023) *Biodiversity Impact Assessment Calculation*

³ Ecology Solutions (2025). *Statutory Biodiversity Metric*. 11467.Statutory Biodiversity Metric.vf

⁴ WSP (2018) *Proposed Development Site at Hitchin, Hertfordshire. Preliminary Ecological Appraisal Report*

Hedgehogs

- 2.8 No evidence of Hedgehog was recorded during the site surveys. The site contains suitable habitat for Hedgehog foraging and dispersal, although this is unlikely to be at densities that are notable outside of the local area.

Birds

- 2.9 The site supports a diverse assemblage of farmland bird species and specifically supports a population of Corn Bunting *Emberiza calandra*, Yellowhammer *Emberiza citrinella*, Linnet *Carduelis cannabina*, and Skylark *Alauda arvensis*. These species are of conservation concern, being in national decline, and are red list species. The bird assemblage on site, and specifically the Corn Bunting population, are considered to be of district value.

Reptiles

- 2.10 The grassland habitats across the site, but principally those tied to the western boundary and associated railway corridor, have been shown to support a moderate Common Lizard *Zootoca vivipara* population. The site is considered to be of local value for common reptiles.

Amphibians

- 2.11 A single pond is present in the south of the site, however surveys in 2016 and 2023 have confirmed absence of Great Crested Newts. Similarly, no Great Crested Newts were recorded within the only other pond within 500m of the site, and no records were returned by the desk study with 2km of the site boundary. Hence it is concluded that the site does not support any populations of Great Crested Newt.

Invertebrates

- 2.12 A limited assemblage of common and widespread invertebrates has been identified within the site with no habitat considered to be of particular importance for this group. Local records suggest the presence of Small Blue *Cupido minimus* and Small Heath *Coenonympha pamphilus pamphilus* butterflies, Cinnabar Moth *Tyria jacobaeae*, and Pantaloon Bee *Dasypoda hirtipes* in close proximity to the north of the site, however it is considered unlikely the site is the primary habitat for these species given the limited habitats in the north. The site and habitats therein are considered to be of only site value to invertebrates / entomology.

3. Management Objectives

- 3.1 The aim of the Phase 1 LEMP is to provide a long-term (i.e. 30 year) management plan for the Phase 1 area of the site to ensure the development, when taken as a whole, achieves a minimum 10% net gain in biodiversity aligning with adopted and emerging policy and legislation.
- 3.2 Defining a set of objectives is central to the effectiveness of the aim, given that it is intended to provide a framework that will safeguard existing nature conservation interest and provide guidance on enhancement and future management.
- 3.3 Specific objectives for the conservation of particular species or groups and particular habitats of nature conservation interest are set out in the relevant sections to follow. The nature of these objectives has been guided by the principles set out in UK and European wildlife legislation, notably the Wildlife & Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017. Furthermore, the formulation of these objectives has also been influenced by national and local biodiversity and conservation targets, as set out in the UK Post-2010 Biodiversity Framework, the Hertfordshire Biodiversity Action Plans (BAPs) and the Hertfordshire Local Nature Recovery Strategy⁵ (LNRS), published on the 24 November 2025.
- 3.4 The overarching objectives for nature conservation are as follows:
 - Objective 1: To retain ecologically valuable habitats to safeguard the benefits these for biodiversity;
 - Objective 2: To secure the implementation and establishment of the proposed landscaping scheme to secure wildlife and ecological benefits, providing demonstrable net gains to the quality and value of the habitats on-site, and for public use and enjoyment; and
 - Objective 3: To ensure that the site is capable of supporting a similar, or greater, complement of species, where this is compatible with the above objectives.
- 3.5 The various measures described in the following sections, are illustrated on Plan ECO3.

⁵ Hertfordshire Nature Recovery Partnership (2025). *Local Nature Recovery Strategy*.

4. Phasing and Implementation

- 4.1 The development will be delivered in four phases, as described in the Site-wide Phasing and Delivery Plan⁶.
- 4.2 The phasing of development at Highover Farm will support the delivery of a comprehensive, sustainable and well-connected new community. The phasing strategy has been based on the following principles as set out in the Strategic Masterplan Framework:
 - To utilise existing infrastructure to minimise disruption and disturbance due to site clearance and construction activity, with the construction access and activity being taken from Stotfold Road;
 - To encourage new residents to adopt more sustainable modes of transport from the outset by construction the new primary street (The Avenue) with supporting bus, walking and cycling infrastructure before any housing is occupied;
 - Advanced structural landscaping, shrub and tree planting to enable early establishment of green infrastructure; and
 - Delivery of a mix of housing type and tenure within each phase.
- 4.3 A brief description of the planned phases, in particular how they impact landscape and open space management, is provided below.
- 4.4 Phase 0 consists of highway and drainage infrastructure, including the spine road, and the construction of the Sustainable Drainage Systems (SuDS) in the north of the site (Hitchin Meadows).
- 4.5 Phase 1 construction will include the creation of residential parcels in the east of the site, along with creation of Hitchin Meadows, Stotfold Linear Park, and part of Dane Walk. This is the phase which is addressed in this LEMP.
- 4.6 Phase 2 will consist of the northern residential parcel, the school site (anticipated to be completed under a separate Reserved Matters (RM)), and the northern section of Icknield Linear Park.
- 4.7 Phase 3 will incorporate the western residential parcel, as well as the Threshing Barn Green, Highover Park, and the allotment area.
- 4.8 Phase 4, the final phase of the development, will consist of the construction of the southernmost residential parcels, as well as creation of a central pocket park.
- 4.9 Each of the above phases will be dealt with under a separate RM, each requiring a detailed LEMP with updated BNG figures detailing the contributions of each phase towards the overall achievement of a +10% net gain. Each RM LEMP will be based on detailed landscaping plans for that particular phase and adhere to the principles set out in the OLEMP.

⁶ Rapleys LLP (September 2025). *Site-wide Phasing and Delivery Plan – Highover Farm, Hitchin*. 503/55/1/SWPDP

5. Management Measures

- 5.1 Habitat creation and management prescriptions relating to Phase 1 of the development, together with monitoring requirements, have been described below, in relation to each of the three objectives.
- 5.2 Once the habitats establish and mature, opportunities for wildlife within the site will be enhanced over time. Hence the ecological value of the site will gradually improve over time.

Biodiversity Net Gain

- 5.3 A separate Statutory Biodiversity Metric for the entire site has been provided⁷, along with an OLEMP⁸, showing how the overall site will achieve +10% Biodiversity Net Gain.
- 5.4 For Phase 1 of the development, a separate Statutory Biodiversity Metric has been provided, which sets out the target conditions for each retained, created and enhanced habitat that will occur as a result of Phase 1 of the proposed development. Management prescriptions set out below have been chosen to ensure that these target conditions are met. A summary of the expected Biodiversity Net Gain contributions for Phase 1 is detailed below in Table 5.1.

Table 5.1. Summary of DEFRA Biodiversity Metric results

		Whole Site Net Gain	Phase 1 Net Gain	Phase 1 Net Gain Contribution	Target Units to be Achieved in Remaining Phases
On-site Baseline	Habitat Units	90.42	26.44	-	-
	Hedgerow Units	18.51	8.34	-	-
	River Units	0.00	0.00	-	-
On-site Post Intervention	Habitat Units	101.71	47.02	46.23%	54.69
	Hedgerow Units	23.23	11.29	48.60%	11.94
	River Units	0.00	0.00	0.00%	0.00
Total Net Unit Change	Habitat Units	11.29	20.57	-	-
	Hedgerow Units	4.72	2.95	-	-
	River Units	0.00	0.00	-	-
Total Net Percentage Gain	Habitat Units	12.49%	77.79%	-	-
	Hedgerow Units	25.47%	35.42%	-	-
	River Units	0.00%	0.00%	-	-

Objective 1: To retain ecologically valuable habitats to safeguard the benefits for biodiversity

- 5.5 Following the mitigation hierarchy, consideration has been given to the retention of habitat wherever possible. None of the existing low distinctiveness baseline area habitats within Phase 1 will be retained, however, the majority of the existing

⁷ Ecology Solutions (2026). *Statutory Biodiversity Metric*. 11467.BNGMetric Whole Site.vf

⁸ Ecology Solutions (2026). *Outline Landscape and Ecological Management Plan*. 11467.OLEMP.vf

hedgerows will be, specifically the hedgerow along the eastern boundary of the site, as well as portions of the internal central hedgerow.

- 5.6 In addition to habitat retention, enhancement of habitats will be undertaken as part of the gain in habitat units. In the Phase 1 area this will include enhancing the northernmost area of crop planting to an arable field margin mixture targeted at supporting farmland birds.
- 5.7 The net gain in habitat units will be largely achieved through the conversion of the arable fields, an ecologically low value habitat, to newly created other neutral grassland, mixed scrub, native trees and native species-rich hedgerow, SuDS, and amenity grassland, in addition to the proposed urban infrastructure and vegetated gardens.

Objective 2: To secure the implementation and establishment of the proposed landscaping scheme to secure wildlife and ecological benefits, providing demonstrable net gains to the quality and value of the habitats on-site, and for public use and enjoyment

Amenity Meadow and Rough Grassland

- 5.8 New areas of other neutral grassland will be established throughout the Hitchin Meadows area in the north of the site, as well as in the Stotfold Linear Park and within the Dane Walk green space.
- 5.9 Two different wildflower grass mixes will be used across the site (see Appendix 3) to create a variety of habitats across the site. The majority of the other neutral grassland areas will be sown with a mixture such as Emorsgate EM6 for Chalk and Limestone Soils (see Table 5.2), or similar, given the underlying soil type. Grassland edges, in particular bordering other habitats such as areas of scrub, will be sown instead with a rough grassland mixture such as Emorsgate EM10 Tussock Meadow Mixture (see Table 5.3), or similar, to create graded edges to the meadow habitats on-site. The majority of the other neutral grassland will be subject to a relaxed rotational management regime aiming to maintain species richness and develop a varied structure to the grassland.

Table 5.2. Emorsgate EM6 Meadow Mixture for Chalk and Limestone Soils

Other Neutral Grassland Seed Species		Percentage Composition
Yarrow	<i>Achillea millefolium</i>	0.8
Kidney Vetch	<i>Anthyllis vulneraria</i>	0.4
Common Knapweed	<i>Centaurea nigra</i>	2
Greater Knapweed	<i>Centaurea scabiosa</i>	1
Wild Carrot	<i>Daucus carota</i>	1
Dropwort	<i>Filipendula vulgaris</i>	0.1
Hedge Bedstraw	<i>Galium album</i>	1
Lady's Bedstraw	<i>Galium verum</i>	0.7
Horseshoe Vetch	<i>Hippocrepis comosa</i>	0.1
Rough Hawkbit	<i>Leontodon hispidus</i>	0.1
Oxeye Daisy	<i>Leucanthemum vulgare</i>	0.9
Musk Mallow	<i>Malva moschata</i>	1.5
Black Medic	<i>Medicago lupulina</i>	0.4
Wild Marjoram	<i>Origanum vulgare</i>	0.2
Ribwort Plantain	<i>Plantago lanceolata</i>	1

Other Neutral Grassland Seed Species		Percentage Composition
Hoary Plantain	<i>Plantago media</i>	1
Salad Burnet	<i>Poterium sanguisorba</i>	2.4
Cowslip	<i>Primula veris</i>	1.1
Selfheal	<i>Prunella vulgaris</i>	2
Meadow Buttercup	<i>Ranunculus acris</i>	0.9
Yellow Rattle	<i>Rhinanthus minor</i>	0.4
Bladder Campion	<i>Silene vulgaris</i>	1
Common Bent	<i>Agrostis capillaris</i>	6
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	3
Quaking Grass	<i>Briza media</i>	4
Glaucous Sedge	<i>Carex flacca</i>	0.5
Crested Dogtail	<i>Cynosurus cristatus</i>	40
Sheep's Fescue	<i>Festuca ovina</i>	8
Red Fescue	<i>Festuca rubra</i>	16
Smaller Cat's-tail	<i>Phleum bertolonii</i>	3.5

Table 5.3. Emorsgate EM10 Tussock Meadow Mixture

Other Neutral Grassland Seed Species		Percentage Composition
Yarrow	<i>Achillea millefolium</i>	0.8
Agrimony	<i>Agrimonia eupatoria</i>	0.6
Lesser Burdock	<i>Actium minus</i>	0.2
Common Knapweed	<i>Centaurea nigra</i>	2
Greater Knapweed	<i>Cenaurea scabiosa</i>	1
Wild Carrot	<i>Daucus carota</i>	2
Wild Teasel	<i>Dipsacus fullonum</i>	1.6
Meadowsweet	<i>Filipendula ulmaria</i>	0.6
Hedge Bedstraw	<i>Galium album</i>	1.8
Meadow Cranesbill	<i>Geranium pratense</i>	0.4
Field Scabious	<i>Knautia arvensis</i>	0.8
Meadow Vetchling	<i>Lathyrus pratensis</i>	0.4
Oxeye Daisy	<i>Leucanthemum vulgare</i>	1.6
Musk Mallow	<i>Malva moschata</i>	0.4
Ribwort Plantain	<i>Plantago lanceolata</i>	1.8
Salad Burnet	<i>Poterium sanguisorba</i>	0.8
Red Campion	<i>Silene dioica</i>	1.2
Tufted Vetch	<i>Vicia cracca</i>	0.4
Bladder Campion	<i>Silene vulgaris</i>	1.6
Common Bent	<i>Agrostis capillaris</i>	4
Meadow Foxtail	<i>Alopecurus pratensis</i>	8
Grey Sedge	<i>Carex divulva ssp divulsa</i>	4
Crested Dogtail	<i>Cynosurus cristatus</i>	24
Cocksfoot	<i>Dactylis glomerata</i>	4
Sheep's Fescue	<i>Festuca ovina</i>	4
Slender-creeping Fescue	<i>Festuca rubra ssp rubra</i>	16
Smaller Cat's-tail	<i>Phleum bertolonii</i>	8
Tall Fescue	<i>Schedonorus arundinaceus</i>	8

- 5.10 The created areas of other neutral grassland will be managed to a variety of conditions based on the most-likely achievable goal for each area of grassland. For example, a 1m margin of meadow grassland bordering hardstanding and paths has been set aside to meet a 'Poor' condition, as these areas will be under closer management such as regular mowing and likely to be impacted by regular footfall. A small number of parcels will be subject to a less formal management regime but

are still likely to be impacted by footfall due to small parcel size – these areas are likely to reach a 'Moderate' condition. The remaining areas will be managed through a relaxed regime focused on biodiversity benefits of the habitat and are in larger parcels reducing the edge effects of disturbance – these areas will target a 'Good' condition. As such, the created grassland would achieve 23.57 habitat units.

Nutrient Stripping

- 5.11 Given the current agricultural land use, it is considered that the fields will require management in the form of forced nutrient stripping prior to the seeding of wildflower grassland.
- 5.12 This will involve the seeding of a high yielding cereal crop without the addition of any fertiliser for one year. These sacrificial crops should be removed from site once they have grown.
- 5.13 Following harvesting of the sacrificial crops, the fields will then be deep ploughed (inversion ploughing), to invert the typically nutrient poor subsoils with the more nutrient rich topsoil. The depth of the deep plough will be determined by the depth of the baseline arable topsoil; however, this is expected to be in the region of 300mm.
- 5.14 This process will create a nutrient poor growing medium, suitable for wildflower grassland seeding.
- 5.15 In the event that there is any time lapse between grassland seeding and the deep plough exercise, the fields will be kept free of any vegetation growth through repeated shallow ploughing and / or spraying, through the sensitive use of glyphosate-based chemicals.
- 5.16 Before the deep plough exercise, a relevant consultant should be contacted to ensure that there is no risk of disturbing potentially sensitive archaeological remains.

Initial Aftercare and Long-term Management and Maintenance

- 5.17 In the first year following the establishment, the sward will be mowed to a height of 40 to 60mm once in mid-March, late August and mid-October. All material will be removed directly after it has been cut to prevent nutrient enrichment, aside from the late August cut which will be left for seven days to allow for seed dispersal, before being removed. These cuts aim to control weed growth and suppress any faster growing grass species.
- 5.18 From year 2 onwards, areas of meadow grassland will be cut 40 to 60mm in August after the wildflowers have flowered. These cuts should be undertaken on a rotational basis whereby 80% of the grassland is cut in weekly 20% sections while the remaining 20% will be left to stand throughout winter before being cut in March. If required, additional cuts to 40 to 60mm can be applied in November and February should soil fertility results in significant growth over winter. The grassland will not be cut between April and July inclusive to ensure that the plants are given the opportunity to flower.

- 5.19 Following any grassland maintenance all arisings will be left in situ for one to seven days to allow seed release and ensure the continued renewal of the floristic diversity of the site. The arisings will then be turned and removed to prevent nutrient enrichment at the detriment to floristic diversity.
- 5.20 Areas of tussocky grassland will require minimal maintenance once established. Unwanted weeds may need control over time through selective scything and targeted removal. In addition, scrub and bramble development should be controlled by cutting the tussocky areas on a rotational basis every 2-3 years between October and February so that no more than half of the tussocky area is cut in any one year.
- 5.21 Tables 5.4 – 5.6 below set out the management and monitoring to be completed together with the various incremental increases in the BNG units delivered across the management period, for the meadow and rough grassland in 'Good', 'Moderate' and 'Poor' condition.

Table 5.4. Good Condition ONG Condition Management

New Other Neutral Grassland (Good)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
0	N/A	- Seeding a sacrificial crop, without the addition of fertiliser, to be removed from site once grown. - Deep plough to approximately 300mm to bring nutrient poor subsoil to surface.	Reducing nutrient levels of soil to allow for future maintenance of species richness.	0	N/A
1	N/A	- Sow native wildflower seed across created areas to allow a species-rich sward to establish. - Sow to provided requirements including soil preparation. - Spot treat undesirable species with selective herbicide. - Check on the establishment of a diverse mixture of native species.	- Reduce the presence of undesirable species. - Have no more than between 1% and 5% bare earth. <5% scrub and <20% bracken cover.	0	N/A
2	9.44	- Increase the diversity of wildlife grassland through control of undesirable species and correct with further sowing if required. - Spot treat undesirable species with selective herbicide. - Single 'Hay' cut applied after flowering with arising left for 1-7 days to allow for seed to be shed to maintain diversity.	- Control undesirable species. - Have no more than between 1% and 5% bare earth. <5% scrub and <20% bracken cover.	9.44	Poor
5	16.97	- Check on the establishment of a diverse mixture of native species. - Control and self-seeded scrub establishment to below 5%. - Spot treat undesirable species with selective herbicide. - Check for any nutrient enrichment and amount of coarse grass species but management as above should seek to allow for rich forb element to develop. - Single 'Hay' cut applied after flowering with arisings left for 1-7 days. Cut the regrowth to around 50mm in late autumn winter and again in spring if required.	- Minimum of 9 native species per square metre. >20% habitat area composed of wildflowers. <30% of grassland covered by Perennial Ryegrass and White Clover combined. - Diverse range of native species managed to prevent any one species becoming dominant. - No invasive non-native species. - Bare ground and signs of damage cover <5% of total area.	7.53	Moderate
10	21.30	- Check on the establishment of a diverse mixture of native species. - Check for any nutrient enrichment and indicator species. - Single 'Hay' cut applied after flowering with arisings left for 1-7 days. Cut the regrowth to around 50mm in late autumn winter and again in spring if required. - Tussocky grassland cut on a rotational basis every 2-3 years.	- Minimum of 10 native species per square metre. <5% cover of creeping thistle, docks and nettle (high soil fertility indicators).	4.33	Good

New Other Neutral Grassland (Good)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
		- Control and self-seeded scrub establishment to below 5%. - Spot treat undesirable species with selective herbicide.			
20	21.30	- Check on the establishment of a diverse mixture of native species - Check for any nutrient enrichment and indicator species - Single 'Hay' cut applied after flowering with arisings left for 1-7 days. Cut the regrowth to around 50mm in late autumn winter and again in spring if required. - Tussocky grassland cut on a rotational basis every 2-3 years - Control and self-seeded scrub establishment to below 5%. - Spot treat undesirable species with selective herbicide.	- Minimum of 10 native species per square metre <5% cover of creeping thistle, docks and nettle (high soil fertility indicators)	0	Good
30	21.30	- Check on the establishment of a diverse mixture of native species - Check for any nutrient enrichment and indicator species - Single 'Hay' cut applied after flowering with arisings left for 1-7 days. Cut the regrowth to around 50mm in late autumn winter and again in spring if required. - Tussocky grassland cut on a rotational basis every 2-3 years - Control and self-seeded scrub establishment to below 5%. - Spot treat undesirable species with selective herbicide.	- Minimum of 10 native species per square metre <5% cover of creeping thistle, docks and nettle (high soil fertility indicators)	0	Good

Table 5.5. Moderate Condition ONG Condition Management

New Other Neutral Grassland (Moderate)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
0	N/A	- Seeding a sacrificial crop, without the addition of fertiliser, to be removed from site once grown. - Deep plough to approximately 300mm to bring nutrient poor subsoil to surface.	Reducing nutrient levels of soil to allow for future maintenance of species richness.	0	N/A
1	N/A	- Sow native wildflower seed across created areas to allow a species-rich sward to establish. - Sow to provided requirements including soil preparation. - Spot treat undesirable species with selective herbicide. - Check on the establishment of a diverse mixture of native species.	- Reduce the presence of undesirable species. - Have no more than between 1% and 5% bare earth. <5% scrub and <20% bracken cover.	0	N/A
2	0.85	- Increase the diversity of wildlife grassland through control of undesirable species and correct with further sowing if required. - Spot treat undesirable species with selective herbicide. - Single 'Hay' cut applied after flowering with arising left for 1-7 days to allow for seed to be shed to maintain diversity.	- Control of undesirable species. - Have no more than between 1% and 5% bare earth. <5% scrub and <20% bracken cover.	0.85	Poor
5	1.53	- Check on the establishment of a diverse mixture of native species. - Control and self-seeded scrub establishment to below 5%. - Spot treat undesirable species with selective herbicide. - Check for any nutrient enrichment and amount of coarse grass species. - Single 'Hay' cut applied after flowering with arisings left for 1-7 days. Cut the regrowth to around 50mm in late autumn winter and again in spring if required.	- Minimum of 9 native species per square metre. >20% habitat area composed of wildflowers. <30% of grassland covered by Perennial Ryegrass and White Clover combined. - Diverse range of native species managed to prevent any one species becoming dominant. - No invasive non-native species. - Bare ground and signs of damage cover <5% of total area.	0.68	Moderate
10	1.53	- Check on the establishment of a diverse mixture of native species. - Control and self-seeded scrub establishment to below 5%. - Spot treat undesirable species with selective herbicide. - Check for any nutrient enrichment and amount of coarse grass species. - Single 'Hay' cut applied after flowering with arisings left for 1-7 days. Cut the regrowth to around 50mm in late autumn winter and again in spring if required.	- Minimum of 9 native species per square metre. >20% habitat area composed of wildflowers. <30% of grassland covered by Perennial Ryegrass and White Clover combined. - Diverse range of native species managed to prevent any one species becoming dominant. - No invasive non-native species.	0	Moderate

New Other Neutral Grassland (Moderate)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
			Bare ground and signs of damage cover <5% of total area.		
20	1.53	- Check on the establishment of a diverse mixture of native species. - Control and self-seeded scrub establishment to below 5%. - Spot treat undesirable species with selective herbicide. - Check for any nutrient enrichment and amount of coarse grass species. - Single 'Hay' cut applied after flowering with arisings left for 1-7 days. Cut the regrowth to around 50mm in late autumn winter and again in spring if required.	- Minimum of 9 native species per square metre. >20% habitat area composed of wildflowers. <30% of grassland covered by Perennial Ryegrass and White Clover combined. - Diverse range of native species managed to prevent any one species becoming dominant. - No invasive non-native species. - Bare ground and signs of damage cover <5% of total area.	0	Moderate
30	1.53	- Check on the establishment of a diverse mixture of native species. - Control and self-seeded scrub establishment to below 5%. - Spot treat undesirable species with selective herbicide. - Check for any nutrient enrichment and amount of coarse grass species. - Single 'Hay' cut applied after flowering with arisings left for 1-7 days. Cut the regrowth to around 50mm in late autumn winter and again in spring if required.	- Minimum of 9 native species per square metre. >20% habitat area composed of wildflowers. <30% of grassland covered by Perennial Ryegrass and White Clover combined. - Diverse range of native species managed to prevent any one species becoming dominant. - No invasive non-native species. - Bare ground and signs of damage cover <5% of total area.	0	Moderate

Table 5.6. Poor Condition ONG Condition Management

New Other Neutral Grassland (Poor)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
0	N/A	- Seeding a sacrificial crop, without the addition of fertiliser, to be removed from site once grown. - Deep plough to approximately 300mm to bring nutrient poor subsoil to surface.	Reducing nutrient levels of soil to allow for future maintenance of species richness.	0	N/A

New Other Neutral Grassland (Poor)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
1	N/A	• Sow native wildflower seed across created areas to allow a species-rich sward to establish. • Sow to provided requirements including soil preparation. • Spot treat undesirable species with selective herbicide. • Check on the establishment of a diverse mixture of native species.	• Reduce the presence of undesirable species. • Have no more than between 1% and 5% bare earth. • <5% scrub and <20% bracken cover.	0	N/A
2	0.74	• Increase the diversity of wildlife grassland through control of undesirable species and correct with further sowing if required. • Spot treat undesirable species with selective herbicide. • Cut when necessary to a height of 50-75mm.	• Control of undesirable species. • Have no more than between 1% and 5% bare earth. • <5% scrub and <20% bracken cover.	0.74	Poor
5	0.74	• Increase the diversity of wildlife grassland through control of undesirable species and correct with further sowing if required. • Spot treat undesirable species with selective herbicide. • Cut when necessary to a height of 50-75mm.	• Control undesirable species. • Have no more than between 1% and 5% bare earth. • <5% scrub and <20% bracken cover.	0	Poor
10	0.74	• Increase the diversity of wildlife grassland through control of undesirable species and correct with further sowing if required. • Spot treat undesirable species with selective herbicide. • Cut when necessary to a height of 50-75mm.	• Control undesirable species. • Have no more than between 1% and 5% bare earth. • <5% scrub and <20% bracken cover.	0	Poor
20	0.74	• Increase the diversity of wildlife grassland through control of undesirable species and correct with further sowing if required. • Spot treat undesirable species with selective herbicide. • Cut when necessary to a height of 50-75mm.	• Control undesirable species. • Have no more than between 1% and 5% bare earth. • <5% scrub and <20% bracken cover.	0	Poor
30	0.74	• Increase the diversity of wildlife grassland through control of undesirable species and correct with further sowing if required. • Spot treat undesirable species with selective herbicide. • Cut when necessary to a height of 50-75mm.	• Control undesirable species. • Have no more than between 1% and 5% bare earth. • <5% scrub and <20% bracken cover.	0	Poor

SuDS Meadow Grassland Areas

- 5.22 An infiltration basin and an attenuation basin will be created in the Hitchin Meadows area in the north of the site through excavation and seeding with a wildflower grass mix for wet soil. These areas will assist with site drainage.
- 5.23 This habitat will be sown with a wildflower grass mix such Emorsgate EM8: Meadow Mixture for Wet Soils (see Table 5.7), or similar given the underlaying soil type, with additional planting of Emorsgate EP1: Pond Edge Mixture (see Table 5.8) in the base of the basin, and planting of stands of grasses (including Tufted Hair-grass *Deschampsia cespitosa*, Snow Rush *Luzula nivea*, and Silver Grass *Miscanthus sinensis* 'Morning Light'), and will be subject to a relaxed rotational management regime aiming to maintain species richness and develop a varied structure to the grassland.

Table 5.7. Emorsgate EP1 Pond Edge Mixture

Emorsgate EP1 Pond Edge Mixture		Percentage Composition
Wild Angelica,	<i>Angelica sylvestris</i>	1
Common Knapweed	<i>Centaurea nigra</i>	2.6
Crosswort,	<i>Cruciata laevipes</i>	1
Wild Teasel,	<i>Dipsacus fullonum</i>	1
Hemp Agrimony	<i>Eupatorium cannabinum</i> ,	0.4
Meadowsweet	<i>Filipendula ulmaria</i>	1.2
Water Avens	<i>Geum rivale</i>	0.6
Yellow Flag-iris	<i>Iris pseudacorus</i>	4
Meadow Vetchling	<i>Lathyrus pratensis</i>	0.8
Greater Birdsfoot Trefoil	<i>Lotus pedunculatus</i>	0.8
Gypsywort	<i>Lycopus europaeus</i>	0.2
Corky-fruited Water dropwort	<i>Oenanthe pimpinelloides</i>	0.2
Ribwort Plantain	<i>Plantago lanceolata</i>	1.2
Selfheal	<i>Prunella vulgaris</i>	0.2
Meadow Buttercup	<i>Ranunculus acris</i>	1
Red Campion	<i>Silene dioica</i>	2.8
Ragged Robin	<i>Silene flos-cuculi</i>	1
Common Bent	<i>Agrostis capillaris</i>	4
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	4
Grey Sedge	<i>Carex divulsa</i> subsp. <i>divulsa</i>	1.6
Crested Dog's-tail	<i>Cynosurus cristatus</i>	34.4
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	1.6
Red Fescue	<i>Festuca rubra</i>	20
Meadow Barley	<i>Hordeum secalinum</i>	4
Rough-stalked Meadow-grass	<i>Poa trivialis</i>	8
Tall Fescue	<i>Schedonorus arundinaceus</i>	2.4

- 5.24 It is expected that the new SuDS will achieve a 'Good' condition when assessed against condition criteria. As such, the created wet grassland would achieve 2.95 habitat units.

Initial Aftercare and Long-term Management and Maintenance

- 5.25 Sowing should occur as per the manufacturer's instructions, ideally in spring or early autumn.
- 5.26 In the first year of management, cutting of annual weeds will be avoided until mid to late summer. This will ensure sown seedlings are protected by annual weeds, which will be beneficial for invertebrates.
- 5.27 The annual weeds will be cut in early August, making way for the young meadow beneath. Any unwanted species such as Docks will be removed, and any arisings taken away from the site. The grassland can then be mown through to the end of March the following year.
- 5.28 Following the initial year, the grassland will be managed to allow for species to grow tall, flower and seed from May through to July / August. A rotational 'hay cut' will then be taken with a scythe, strimmer or tractor mower to a height of around 50mm, and the grass then cut in mid-autumn and again in mid-spring if required.
- 5.29 Following any grassland maintenance all arisings will be left in situ for five days to allow seed release and ensure the continued renewal of the floristic diversity of the site. The arisings will then be turned and removed from site to prevent nutrient enrichment at the detriment to floristic diversity.
- 5.30 The SuDS grassland will be managed to encourage habitat variation, with no more than 80% of the habitat area covered by a single component. To achieve this goal, 20% of the SuDS meadow should be left without cutting each year to create more tussocky grassland and small areas of encroaching scrub / bramble. In addition, areas of standing water and wetter ground should be encouraged.
- 5.31 Litter and rubbish will be removed from the grassland as necessary during the on-going management of the site.
- 5.32 Machines and heavy equipment should be used with care on wet sites to avoid damage to soil and vegetation.
- 5.33 Table 5.8 below sets out the management and monitoring to be completed together with the various incremental increases in the BNG units delivered across the management period.

Table 5.8. Good Condition SuDS Condition Management

New SuDS (Moderate)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
1	1.13	- Sow to provided requirements including soil preparation. - Hand removal of undesirable species. - Check on the establishment of a diverse mixture of native species.	- Reduce the presence of undesirable and non-native species. - Variety of flowering species with pollen sources available most of the year.	1.13	Poor
2	1.13	- Check on the establishment of a diverse mixture of native species. - Hand removal of undesirable species. - Bioswale cut on a rotational basis every 2-3 years.	- Reduce the presence of undesirable and non-native species. - Variety of flowering species with pollen sources available most of the year.	0	Poor
5	2.11	- Check on the establishment of a diverse mixture of native species. - Hand removal of undesirable species. - Rotational 'Hay' cut applied after flowering with arisings left for 1-7 days. Cut the regrowth to around 50mm in late autumn winter and again in spring if required. 20% of SuDS area left uncut in any one year.	- Reduce the presence of undesirable and non-native species. - Variety of flowering species with pollen sources available most of the year. - Planting is suitable for wetland / riparian habitat.	0.98	Moderate
10	2.95	- Check on the establishment of a diverse mixture of native species. - Hand removal of undesirable species. - Rotational 'Hay' cut applied after flowering with arisings left for 1-7 days. Cut the regrowth to around 50mm in late autumn winter and again in spring if required. 20% of SuDS area left uncut in any one year.	- Absence of invasive non-native species. - Variety of flowering species with pollen sources available most of the year. - Varied vegetation structure, with no single habitat component accounting for more that 80% of the total area.	0.84	Good
20	2.95	- Check on the establishment of a diverse mixture of native species. - Hand removal of undesirable species. - Rotational 'Hay' cut applied after flowering with arisings left for 1-7 days. Cut the regrowth to around 50mm in	- Absence of invasive non-native species. - Variety of flowering species with pollen sources available most of the year. - Varied vegetation structure, with no single habitat component accounting for more that 80% of the total area.	0	Good

New SuDS (Moderate)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
		late autumn winter and again in spring if required. 20% of SuDS area left uncut in any one year.			
30	2.95	• Check on the establishment of a diverse mixture of native species. • Hand removal of undesirable species. • Rotational 'Hay' cut applied after flowering with arisings left for 1-7 days. Cut the regrowth to around 50mm in late autumn winter and again in spring if required. 20% of SuDS area left uncut in any one year.	• Absence of invasive non-native species. • Variety of flowering species with pollen sources available most of the year. • Varied vegetation structure, with no single habitat component accounting for more than 80% of the total area.	0	Good

Bioswale

- 5.34 SuDS in the form of bioswale ditches will be created in the Stotfold Linear Park in the east of the Phase 1 area through excavation and seeding with a marginal pond edge mix. These areas will assist with site drainage.
- 5.35 This habitat will be sown with Emorsgate EM8: Meadow Mixture for wet soils (see Table 5.9), or similar given the underlaying soil type, along with additional planting of stands of grasses (see paragraph 5.23), and of stands of marginal species (including Meadowsweet *Filipendula ulmaria*, Yellow Flag Iris *Iris pseudacorus*, Soft Rush *Juncus effusus*, and Water Forget-me-not *Myosotis scorpioides*), and will be subject to a relaxed rotational management regime aiming to maintain species richness and develop a varied structure.

Table 5.9. Emorsgate EM8 Meadow Mixture for Wet Soils

Emorsgate EM8 Meadow Mixture for wet soils		Percentage Composition
Yarrow	<i>Achillea millefolium</i>	2
Agrimony	<i>Agrimonia eupatoria</i>	0.6
Common Knapweed	<i>Centaurea nigra</i>	3.6
Meadowsweet	<i>Filipendula ulmaria</i>	1
Lady's Bedstraw	<i>Galium verum</i>	2
Water Avens	<i>Geum rivale</i>	0.2
Meadow Vetchling	<i>Lathyrus pratensis</i>	0.5
Rough Hawkbit	<i>Leontodon hispidus</i>	0.1
Oxeye Daisy	<i>Leucanthemum vulgare</i>	1.2
Birdsfoot Trefoil	<i>Lotus corniculatus</i>	0.1
Greater Birdsfoot Trefoil	<i>Lotus pedunculatus</i>	0.4
Ribwort Plantain	<i>Plantago lanceolata</i>	3.2
Cowslip	<i>Primula veris</i>	0.2
Selfheal	<i>Prunella vulgaris</i>	0.1
Meadow Buttercup	<i>Ranunculus acris</i>	0.4
Yellow Rattle	<i>Rhinanthus minor</i>	1.4
Common Sorrel	<i>Rumex acetosa</i>	1.2
Great Burnet	<i>Sanguisorba officinalis</i>	1.0
Ragged Robin	<i>Silene flos-cuculi</i>	0.3
Devil's-bit Scabious	<i>Succisa pratensis</i>	0.1
Tufted Vetch	<i>Vicia cracca</i>	0.4
Common Bent	<i>Agrostis capillaris</i>	4
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	4
Grey Sedge	<i>Carex divulsa</i> subsp. <i>divulsa</i>	1.6
Crested Dog's-tail	<i>Cynosurus cristatus</i>	34.4
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	1.6
Red Fescue	<i>Festuca rubra</i>	20
Meadow Barley	<i>Hordeum secalinum</i>	4
Rough-stalked Meadow-grass	<i>Poa trivialis</i>	8
Tall Fescue	<i>Schedonorus arundinaceus</i>	2.4

- 5.36 It is expected that the new bioswales will achieve a 'Good' condition when assessed against condition criteria. As such, the created bioswales would achieve 0.54 habitat units.

Initial Aftercare and Long-term Management and Maintenance

- 5.37 Sowing should occur as per the manufacturer's instructions, ideally in spring or early autumn.
- 5.38 In the first year of management, cutting of annual weeds will be avoided until mid to late summer. This will ensure sown seedlings are protected by annual weeds, which will be beneficial for invertebrates.
- 5.39 Variation in structure will be achieved by cutting back sections of vegetation every 2-3 years in rotation, between September and November. Dense stands of single species (e.g. Yellow Flag Iris) may benefit from selective thinning. Machines and heavy equipment should be used with care on wet sites to avoid damage to soil and vegetation.
- 5.40 Litter and rubbish will be removed from the grassland as necessary during the on-going management if the site.
- 5.41 Table 5.10 below sets out the management and monitoring to be completed together with the various incremental increases in the BNG units delivered across the management period.

Table 5.10. Good Condition Bioswale Condition Management

New Bioswale (Moderate)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
1	0.39	• Sow to provided requirements including soil preparation. • Hand removal of undesirable species. • Check on the establishment of a diverse mixture of native species.	• Reduce the presence of undesirable and non-native species. • Variety of flowering species with pollen sources available most of the year.	0.39	Moderate
2	0.39	• Check on the establishment of a diverse mixture of native species. • Hand removal of undesirable species. • Bioswale cut on a rotational basis every 2-3 years.	• Reduce the presence of undesirable and non-native species. • Variety of flowering species with pollen sources available most of the year.	0	Moderate
5	0.54	• Check on the establishment of a diverse mixture of native species. • Hand removal of undesirable species. • Bioswale cut on a rotational basis every 2-3 years.	• Absence of invasive non-native species. • Variety of flowering species with pollen sources available most of the year. • Varied vegetation structure, with no single habitat component accounting for more than 80% of the total area.	0.15	Good
10	0.54	• Check on the establishment of a diverse mixture of native species. • Hand removal of undesirable species. • Bioswale cut on a rotational basis every 2-3 years.	• Absence of invasive non-native species. • Variety of flowering species with pollen sources available most of the year. • Varied vegetation structure, with no single habitat component accounting for more than 80% of the total area.	0	Good
20	0.54	• Check on the establishment of a diverse mixture of native species. • Hand removal of undesirable species. • Bioswale cut on a rotational basis every 2-3 years.	• Absence of invasive non-native species. • Variety of flowering species with pollen sources available most of the year. • Varied vegetation structure, with no single habitat component accounting for more than 80% of the total area.	0	Good
30	0.54	• Check on the establishment of a diverse mixture of native species. • Hand removal of undesirable species. • Bioswale cut on a rotational basis every 2-3 years.	• Absence of invasive non-native species. • Variety of flowering species with pollen sources available most of the year. • Varied vegetation structure, with no single habitat component accounting for more than 80% of the total area.	0	Good

Amenity Grassland

- 5.42 A number of open spaces across the site will comprise of modified / amenity grassland, both in amenity areas and roadside verges. The grassland will offer a durable habitat and enhance the appearance and ecological interest of the site.
- 5.43 Two grass mixes will be used across the amenity grassland on-site, creating areas suitable for different uses, as well as creating variation for different invertebrate niches. The more formally managed of these areas will be planted with the Medallion Turf by Rolawn Ltd or similar, consisting of fine-leaved fescue and ryegrass cultivars, whilst the more relaxed areas will be seeded with the Emorsgate EL1 Flowering Lawn mix or similar (see Table 5.11).

Table 5.11. Emorsgate EL1 Flowering Lawn Mixture

Other Neutral Grassland Seedling Species		Percentage Composition
Kidney Vetch	<i>Anthyllis vulneraria</i>	1
Betony	<i>Betonica officinalis</i>	1
Common Knapweed	<i>Centaurea nigra</i>	1.6
Hedge Bedstraw	<i>Galium album</i>	1
Lady's Bedstraw	<i>Galium verum</i>	1.6
Oxeye Daisy	<i>Leucanthemum vulgare</i>	1.4
Birdsfoot Trefoil	<i>Lotus corniculatus</i>	0.2
Black Medick	<i>Medicago lupulina</i>	0.6
Ribwort Plantain	<i>Plantago lanceolata</i>	2.4
Cowslip	<i>Primula veris</i>	1
Selfheal	<i>Prunella vulgaris</i>	1.2
Meadow Buttercup	<i>Ranunculus acris</i>	1.6
Bladder Campion	<i>Silene vulgaris</i>	1
Dandelion	<i>Taraxacum officinale</i>	0.4
White Clover	<i>Trifolium repens</i>	4
Common Bent	<i>Agrostis capillaris</i>	8
Crested Dogtail	<i>Cynosurus cristatus</i>	28
Red Fescue	<i>Festuca rubra</i>	24
Smaller Cat's-tail	<i>Phleum bertolonii</i>	4
Smooth-stalked Meadow-grass	<i>Poa pratensis</i>	16

- 5.44 The created areas of modified grassland, on the other hand, will be managed to a variety of conditions based on the most-likely achievable goal for each area of grassland. The majority of the new modified grassland will target a 'Poor' condition, in particular any grassland bordering residential areas and footpaths, or areas set aside for amenity purposes, such as the playing fields of the proposed school, as these areas will be under closer management such as regular mowing and likely to be impacted by footfall. The remaining parcels of modified grassland are in larger parcels, or in areas with less expected footfall, and as such will target a 'Moderate' condition. The created grassland is expected to achieve 2.54 habitat units.

Initial Aftercare and Long-term Management and Maintenance

- 5.45 Sowing should occur as per the manufacturer's instructions, ideally in spring or early autumn.

- 5.46 Mow newly sown flowering lawns regularly (every 7 -10 days during growing season) throughout the first year of establishment. Cut to a height of 40-60mm, removing cuttings if dense. This will gradually develop a good sward structure, help maintain balance between faster growing grasses and slower developing wildflowers, and control annual weeds. Large perennial weeds such as docks should be dug out by hand.
- 5.47 These areas will have a formal aesthetic. The grass will be cut when it reaches 75 mm long back to a length of 35 mm, approximately three times per year in March, August and October. The grassland in areas designated as targeting a 'Poor' condition, grass cutting will occur as necessary, to maintain a sward height of between 25 – 75mm. Where it is considered appropriate for the intended use of the grassland, mowing can be relaxed in May to allow for flowering, with cutting resumed after 4-8 weeks.
- 5.48 Heavy quantities of grass cuttings will be collected and removed.
- 5.49 Where necessary, reinstatement by seeding will be undertaken where establishment is unsuccessful.
- 5.50 The management and monitoring to be completed together with the various incremental increases in the BNG units delivered across the management period is set out in Tables 4.12. and 4.13. below.

Table 5.12. Moderate Condition Modified Grassland Condition Management

New Modified Grassland (Moderate)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
1	0.52	- Sow to provided requirements including soil preparation. - Mow regularly (every 7-10 days during growing season) to control weeds.	- Reduce the presence of undesirable species. - Have no more than between 1% and 5% bare earth. <20% scrub cover.	0.52	Poor
2	0.52	- Spot treat undesirable species with selective herbicide. - Cut when necessary to maintain a sward height of 25-75mm.	- Reduce the presence of undesirable species. - Have no more than between 1% and 5% bare earth. <20% scrub cover.	0	Poor
5	0.94	- Check on the establishment of a diverse mixture of native species. - Control and self-seeded scrub establishment to below 5%. - Spot treat undesirable species with selective herbicide. - Cut when necessary to maintain a sward height of 25-75mm. - Mowing relaxed in May for 4-8 weeks to allow for flowering.	- A minimum of 6 plant species per square metre. <20% bracken cover. - Control undesirable species.	0.42	Moderate
10	0.94	- Check on the establishment of a diverse mixture of native species. - Control and self-seeded scrub establishment to below 5%. - Spot treat undesirable species with selective herbicide. - Cut when necessary to maintain a sward height of 25-75mm. - Mowing relaxed in May for 4-8 weeks to allow for flowering.	- A minimum of 6 plant species per square metre. <20% scrub and <20% bracken cover. - Control undesirable species.	0	Moderate
20	0.94	- Check on the establishment of a diverse mixture of native species. - Control and self-seeded scrub establishment to below 5%. - Spot treat undesirable species with selective herbicide. - Cut when necessary to maintain a sward height of 25-75mm. - Mowing relaxed in May for 4-8 weeks to allow for flowering.	- A minimum of 6 plant species per square metre. <20% scrub and <20% bracken cover. - Control undesirable species.	0	Moderate
30	0.94	- Check on the establishment of a diverse mixture of native species. - Control and self-seeded scrub establishment to below 5%. - Spot treat undesirable species with selective herbicide. - Cut when necessary to maintain a sward height of 25-75mm.	- A minimum of 6 plant species per square metre. <20% scrub and <20% bracken cover. - Control undesirable species.	0	Moderate

New Modified Grassland (Moderate)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
		Mowing relaxed in May for 4-8 weeks to allow for flowering.			

Table 5.13. Poor Condition Modified Grassland Condition Management

New Modified Grassland (Poor)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
1	1.61	- Sow to provided requirements including soil preparation. - Mow regularly (every 7-10 days during growing season) to control weeds.	- Reduce the presence of undesirable species. - Have no more than between 1% and 5% bare earth. <20% scrub cover.	1.61	Poor
2	1.61	- Spot treat undesirable species with selective herbicide. - Cut when necessary to maintain a sward height of 25-75mm.	- Reduce the presence of undesirable species. - Have no more than between 1% and 5% bare earth. <20% scrub cover.	0	Poor
5	1.61	- Spot treat undesirable species with selective herbicide. - Cut when necessary to maintain a sward height of 25-75mm.	- Reduce the presence of undesirable species. - Have no more than between 1% and 5% bare earth. <20% scrub cover.	0	Poor
10	1.61	- Spot treat undesirable species with selective herbicide. - Cut when necessary to maintain a sward height of 25-75mm.	- Reduce the presence of undesirable species. - Have no more than between 1% and 5% bare earth. <20% scrub cover.	0	Poor
20	1.61	- Spot treat undesirable species with selective herbicide. - Cut when necessary to maintain a sward height of 25-75mm.	- Reduce the presence of undesirable species. - Have no more than between 1% and 5% bare earth. <20% scrub cover.	0	Poor
30	1.61	Spot treat undesirable species with selective herbicide.	- Reduce the presence of undesirable species. - Have no more than between 1% and 5% bare earth. <20% scrub cover	0	Poor

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New Modified Grassland (Poor)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
		Cut when necessary to maintain a sward height of 25-75mm			

Field Margin – Farmland Bird Habitat

- 5.51 An area in the north of the Hitchin Meadows will be established as compensatory farmland bird habitat. This area will provide suitable foraging and nesting opportunities for farmland birds such as Corn Bunting and Skylark which the site baseline is known to support. The habitat will be planted with a grass species mix like CSS10 / FCB Wild Bird Food Mixture – Finch & Corn Bunting AB9 or similar (see Table 5.14).

Table 5.14. Farmland Bird Habitat Species

Mixture Specification		Percentage Composition
Spring Barley	<i>Hordeum vulgare</i>	50
Spring Triticale	<i>X Triticosecale</i>	30
Sunflower	<i>Helianthus annuus</i>	7
Red Millet	<i>Eleusine coracana</i>	5
White Millet	<i>Panicum miliaceum</i>	5
Quinoa	<i>Chenopodium quinoa</i>	3

- 5.52 The new farmland bird habitat has no applicable condition assessment when assessed against condition criteria, and as such, would achieve 0.4 habitat units.

Initial Aftercare and Long-term Management and Maintenance

- 5.53 The plant mix should be sown as per manufacturer instructions, with ground preparation and sowing occurring each year.
- 5.54 Planting should be left uncut during the Summer, Autumn and Winter, until at least the 15 February each year to ensure that they can set seed to feed farmland birds during the 'hungry gap'.

Mixed Scrub

- 5.55 Parcels of mixed scrub will be planted across the site, in particular in the east and west of the Hitchin Meadows area.
- 5.56 Parcels of mixed scrub will have slightly different compositions depending on their location (i.e. a thornless mix near to LEAP play areas). The species used across the site are shown in Table 5.15. below.

Table 5.15. Native Scrub Species

Native Mixed Scrub Species	
Field Maple	<i>Acer campestre</i>
Black Alder	<i>Alnus glutinosa</i>
Silver Birch	<i>Betula pendula</i>
Hornbeam	<i>Carpinus betulus</i>
Dogwood	<i>Cornus sanguinea</i>
Hazel	<i>Corylus avellana</i>
Hawthorn	<i>Crataegus monogyna</i>
Honeysuckle	<i>Lonicera periclymenum</i>
Crab Apple	<i>Malus sylvestris</i>
Cherry	<i>Prunus avium</i>

Native Mixed Scrub Species	
Blackthorn	<i>Prunus spinosa</i>
Oak	<i>Quercus robur</i>
Dog-rose	<i>Rosa canina</i>
Gelder-rose	<i>Viburnum opulus</i>
Scotch Broom	<i>Cytisus scoparius</i>
European Spindle	<i>Euonymus europaeus</i>
Holly	<i>Ilex aquifolium</i>
Privet	<i>Ligustrum vulgare</i>
Buckthorn	<i>Rhamnus cathartica</i>
Beach Rose	<i>Rosa rugosa</i>

- 5.57 The new mixed scrub habitat will target a 'Good' condition when assessed against condition criteria. As such, the new mixed scrub would achieve 10.54 habitat units.

Initial Aftercare and Long-term Management and Maintenance

- 5.58 Mixed scrub planting will be undertaken during the autumn, winter or spring. Young shrubs will be triple staked with a timber cross bar and soft string ties and protected from herbivory damage. Stakes and guards may be removed when no longer required (3-5 years after planting).
- 5.59 Undesirable species, including in the ground flora of the mixed scrub habitats, will be removed by hand as required.
- 5.60 Management works will aim to ensure that this habitat retains its species-rich nature. Should any individual scrub species be found to be outcompeting its neighbouring scrub planting, said species will be cut back, as required, to maintain the relative abundances of the species present. Pruning and trimming works should also ensure that this planting retains a 'scrubby' appearance, preventing the progression of scrub to woodland.
- 5.61 Cuts will be undertaken on a rotational basis (informed by ongoing monitoring) to deliver a mix of ages of specimens throughout the scrub parcel. The scrub will abut the species-rich grassland which is to be created, and a scalloped edge can be introduced maximising ecological niches to be created as part of the edge habitat. As part of the aforementioned cutting regime, targeted glade creation will be undertaken once the scrub has become established.
- 5.62 Dead wood produced through these management works will, where possible, be retained as an ecological feature at the base of an area of mixed scrub or species-rich native hedgerow to offer new habitat for saproxylic invertebrates and Hedgehogs.
- 5.63 The management of mixed scrub planting is to occur outside the bird nesting season (March to August inclusive), or within this period only after a Suitably Qualified Ecologist (SQE) has undertaken checks to ensure no nesting birds are present. Ideally, the best time for arboricultural management is during January and early February as this allows fruit / berry-bearing scrub to offer food resource for birds throughout autumn, into winter, while still avoiding the bird nesting season.

- 5.64 The management and monitoring to be completed together with the various incremental increases in the BNG units delivered across the management period is set out in Table 5.16.

Table 5.16. Good Condition Mixed Scrub Condition Management

New Mixed Scrub (Good)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
1	4.84	- Planting during autumn, winter or spring. - Monthly removal of undesirable species by hand where required.	- No invasive non-native species. <5% cover of non-native ground cover.	4.84	Poor
2	4.84	- Monthly removal of undesirable species by hand where required. - Scrub management to be undertaken outside of bird nesting season.	- No invasive non-native species. <5% cover of non-native ground cover.	0	Poor
5	8.39	- Scrub cut on a rotational basis to deliver variation in age structure and prevent succession to woodland. - Any species found to be outcompeting other scrub species will be cut back as required. - Scrub management to be undertaken outside of bird nesting season. - Replacement of failed scrub by infilling with native species.	- At least 3 native woody species, with no single species making up more than 75% of the total area. - Non-native species make up <20% of total canopy. - Signs of new seedlings and young shrubs alongside more mature shrubs.	3.55	Moderate
10	10.54	- Scrub cut on a rotational basis to deliver variation in age structure and prevent succession to woodland. - Any species found to be outcompeting other scrub species will be cut back as required. - Creation of glades and scalloped edges. - Scrub management to be undertaken outside of bird nesting season.	- Well-developed edge habitat with adjacent semi-natural habitats. - Glade / ride creation within the scrub blocks, with sheltered edges. - Seedlings, saplings, young and mature shrubs are all present.	2.15	Good
20	10.54	- Scrub cut on a rotational basis to deliver variation in age structure and prevent succession to woodland - Any species found to be outcompeting other scrub species will be cut back as required - Maintenance of glades and scalloped edges - Scrub management to be undertaken outside of bird nesting season	- Well-developed edge habitat with adjacent semi-natural habitats. - Well maintained glades and rides within the scrub blocks with sheltered edges. - Seedlings, saplings, young and mature shrubs are all present.	0	Good
30	10.54	Scrub cut on a rotational basis to deliver variation in age structure and prevent succession to woodland.	Well-developed edge habitat with adjacent semi-natural habitats.	0	Good

New Mixed Scrub (Good)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
		- Any species found to be outcompeting other scrub species will be cut back as required. - Maintenance of glades and scalloped edges. - Scrub management to be undertaken outside of bird nesting season.	- Well maintained glades and rides within the scrub blocks with sheltered edges. - Seedlings, saplings, young and mature shrubs are all present.		

Individual Trees

- 5.65 A total of 224 new native and non-native trees will be planted in appropriate locations throughout the Phase 1 area to bolster the green infrastructure within the site (see Table 5.17.).

Table 5.17. Tree Species

Native Species	
Silver Birch	<i>Betula pendula</i>
Black Alder	<i>Alnus glutinosa</i>
Oak	<i>Quercus robur</i>
White Willow	<i>Salix alba</i>
Crack Willow	<i>Salix fragilis</i>
Hawthorn	<i>Acer campestre</i>
Hornbeam	<i>Carpinus betulus</i>
Whitebeam	<i>Sorbus aria</i>
Wild Service Tree	<i>Sorbus torminalis</i>
Small-leaved Lime	<i>Tilia cordata</i>
Crab Apple	<i>Malus sylvestris</i>
Rowan	<i>Sorbus aucuparia</i>
Non-native Species	
Copper Beech	<i>Fagus sylvatica</i> 'Purpurea'
Sweetgum	<i>Liquidamber styraciflua</i>
Callery Pear	<i>Pyrus calleryana</i> 'Chanticleer'
Sweet Cherry cultivar	<i>Prunus avium</i> 'Plena'
Black Birch	<i>Betula nigra</i>
Lebanese Wild Apple	<i>Malus trilobata</i>
Juneberry	<i>Amelanchier</i> 'Ballerina'
Serviceberry	<i>Amelanchier arborea</i> 'Robin Hill'
Magnolia	<i>Magnolia Kobus</i> 'Isis'
Whitebeam cultivar	<i>Sorbus aria</i> 'Magnifica'
Upright Cherry	<i>Prunus</i> 'Amanogawa'
Hupeh Crab Apple	<i>Malus hupehensis</i>

- 5.66 The new tree planting will target a 'Moderate' condition when assessed against condition criteria. As such, individual trees combined would achieve 2.79 habitat units.

Initial Aftercare and Long-term Management and Maintenance

- 5.67 Planting of new trees will be undertaken during the autumn, winter or spring, with subsequent monitoring required in order to identify any potential gaps where plants have not survived.
- 5.68 Arboricultural management will be carried out by a qualified arboriculturist outside the bird nesting season (March – August inclusive) to avoid any potential offence, or after a suitably qualified ecologist has undertaken checks to ensure no nesting birds are present.

- 5.69 New planting shall be inspected monthly for the first two years to ensure that they are straight, upright, healthy, not diseased or damaged, or dead. After the first two years, trees can be inspected annually if found to be establishing well.
- 5.70 Any basal or epicormic growth shall be removed. Regular watering will occur weekly during the main growing season (May to August inclusive) and only as required outside these months. Any newly planted trees which die should be replaced in the following early spring or late autumn with the same species to the same specification and quality.
- 5.71 Trees will be triple staked with timber cross bar and soft ties and be protected with 600mm spiral Rabbit guards. When no longer necessary, typically after three to five years, guards and stakes may be removed from the planting.
- 5.72 A weed-free ring (500 mm) will be maintained around each tree planted for the first five years to reduce competition from weed-species for light and nutrients. This can be achieved by maintaining a layer of bark mulch (75mm settled depth) around the base of each tree. Regular health checks of the trees will also be undertaken during periods of dry weather, to ensure that the trees are not affected by drought. Trees planted within grass shall be fitted with mower / strimmer guards or mulched with a 500 mm diameter circle as above.
- 5.73 Necessary tree works within the development site shall be undertaken as required in accordance with BS 3998 to remove inward growing, crossing, rubbing, dead or damaged branches.
- 5.74 The management and monitoring to be completed together with the various incremental increases in the BNG units delivered across the management period is set out in Table 5.18 below.

Table 5.18. Moderate Condition Urban Trees Condition Management

New Urban Trees (Moderate)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
1	N/A	- Planting undertaken during autumn, winter and spring - Arboricultural management undertaken outside of the bird nesting season.	Protected from damage by human activities.	0	N/A
2	N/A	Arboricultural management undertaken outside of the bird nesting season.	Protected from damage by human activities.	0	N/A
5	N/A	Arboricultural management undertaken outside of the bird nesting season.	Protected from damage by human activities.	0	N/A
10	2.55	- Arboricultural management undertaken outside of the bird nesting season. - Check for good annual growth and healthy crowns. - Maintain vegetation at the base of the tree, covering at least 20% of the canopy area.	>20% of canopy is oversailing vegetation. - Protected from damage by human activities.	2.55	Poor
20	2.55	- Arboricultural management undertaken outside of the bird nesting season. - Check for good annual growth and healthy crowns. - Maintain vegetation at the base of the tree, covering at least 20% of the canopy area.	>20% of canopy is oversailing vegetation. - Protected from damage by human activities.	0	Poor
30	2.79	- Arboricultural management undertaken outside of the bird nesting season. - Maintain vegetation at the base of the tree, covering at least 20% of the canopy area. - Check for good annual growth and healthy crowns.	>20% of canopy is oversailing vegetation. - Protected from damage by human activities. - Tree can grow to at least 75% of its expected canopy area (i.e. has enough space, is not pruned regularly). - Ecological niches are present (e.g. ivy, dead wood, cavities, loose bark).	0.24	Moderate

Naturalised Bulbs (Bare Ground)

- 5.75 Small areas of bulb planting will be established in the Hitchin Meadows area, associated with the mixed scrub parcels and the wildflower meadow. The species to be used for this habitat are shown in Table 5.19. below.

Table 5.19. Bulb Species

Bulb Species		Density (/m ²)
Balkan Anemone	<i>Anemone blanda</i>	10
Snowdrop	<i>Galanthus nivalis</i>	10
Native Bluebell	<i>Hyacinthoides non-scripta</i>	10
Garden Grape Hyacinth	<i>Muscari armeniacum</i> 'Blue Spire'	10

- 5.76 The new bulb planting will target a 'Moderate' condition when classed as bare ground and assessed against condition criteria. As such, the habitat would achieve 0.04 habitat units.

Initial Aftercare and Long-term Management and Maintenance

- 5.77 Bulb planting should take place according to manufacturer's instructions, ideally in spring, autumn or winter.
- 5.78 During the first year of growth, watering should take place on a regular basis during the growing season. In subsequent years, watering can take place as required, particularly during periods of drought.
- 5.79 Undesirable species, including weeds and non-native invasive species, should be removed by hand as required.
- 5.80 Geophytes will be left uncut for a period of 4 weeks after flowering. The bulbs can be cut along with the adjacent meadow habitat for the remainder of the year. Bulbs can be left in the ground all year round.
- 5.81 The management and monitoring to be completed together with the various incremental increases in the BNG units delivered across the management period is set out in Table 5.20 below.

Table 5.20 Moderate Condition Bare Ground Condition Management

New Bare Ground – Bulb Planting (Moderate)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
1	0.02	- Planting as per manufacturer's instructions, during autumn, winter or spring. - Regular watering during the growing period. - Removal of undesirable species by hand, as required. - Geophytes will be left uncut for a period of 4 weeks after flowering. Bulbs will be left in the ground all year round.	<5% cover of Invasive non-native species.	0.02	Poor
2	0.02	- Removal of undesirable species by hand, as required. - Geophytes will be left uncut for a period of 4 weeks after flowering. Bulbs will be left in the ground all year round.	<5% cover of Invasive non-native species.	0	Poor
5	0.04	- Removal of undesirable species by hand, as required. - Geophytes will be left uncut for a period of 4 weeks after flowering. Bulbs will be left in the ground all year round. - Check on the establishment of a diverse mixture of flowering species.	<5% cover of Invasive non-native species. - Variety of planting suitable for wildlife, e.g. flowering species with pollen sources available most of the year.	0.02	Moderate
10	0.04	- Removal of undesirable species by hand, as required. - Geophytes will be left uncut for a period of 4 weeks after flowering. Bulbs will be left in the ground all year round. - Check on the establishment of a diverse mixture of flowering species.	<5% cover of Invasive non-native species. - Variety of planting suitable for wildlife, e.g. flowering species with pollen sources available most of the year.	0	Moderate
20	0.04	- Removal of undesirable species by hand, as required. - Geophytes will be left uncut for a period of 4 weeks after flowering. - Check on the establishment of a diverse mixture of flowering species. Bulbs will be left in the ground all year round.	<5% cover of Invasive non-native species. - Variety of planting suitable for wildlife, e.g. flowering species with pollen sources available most of the year.	0	Moderate
30	0.04	- Removal of undesirable species by hand, as required. - Geophytes will be left uncut for a period of 4 weeks after flowering. Bulbs will be left in the ground all year round. - Check on the establishment of a diverse mixture of flowering species.	<5% cover of Invasive non-native species. - Variety of planting suitable for wildlife, e.g. flowering species with pollen sources available most of the year.	0	Moderate

Introduced Shrub

- 5.82 Several areas of ornamental planting will be established across the site, largely associated with the housing parcels and play areas. Planting will include both native and non-native species (see Table 5.21).

Table 5.21. Ornamental Species

Ornamental Planting Species	
Japanese Aralia	<i>Fatsia japonica</i>
New Zealand Flax	<i>Phormium</i> 'Yellow Wave', 'Platt's Black', 'Dazzler', 'Jester'
Japanese Sedge	<i>Carex oshimensis</i> 'Everest', 'Evergold'
Small-leaved Alum	<i>Heuchera micrantha</i> 'Palace Purple'
Hebe	<i>Hebe pinguifolia</i> 'Sutherlandii'
Chinese Silver Grass	<i>Miscanthus sinensis</i> 'Klein Fontane', 'Morning Light'
Red-tip Photinia	<i>Photinia x fraseria</i> 'Red Robin'
English Lavender	<i>Lavandula angustifolia</i> 'Hidcote', 'Munstead'
Lily Turf	<i>Liriope muscari</i>
Feathertop	<i>Pennisetum villosum</i>
Star Jasmine	<i>Trachelospermum jasminoides</i>
Brachyglottis	<i>Brachyglottis</i> 'Sunshine'
Creeping Blue Blossom	<i>Ceanothus thyrsiflorus repens</i>
Mexican Orange Blossom	<i>Choisya</i> 'Aztec Pearl', 'Sundance'
Fortune's Spindle	<i>Euonymus fortunei</i> 'Emerald n Gold', 'Emerald Gaiety'
Hebe	<i>Hebe</i> 'Marjorie', 'Mrs Winder', 'Purple Queen'
White Hebe	<i>Hebe albicans</i> 'Red Edge'
Kohuhu	<i>Pittosporum tenuifolium</i> 'Golf Ball', 'Tom Thumb'
Cherry Laurel cultivar	<i>Prunus laurocerasus</i> 'Otto Luyken'
Rosemary	<i>Rosmarinus officinalis</i>
Sweet Dwarf Box	<i>Sarcococca humilis</i>
Japanese Skimmia	<i>Skimmia japonica</i> 'Rubella'
David Viburnum	<i>Viburnum davidii</i>
Japanese Laurel	<i>Aucuba japonica</i> 'Crotonifolia'
White Dogwood	<i>Cornus alba</i> 'Elegantissima'
Ebbing's Silver-berry	<i>Elaeagnus pungens</i> 'Maculata', x <i>ebbingei</i> 'Compacta', 'Viveleg'
Tufted Hairgrass	<i>Deschampia cespitosa</i>
Evergreen Spindle	<i>Euonymus japonicus</i> 'Jean Hugues'
New Zealand Broadleaf	<i>Griselinia littoralis</i>

- 5.83 The new areas of ornamental planting have no applicable condition when assessed against condition criteria. As such, the habitat would achieve 0.54 habitat units.

Initial Aftercare and Long-term Management and Maintenance

- 5.84 Planting of ornamental species will be undertaken during the autumn, winter or spring, with subsequent monitoring required in order to identify any potential gaps where plants have not survived.
- 5.85 Dead and damaged branches will be removed from plants post-planting. All planted areas will be mulched with 75mm (settled depth) bark mulch.

- 5.86 Ornamental planting will be maintained through the removal of undesirable species on a monthly basis. The use of pesticides (herbicides, insecticides, fungicides, and slug pellets etc.) will be avoided, and any removal will be undertaken by hand.
- 5.87 All dead stems of grasses and perennial species from the previous summer's growth will be cut back after the winter period (mid to late March) on an annual basis, with all arisings removed and disposed of off-site.
- 5.88 Deadheading of herbaceous plants will be undertaken following flowering and when flower heads have died off. This will be done on an annual basis between August and November depending on the species used. All arisings will again need to be removed.
- 5.89 Watering will be required during periods of drought to ensure satisfactory establishment. Watering will be undertaken as required to maintain healthy plant growth.
- 5.90 Monthly checks of plants will be carried out during the first year of establishment for any unsuccessful specimen and bi-monthly thereafter. Where plants are seen to have failed, these will be removed and replaced with an alternative species on the advice of the landscape architect. If particular species are spreading vigorously and are impacting other species establishment or success, then these will be divided, and the excess plant material removed from the development.
- 5.91 Litter and rubbish will be removed from the ornamental planting as necessary during the on-going management of the site.
- 5.92 Any management applied to the shrub species within the ornamental beds will be applied outside of the nesting bird season (March to August inclusive) to avoid any disturbance to nesting birds.

Rain Garden

- 5.93 Several parcels of rain garden will be established across the residential areas of the site, associated with vegetated build-outs. Planting will include False Goat-beard Astilbe 'White', Red Bistort Bistorta officinalis 'Superba', Slender-tufted Sedge Carex acuta, Tufted Hairgrass cultivar Deschampsia cespitosa 'Goldtau', and Yellow Flag Iris.
- 5.94 The new parcels of rain garden planting will target a moderate condition when assessed against condition criteria. As such, the habitat would achieve 0.03 habitat units.

Initial Aftercare and Long-term Management and Maintenance

- 5.95 Planting of rain garden species will be undertaken during the autumn, winter or spring, with subsequent monitoring required in order to identify any potential gaps where plants have not survived.
- 5.96 Rain garden planting will be maintained through the removal of undesirable species on a monthly basis. The use of pesticides (herbicides, insecticides,

fungicides, and slug pellets etc.) will be avoided, and any removal will be undertaken by hand.

- 5.97 All dead stems of grasses and perennial species from the previous summer's growth will be cut back after the winter period (mid to late March) on an annual basis, with all arisings removed and disposed of off-site.
- 5.98 Deadheading of herbaceous plants will be undertaken following flowering and when flower heads have died off. This will be done on an annual basis between August and November depending on the species used. All arisings will again need to be removed.
- 5.99 Watering will be required during periods of drought to ensure satisfactory establishment. Watering will be undertaken as required to maintain healthy plant growth.
- 5.100 Monthly checks of plants will be carried out during the first year of establishment for any unsuccessful specimen and bi-monthly thereafter. Where plants are seen to have failed, these will be removed and replaced with an alternative species on the advice of the landscape architect. If particular species are spreading vigorously and are impacting other species establishment or success, then these will be divided, and the excess plant material removed from the development.
- 5.101 Litter and rubbish will be removed from the ornamental planting as necessary during the on-going management of the site.
- 5.102 The management and monitoring to be completed together with the various incremental increases in the BNG units delivered across the management period is set out in Table 5.22 below.

Table 5.22 Moderate Condition Rain Garden Condition Management

New Rain Garden (Moderate)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
1	0.02	- Planting as per manufacturer's instructions, during autumn, winter or spring. - Regular watering during the growing period. - Removal of undesirable species by hand, as required.	<5% cover of Invasive non-native species.	0.02	Poor
2	0.00	- Removal of undesirable species by hand, as required. - Vegetation will be cut back after the winter period (mid to late March) on an annual basis, with all arisings removed and disposed of off-site. - Deadheading of herbaceous plants will be undertaken following flowering August and November depending on the species used, with all arisings removed.	<5% cover of Invasive non-native species.	0	Poor
5	0.03	- Removal of undesirable species by hand, as required. - Vegetation will be cut back after the winter period (mid to late March) on an annual basis, with all arisings removed and disposed of off-site. - Deadheading of herbaceous plants will be undertaken following flowering August and November depending on the species used, with all arisings removed. - Check on the establishment of a diverse mixture of flowering species.	<5% cover of Invasive non-native species. - Variety of planting suitable for wildlife, e.g. flowering species with pollen sources available most of the year.	0.01	Moderate
10	0.03	- Removal of undesirable species by hand, as required. - Vegetation will be cut back after the winter period (mid to late March) on an annual basis, with all arisings removed and disposed of off-site. - Deadheading of herbaceous plants will be undertaken following flowering August and November depending on the species used, with all arisings removed. - Check on the establishment of a diverse mixture of flowering species.	<5% cover of Invasive non-native species. - Variety of planting suitable for wildlife, e.g. flowering species with pollen sources available most of the year.	0	Moderate
20	0.03	Removal of undesirable species by hand, as required.	<5% cover of Invasive non-native species.	0	Moderate

		- Vegetation will be cut back after the winter period (mid to late March) on an annual basis, with all arisings removed and disposed of off-site. - Deadheading of herbaceous plants will be undertaken following flowering August and November depending on the species used, with all arisings removed. - Check on the establishment of a diverse mixture of flowering species.	Variety of planting suitable for wildlife, e.g. flowering species with pollen sources available most of the year.		
30	0.03	- Removal of undesirable species by hand, as required. - Vegetation will be cut back after the winter period (mid to late March) on an annual basis, with all arisings removed and disposed of off-site. - Deadheading of herbaceous plants will be undertaken following flowering August and November depending on the species used, with all arisings removed. - Check on the establishment of a diverse mixture of flowering species.	<5% cover of Invasive non-native species. - Variety of planting suitable for wildlife, e.g. flowering species with pollen sources available most of the year.	0	Moderate

Vegetated Garden

- 5.103 A large area of the southern portion of the Phase 1 site has been set aside as vegetated garden, with individual plots designated and extrapolated as per the Phase 1 landscaping plans (see Appendix 3). These habitats are under residential control so do not have management prescribed to them, however, they still contribute to the BNG score for the site.
- 5.104 The vegetated gardens have no applicable condition when assessed against condition criteria. As such, the habitat would achieve 3.09 habitat units.
- 5.105 To ensure that the development is successful in achieving these habitat units, residents should be encouraged to maintain the areas under their control in a way that benefits biodiversity, for example to control non-native invasive species, and to keep these areas primarily vegetated.

Non-native and Ornamental Hedgerow

- 5.106 Single species and non-native hedgerows will be planted throughout the development, largely associated with the residential areas. The species included in the ornamental hedgerows are shown in Table 5.23.

Table 5.23. Ornamental Hedgerow Species

Hedgerow Species	
Hornbeam	<i>Carpinus betulus</i>
Ebbing's Silverberry	<i>Elaeagnus x ebbingei</i> 'Compacta' and 'Viveleg'
Evergreen Spindle	<i>Euonymus japonicus</i> 'Jean Hugues'
New Zealand Broadleaf	<i>Griselinia littoralis</i>
Red-tip Photinia	<i>Photinia x fraseri</i> 'Red Robin'
'Instant Hedge'	Native 'Instant Hedgerow' – primarily <i>Crataegus monogyna</i>

- 5.107 The ornamental hedgerows will target a Poor condition when assessed against condition criteria. As such, these hedgerows would achieve 1.18 hedgerow units.

Initial Aftercare and Long-term Management and Maintenance

- 5.108 Planting will be undertaken during the autumn, winter or spring, with subsequent monitoring required in order to identify any potential gaps where plants have not survived.
- 5.109 Watering will be required during periods of drought to ensure satisfactory establishment. Watering will be undertaken as required to maintain healthy plant growth.
- 5.110 Ornamental planting will be maintained through the removal of undesirable species on a monthly basis. The use of pesticides (herbicides, insecticides, fungicides, and slug pellets etc.) will be avoided, and any removal will be undertaken by hand.
- 5.111 Litter and rubbish will be removed from the ornamental planting as necessary during the on-going management of the site.

- 5.112 Any management applied to the hedge species within the ornamental beds will be applied outside of the nesting bird season (March to August inclusive) to avoid any disturbance to nesting birds.
- 5.113 Hedgerows will be maintained formally and trimmed when necessary to the required size and to ensure a neat appearance, whilst maintaining the structure of the hedgerow.

Species-rich Native Hedgerow

- 5.114 New species rich hedgerows will be established across the site, in particular along the Dane's Walk area. The hedgerow planting must utilise a minimum of five native, woody species in order to be classed as species rich within the Biodiversity Metric. The utilisation of fruit bearing species will also heighten the foraging resources for birds and mammals. Once fully established, these hedgerows will also provide new nesting opportunities for birds, and new foraging and dispersal opportunities for bats and small mammals in addition to improving connectivity and green infrastructure across the site.

Table 5.24. Species-rich Native Hedgerow Species

Native Hedgerow Species	
Hazel	<i>Corylus avellana</i>
Hawthorn	<i>Crataegus monogyna</i>
Dogwood	<i>Cornus sanguinea</i>
Holly	<i>Ilex aquifolium</i>
Guelder-rose	<i>Viburnum opulus</i>
Honeysuckle	<i>Lonicera periclymenum</i>
Dog Rose	<i>Rosa canina</i>
Wild Privet	<i>Ligustrum vulgare</i>
Field Maple	<i>Acer campestre</i>

- 5.115 Additional seeding of a shade tolerant grassland seed mix such as Emorsgate EH1 Hedgerow Mixture or similar, will occur beneath and directly adjacent to the hedgerow planting. The species assemblage of this seed mix is detailed in Table 5.25 below.

Table 5.25. Emorsgate EH1 species list

Hedgerow Ground Flora Species		Percentage Composition
Agrimony	<i>Agrimonia eupatoria</i>	0.50
Garlic Mustard	<i>Alliaria petiolata</i>	1.00
Cow Parsley	<i>Anthriscus sylvestris</i>	0.50
Lesser Burdock	<i>Arctium minus</i>	1.00
Common Knapweed	<i>Centaurea nigra</i>	2.00
Rough Chervil	<i>Chaerophyllum temulum</i>	0.40
Crosswort	<i>Cruciata laevipes</i>	0.80
Wild Carrot	<i>Daucus carota</i>	0.80
Wild Teasel	<i>Dipsacus fullonum</i>	1.50
Meadowsweet	<i>Filipendula ulmaria</i>	0.40
Hedge Bedstraw	<i>Galium album</i>	1.50
Wood Avens	<i>Geum urbanum</i>	0.40

Hedgerow Ground Flora Species		Percentage Composition
Meadow Crane's-bill	<i>Geranium pratense</i>	0.30
Narrow-leaved Everlasting-pea	<i>Lathyrus sylvestris</i>	1.00
Moon Daisy	<i>Leucanthemum vulgare</i>	1.20
Musk Mallow	<i>Malva moschata</i>	1.00
Wild Marjoram	<i>Origanum vulgare</i>	0.30
Ribwort Plantain	<i>Plantago lanceolata</i>	0.80
Cowslip	<i>Primula veris</i>	0.60
Common Sorrel	<i>Rumex acetosa</i>	0.40
Red Campion	<i>Silene dioica</i>	2.00
Bladder Campion	<i>Silene vulgaris</i>	0.80
Tufted Vetch	<i>Vicia cracca</i>	0.80
Common Bent (w)	<i>Agrostis capillaris</i>	2.40
Sweet Vernal-grass (w)	<i>Anthoxanthum odoratum</i>	1.60
False Brome (w)	<i>Brachypodium sylvaticum</i>	0.80
Crested Dogstail	<i>Cynosurus cristatus</i>	48.00
Tufted Hair-grass (w)	<i>Deschampsia cespitosa</i>	1.60
Red Fescue	<i>Festuca rubra</i>	19.20
Wood Meadow-grass	<i>Poa nemoralis</i>	6.40

- 5.116 Different lengths of hedgerow planting are expected to reach different conditions depending on their expected outcomes in their location. Some locations where the hedgerow is likely to be maintained more formally, or where the ability to maintain a margin of ground flora adjacent to the hedgerow, the hedgerow will target a Poor condition. The remaining hedgerow lengths will target a Good condition. Overall, the new native hedgerow planting is expected to result in a gain of 2.02 hedgerow units.

Initial Aftercare and Long-term Management and Maintenance

- 5.117 Planting will be undertaken during the autumn, winter or spring, with monthly inspections, during which vegetation is checked for signs of disease or damage, between April and September during the first year, and bi-monthly inspections in the second and third years. Following this the hedgerow planting can be inspected annually if it is found to be establishing well. Any specimen which if found to be diseased, damaged or dead should be replaced in the following season with the same species to the same specification and quality.
- 5.118 Tree guards and stakes should be used to protect the new hedgerow planting from damage and increase the survival rate. These shall be removed in May when this initial support is no longer required, typically after three to five years following planting.
- 5.119 Young hedgerow should be watered weekly during the main growing season (May to September inclusive) for the first year following planting to ensure satisfactory establishment and then only when necessary to avoid death during drought conditions.
- 5.120 The management of the hedgerows will aim to ensure a continued dense structure. The hedgerow is to be cut mechanically to a maximum height of two metres to ensure that the structure is not significantly altered to compromise their value for

associated wildlife. The hedgerows will be cut on a three-year rotation, so that not all the length is cut in any one year. This will encourage greater availability of winter forage for birds. Where possible, hedgerows will be laid on rotation by an experienced contractor to encourage greater structural diversity.

- 5.121 Any hedgerow management will be undertaken outside of the bird nesting season (March to August inclusive) to avoid any potential offence under the legislation, or within this period only after a suitably qualified ecologist has undertaken checks to ensure no nesting birds are present. The best time for hedgerow management is during January and early February after birds have eaten the berries and prior to the bird nesting season.
- 5.122 All dead wood produced through the management works will be retained as an ecological feature at the base of the hedgerow where possible, offering new habitat for saproxylic invertebrates and Hedgehogs.
- 5.123 The shade tolerant grassland seed mix should be subject to a similar management regime to the other neutral grassland.
- 5.124 Tables 5.26 and 5.27 below sets out the management and monitoring to be completed together with the various incremental increases in the BNG units delivered across the management period.

Table 5.26. Good Condition Species-rich Native Hedgerow Condition Management

New Species-rich Native Hedgerow (Good)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
1	0.87	- Planting of native species with appropriate after care. - Installation of tree guards and stakes.	- Reduce gaps and increase height and width of hedgerow. - Maintain species diversity.	0.87	Poor
2	0.87	- Check of new planting to ensure it established and replace as required. - Spot treat any undesirable species with selective herbicide.	>90% of the hedgerow and undisturbed ground is free of invasive and recently introduced non-native species. - Gaps make up <10% of total length, and none are >5m.	0	Poor
5	1.51	- Spot treat any undesirable species with selective herbicide. - Check for any damage and complete necessary remedial action (including potential replacement / bolster planting).	- Height is >1.5m average along length. <20% cover of species indicative of nutrient enrichment. >90% of hedgerow and undisturbed ground is free of damage from human activities.	0.64	Moderate
10	1.51	- Spot treat any undesirable species with selective herbicide. - Check for any damage and complete necessary remedial action (including potential replacement / bolster planting).	- Height is >1.5m average along length. <20% cover of species indicative of nutrient enrichment. >90% of hedgerow and undisturbed ground is free of damage from human activities.	0	Moderate
20	1.76	- Maintain the hedgerow to a height of 2m and a width of at least 1.5m. - Spot treat any undesirable species with selective herbicide. - Check for any damage and complete necessary remedial action (including potential replacement / bolster planting).	- Height and width is >1.5m average along length. - Gap between ground and base of canopy <0.5m for >90% of length. >1m of undisturbed ground with perennial vegetation for >90% of length, along at least one side.	0.25	Good
30	1.76	- Maintain the hedgerow to a height of 2m and a width of at least 1.5m. - Spot treat any undesirable species with selective herbicide.	- Height and width is >1.5m average along length. - Gap between ground and base of canopy <0.5m for >90% of length.	0	Good

		Check for any damage and complete necessary remedial action (including potential replacement / bolster planting).	>1m of undisturbed ground with perennial vegetation for >90% of length, along at least one side.		
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Table 5.27. Poor Condition Species-rich Native Hedgerow Condition Management

New Species-rich Native Hedgerow (Poor)					
Year	BNG Unit	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gain / Delivered	BNG
1	0.26	- Planting of native species with appropriate after care. - Installation of tree guards and stakes.	>90% of the hedgerow and undisturbed ground is free of invasive and recently introduced non-native species. - Gap between ground and base of canopy <0.5m for >90% of length. - Gaps make up <10% of total length, and none are >5m.	0.26	Poor
2	0.26	- Check of new planting to ensure it established and replace as required. - Spot treat any undesirable species with selective herbicide.	>90% of the hedgerow and undisturbed ground is free of invasive and recently introduced non-native species. - Gap between ground and base of canopy <0.5m for >90% of length. - Gaps make up <10% of total length, and none are >5m.	0	Poor
5	0.26	- Spot treat any undesirable species with selective herbicide. - Check for any damage and complete necessary remedial action (including potential replacement / bolster planting).	>90% of the hedgerow and undisturbed ground is free of invasive and recently introduced non-native species. - Gap between ground and base of canopy <0.5m for >90% of length. - Gaps make up <10% of total length, and none are >5m.	0	Poor
10	0.26	- Spot treat any undesirable species with selective herbicide. - Check for any damage and complete necessary remedial action (including potential replacement / bolster planting).	>90% of the hedgerow and undisturbed ground is free of invasive and recently introduced non-native species. - Gap between ground and base of canopy <0.5m for >90% of length. - Gaps make up <10% of total length, and none are >5m.	0	Poor
20	0.26	- Spot treat any undesirable species with selective herbicide. - Check for any damage and complete necessary remedial action (including potential replacement / bolster planting).	>90% of the hedgerow and undisturbed ground is free of invasive and recently introduced non-native species. - Gap between ground and base of canopy <0.5m for >90% of length. - Gaps make up <10% of total length, and none are >5m.	0	Poor

New Species-rich Native Hedgerow (Poor)					
Year	BNG Unit	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gain / Delivered	BNG
30	0.26	- Spot treat any undesirable species with selective herbicide. - Check for any damage and complete necessary remedial action (including potential replacement / bolster planting).	>90% of the hedgerow and undisturbed ground is free of invasive and recently introduced non-native species. - Gap between ground and base of canopy <0.5m for >90% of length. - Gaps make up <10% of total length, and none are >5m.	0	Poor

Native Hedgerow

- 5.125 Lengths of native hedgerow in poor condition in the Dane's Walk area of the site, will be enhanced to 'Good' condition through infill planting of native species (see Table 5.24.), and understorey establishment through planting of a shade tolerant seed mix Emorsgate EH1 Hedgerow Mixture or similar (see Table 5.25.).

Initial Aftercare and Long-term Management and Maintenance

- 5.126 Planting will be undertaken during the autumn, winter or spring, with monthly inspections, during which vegetation is checked for signs of disease or damage, between April and September during the first year, and bi-monthly inspections in the second and third years. Following this the hedgerow planting can be inspected annually if it is found to be establishing well. Any specimen which if found to be diseased, damaged or dead should be replaced in the following season with the same species to the same specification and quality.
- 5.127 Tree guards and stakes should be used to protect the new hedgerow planting from damage and increase the survival rate. These shall be removed in May when this initial support is no longer required, typically after three to five years following planting.
- 5.128 Young hedgerow should be watered weekly during the main growing season (May to September inclusive) for the first year following planting to ensure satisfactory establishment and then only when necessary to avoid death during drought conditions.
- 5.129 The management of the hedgerows will aim to ensure a continued dense structure. The hedgerow is to be cut mechanically to a maximum height of two metres to ensure that the structure is not significantly altered to compromise their value for associated wildlife. The hedgerows will be cut on a three-year rotation, so that not all the length is cut in any one year. This will encourage greater availability of winter forage for birds. Where possible, hedgerows will be laid on rotation by an experienced contractor to encourage greater structural diversity.
- 5.130 Any hedgerow management will be undertaken outside of the bird nesting season (March to August inclusive) to avoid any potential offence under the legislation, or within this period only after a suitably qualified ecologist has undertaken checks to ensure no nesting birds are present. The best time for hedgerow management is during January and early February after birds have eaten the berries and prior to the bird nesting season.
- 5.131 All dead wood produced through the management works will be retained as an ecological feature at the base of the hedgerow where possible, offering new habitat for saproxylic invertebrates and Hedgehogs.
- 5.132 The shade tolerant grassland seed mix should be subject to a similar management regime to the other neutral grassland.
- 5.133 Tables 5.28 below sets out the management and monitoring to be completed together with the various incremental increases in the BNG units delivered across the management period.

Table 5.28. Enhanced Poor to Good Condition Native Hedgerow Condition Management

Enhanced Native Hedgerow (Poor to Good)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
0	0.19	- Infill planting of native species with appropriate after care. - Installation of tree guards and stakes.	>90% of the hedgerow and undisturbed ground is free of invasive and recently introduced non-native species. - Infill gaps to ensure they make up <10% of total length, and none are >5m.	0	Poor
1	0.19	- Check of new planting to ensure it established and replace as required. - Spot treat any undesirable species with selective herbicide.	>90% of the hedgerow and undisturbed ground is free of invasive and recently introduced non-native species. - Gaps make up <10% of total length, and none are >5m.	0	Poor
2	0.19	- Check of new planting to ensure it established and replace as required. - Spot treat any undesirable species with selective herbicide.	>90% of the hedgerow and undisturbed ground is free of invasive and recently introduced non-native species. - Gaps make up <10% of total length, and none are >5m.	0	Poor
5	0.37	- Spot treat any undesirable species with selective herbicide. - Check for any damage and complete necessary remedial action (including potential replacement / bolster planting).	- Height is >1.5m average along length. <20% cover of species indicative of nutrient enrichment. >90% of hedgerow and undisturbed ground is free of damage from human activities.	0.18	Moderate
10	0.52	- Maintain the hedgerow to a height of 2m and a width of at least 1.5m. - Spot treat any undesirable species with selective herbicide. - Check for any damage and complete necessary remedial action (including potential replacement / bolster planting).	- Height and width is >1.5m average along length. - Gap between ground and base of canopy <0.5m for >90% of length. >1m of undisturbed ground with perennial vegetation for >90% of length, along at least one side.	0.15	Good
20	0.52	- Maintain the hedgerow to a height of 2m and a width of at least 1.5m. - Spot treat any undesirable species with selective herbicide.	- Height and width is >1.5m average along length. - Gap between ground and base of canopy <0.5m for >90% of length. >1m of undisturbed ground with perennial vegetation for >90% of length, along at least one side.	0	Good

Enhanced Native Hedgerow (Poor to Good)					
Year	BNG Units	Management / Monitoring Prescriptions	Improved Condition Requirements	Units Gained / Delivered	BNG Condition
		Check for any damage and complete necessary remedial action (including potential replacement / bolster planting).			
30	0.52	- Maintain the hedgerow to a height of 2m and a width of at least 1.5m. - Spot treat any undesirable species with selective herbicide. - Check for any damage and complete necessary remedial action (including potential replacement / bolster planting).	- Height and width is >1.5m average along length. - Gap between ground and base of canopy <0.5m for >90% of length. >1m of undisturbed ground with perennial vegetation for >90% of length, along at least one side.	0	Good

Invasive Non-Native Species

- 5.134 No Invasive Non-native Species (INNS) as listed under Schedule 9 of the Wildlife & Countryside Act 1981 (as amended) were discovered on-site during the course of any surveys conducted by Ecology Solutions.
- 5.135 If INNS are identified within or immediately adjacent to the site during the proposed works, their removal will follow best practice methodologies and care will be taken to minimise the risk of further spreading them throughout the site. Removed material will be treated as contaminated waste and disposed of at a licenced facility.

Objective 3: To ensure that the site is capable of supporting a similar, or greater, complement of species, where this is compatible with the above objectives

- 5.136 The establishment of new areas of grassland, amenity planting, hedgerows, trees and SuDS will diversify the habitats present at the site and encourage a greater range of wildlife use over the existing situation.

Bats

- 5.137 The trees in the east of the site that have been identified as possessing bat potential will be mostly retained and protected during the development. In addition, the majority of hedgerows, which are of particular suitability for use by bats for foraging, are being retained or enhanced.
- 5.138 Six bat boxes will be installed on suitable retained trees across the Phase 1 site, to provide new roosting opportunities during or post-construction. Models will include Schwegler 1FF Bat Box, Chavenage Cavity Bat Box (or similar) (see Plan ECO4 and Appendix 4).
- 5.139 Boxes will be positioned at a minimum height of three metres above ground level, away from significant lighting and orientated in a southern, southeastern, or southwestern direction to provide enough warmth. Once securely mounted onto retained trees and buildings, these bat box models will be virtually maintenance free.
- 5.140 Bat boxes will be checked once per year for the first five years following installation. A suitably qualified and licensed bat worker will ensure bat boxes are still in situ, with arrangement made for replacement if found to be damaged or missing. To limit the likelihood of disturbing any bats, checks should be carried out in February or March, prior to bats occupying the boxes, as they often only use bat boxes in summer and move elsewhere for hibernation roosts.
- 5.141 No future monitoring (after five years) of the bat boxes is considered necessary since no bat roosting sites will be lost as a result of the development.

Hedgehogs

- 5.142 Additional hibernation opportunities will be provided for Hedgehogs through the provision of eight log piles located in sheltered areas of landscaping (see Plan ECO4 and Appendix 5).

5.143 These will be established post-construction in a discreet location and should be created from materials sourced on-site during construction where possible.

5.144 In addition, Hedgehog gateways will be installed in impermeable boundaries where appropriate, to allow Hedgehogs to forage freely across the site.

5.145 No monitoring or management of the log piles will be required.

Badgers

5.146 For animal welfare reasons, Badgers are considered within a separate confidential document.

Birds

5.147 The compensatory bird habitat in the north of the site will contribute to mitigating some of the ground-nesting bird habitat lost as part of the development.

5.148 To provide additional nesting opportunities, a number of bird boxes will be installed at the site post-construction. Four Woodstone Seville 28mm Bird Boxes, three Woodstone Seville 32mm Bird Boxes, and one Barn Owl Nest Box will be installed on suitable retained trees. One Schwegler 1SP sparrow Terrace or similar (see Plan ECO4 and Appendix 6) will be installed into a new building at a suitable location. In addition, to comply with the LNRS, each new building on-site should have an integrated Swift brick installed into it, for example Schwegler No.17 Swift Brick or similar (see Appendix 6), to support this local target species.

5.149 All bird boxes will be positioned high up on trees / buildings (a minimum height of 2-3m above ground level) and orientated to face north / northeast to provide enough shelter from excessive sunlight. Once securely mounted, these bird box models will be virtually maintenance free and can be used for years without cleaning.

5.150 Bird boxes will be checked periodically (once per year in February) for the first five years following installation. A suitably experienced ecologist will ensure bird boxes are still in situ and are not damaged. Checks for signs of structural damage should be undertaken outside the nesting season (March to August inclusive) by a suitably qualified ecologist. Boxes will be replaced if found to be damaged or missing.

Reptiles

5.151 The creation of high-quality grassland will provide an uplift in the foraging and basking habitat available for this group. In addition, the creation of log piles as detailed for Hedgehogs above, will provide additional hibernation opportunities for reptiles.

5.152 No monitoring or management of the log piles will be required.

Invertebrates

5.153 Four National Trust CJ Wildlife Apex Insect Houses will be installed in sheltered spots with enough exposure to sunlight to offer new opportunities for

invertebrates' post-construction (see Plan ECO4 and Appendix 7). The boxes will be south-facing and require no monitoring or management.

- 5.154 Further enhancements will be provided through the establishment of log piles, as detailed above for Hedgehogs. These will offer new opportunities for saproxylic species such as Stag Beetle *Lucanus cervus*.

6. Implementation and Responsibilities

- 6.1 The Management Entity has ultimate responsibility for the implementation, funding and legal mechanisms of this strategy.
- 6.2 It is the responsibility of the Management Entity to instruct appropriate experienced contractors to establish the various features and habitats proposed, and also to instruct appropriate experienced ecologists and / or landscape contractors to check the work as set out in this management plan, where necessary.
- 6.3 Clear channels between these parties and their associates on the ground will be in operation at all times, by email and telephone as appropriate.
- 6.4 The Landlord Entity will manage and maintain the development and landscaping.

Contractor Responsibilities

- 6.5 All materials used during the development of the site, as well as any operations, will be in accordance with British Standards, Codes of Practice, and legislation.
- 6.6 A review of the management plan will be undertaken every five years and so long as the development exists, to determine its success. If warranted, appropriate remedial actions to the management plan will be undertaken to ensure that the landscaping and ecological aims of the management plan are achieved.

7. Schedule of Landscape and Ecological Works

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
Amenity Meadow and Tussocky Grassland	Pre-seeding preparation	Nutrient Stripping and Ground Preparation	Nutrient stripping by seeding of a sacrificial crop without the addition of fertiliser, removed from the site once grown, followed by deep ploughing to approximately 300mm	x	x	x	x	x	x	x	x	x	x	x	x
	Establishment	Seeding	Emorsgate EM6 Chalk and Limestone Mixture and EM10 Tussock Meadow Mixture									x	x	x	
	Maintenance operations after seeding (Year 1)	Health inspections	Seeding found to have not established during bi-monthly health visits between March and September will be reseeded with the same seed mix in autumn, winter or spring.			x		x		x		x			
		Cutting	Sward will be cut to a height of 40-60mm in mid-March, late August and mid-October, with material left for seven days for seed dispersal only following the August cut.			x					x		x		
		Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					x	x	x	x	x			
	Routine maintenance operations (Year 2 onwards)	Health inspections	Seeding found to have not established during bi-monthly health visits between March and September will be reseeded with the same seed mix in autumn, winter or spring.			x		x		x		x			

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
		Cutting	Meadow areas will be allowed to flower through to August, when 80% of the grassland will be cut to a height of 40-60mm, and the remaining 20% left to stand through winter and cut in March. Additional cuts to 40 to 60mm can be applied in November and February should soil fertility results in significant growth over winter. All arisings will be left in situ for five days to allow seed release and ensure the continued renewal of the floristic diversity of the site. The arisings will then be turned and removed from site.		x	x					x			x	
			Tussocky areas will be cut on a rotational basis every 2-3 years between October and February so that no more than half of the tussocky area is cut in any one year.	x	x								x	x	x
		Weeding	Monthly hand removal of weeds.	x	x	x	x	x	x	x	x	x	x	x	x
		Litter	To be removed as necessary before any cutting works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					x	x	x	x	x			
SuDS Meadow Grassland Areas	Pre-seeding preparation	Ground Preparation	Removal of undesirable species. Soil shall be levelled (minimum 150mm depth).	x	x	x	x	x	x	x	x	x	x	x	x
	Establishment	Seeding	New grassland seeding should occur as per manufacturer's guidance ideally during early autumn or spring prior to, or within 12 months, of the completion of the development.			x	x	x				x	x		
	Maintenance operations after seeding (Year 1)	Health inspections	Seeding found to have not established during bi-monthly health visits between March and September will be reseeded with the same seed mix in autumn, winter or spring.			x		x		x		x			

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
		Cutting	Cutting of annual weeds will be avoided until mid to late summer, with cutting delayed until early August, making way for the young meadow beneath. Any unwanted species such as Docks will be removed, and any arisings taken away from the site.								X				
			The grassland can then be mown through to the end of March the following year.	X	X	X						X	X	X	X
		Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					X	X	X	X	X			
	Routine maintenance operations (Year 2 onwards)	Health inspections	Lawn seeding found to have not established during bi-monthly health visits between March and September will be reseeded with the same seed mix in autumn, winter or spring.			X		X		X		X			
		Cutting	Following initial year, grass will be managed to allow for species to grow tall, flower and seed from May through to July / August. A 'hay cut' will then be taken and the grass then cut in mid-autumn and mid-spring. All arisings will be left in situ for five days to allow seed release and ensure the continued renewal of the floristic diversity of the site. The arisings will then be turned and removed from site. 20% of the SuDS meadow should be left without cutting each year to create more tussocky grassland and small areas of encroaching scrub / bramble.				X				X	X	X		
		Weeding	Monthly hand removal of weeds unwanted species.	X	X	X	X	X	X	X	X	X	X	X	X
		Litter	To be removed as necessary before any cutting works.	X	X	X	X	X	X	X	X	X	X	X	X
		Watering	As required during periods of drought to avoid death of the planting.					X	X	X	X	X			

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
Bioswale	Pre-seeding preparation	Ground Preparation	Removal of undesirable species. Soil shall be levelled (minimum 150mm depth).	x	x	x	x	x	x	x	x	x	x	x	x
	Establishment	Seeding	New seeding should occur as per manufacturer's guidance ideally during early autumn or spring prior to, or within 12 months, of the completion of the development.			x	x	x				x	x		
	Maintenance operations after seeding (Year 1)	Health inspections	Seeding found to have not established during bi-monthly health visits between March and September will be reseeded with the same seed mix in autumn, winter or spring.			x		x		x		x			
		Cutting	Cutting of annual weeds will be avoided until mid to late summer, with cutting delayed until early August, making way for the young meadow beneath. Any unwanted species such as Docks will be removed, and any arisings taken away from the site.								x				
			The grassland can then be mown through to the end of March the following year.	x	x	x						x	x	x	x
		Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					x	x	x	x	x			
	Routine maintenance operations (Year 2 onwards)	Health inspections	Lawn seeding found to have not established during bi-monthly health visits between March and September will be reseeded with the same seed mix in autumn, winter or spring.			x		x		x		x			

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
		Cutting	Variation in structure will be achieved by cutting back sections of vegetation every 2-3 years in rotation, between September and November. Dense stands of single species (e.g. Yellow Flag Iris) may benefit from selective thinning. Machines and heavy equipment should be used with care on wet sites to avoid damage to soil and vegetation.									x	x	x	
		Weeding	Monthly hand removal of weeds unwanted species.	x	x	x	x	x	x	x	x	x	x	x	x
		Litter	To be removed as necessary before any cutting works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x			
Amenity Grassland	Pre-seeding preparation	Ground Preparation	Removal of undesirable species. Soil shall be levelled (minimum 150mm depth).	x	x	x	x	x	x	x	x	x	x	x	x
	Establishment	Seeding	New seeding should occur as per manufacturer's guidance ideally during early autumn or spring prior to, or within 12 months, of the completion of the development.			x	x	x				x	x		
	Maintenance operations after seeding (Year 1)	Health inspections	Seeding found to have not established during bi-monthly health visits between March and September will be reseeded with the same seed mix in autumn, winter or spring.			x		x		x		x			
		Cutting	Mow newly sown flowering lawns regularly (every 7 -10 days during growing season) throughout the first year of establishment. Cut to a height of 40-60mm, removing cuttings if dense.			x	x	x	x	x	x	x			
			Large perennial weeds such as docks should be dug out by hand.	x	x	x	x	x	x	x	x	x	x	x	x

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
		Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					x	x	x	x	x			
	Routine maintenance operations (Year 2 onwards)	Health inspections	Lawn seeding found to have not established during bi-monthly health visits between March and September will be reseeded with the same seed mix in autumn, winter or spring.			x		x		x		x			
		Cutting	The grass will be cut when it reaches 75 mm long back to a length of 35 mm, approximately three times per year in March, August and October.			x					x		x		
			Grass cutting in 'Poor' condition areas will occur as necessary, to maintain a sward height of between 25 – 75mm. Where it is considered appropriate for the intended use of the grassland, mowing can be relaxed in May to allow for flowering, with cutting resumed after 4-8 weeks.	x	x	x	x			x	x	x	x	x	x
		Weeding	Monthly hand removal of weeds unwanted species.	x	x	x	x	x	x	x	x	x	x	x	x
		Litter	To be removed as necessary before any cutting works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x			
Farmland Bird Habitat	Pre-seeding preparation	Ground Preparation	Removal of undesirable species. Soil shall be levelled (minimum 150mm depth).	x	x	x	x	x	x	x	x	x	x	x	x
	Establishment	Seeding	New seeding should occur yearly, as per manufacturer's guidance, during spring				x	x	x						
	Routine maintenance operations	Cutting	Planting should be left uncut during the Summer, Autumn and Winter, until at least the 15 February each year to ensure that they can set seed to feed farmland birds during the 'hungry gap'.		x	x									

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
	(Year 1 onwards)	Litter	To be removed as necessary before any cutting works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x			
Mixed Scrub	Establishment	Planting	Mixed scrub planting should occur during autumn, winter or spring prior to, or within 12 months, of the completion of the development.	x	x	x	x	x				x	x	x	x
	Maintenance operations after planting (Year 1 + 2)	Health inspections	Should any shrubs be observed to be diseased, damaged or dead during monthly visits between March and September they will be replaced with the same species to the same specification in early spring or late autumn.			x	x	x	x	x	x	x			
		Tree guards / stakes	Trees planted shall be triple staked with timber cross bar and soft ties and be protected with 600mm spiral Rabbit guards. To be installed at the same time as the planting.	x	x	x	x	x				x	x	x	x
		Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					x	x	x	x	x			
		Weeding	The removal of undesirable weed species by hand will occur monthly, where required.	x	x	x	x	x	x	x	x	x	x	x	x
	Routine maintenance operations (Year 3 onwards)	Health inspections	Should any trees be observed to be diseased, damaged or dead during monthly visits between March and September they will be replaced with the same species to the same specification in early spring or late autumn.			x	x	x	x	x	x	x			
		Tree guards / stakes	Once no longer required (years 3-5), stakes and biodegradable guards may be removed.	x	x	x	x	x	x	x	x	x	x	x	x

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
		Cutting	Should any individual scrub species be found to be outcompeting its neighbouring scrub planting, said species will be cut back, as required, to maintain the relative abundances of the species present.	x	x							x	x	x	x
			Pruning and trimming works should ensure that this planting retains a 'scrubby' appearance, preventing the progression of scrub to woodland.	x	x							x	x	x	x
			Cuts will be undertaken on a rotational basis (informed by ongoing monitoring) to deliver a mix of ages of specimens throughout the scrub parcel, scalloped edges, and glades once the scrub is established.	x	x							x	x	x	x
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x			
Individual Trees	Establishment	Planting	New tree planting should occur during autumn, winter or spring prior to, or within 12 months, of the completion of the development.	x	x	x	x	x				x	x	x	x
	Maintenance operations after seeding (Year 1)	Health inspections	Should any trees be observed to be diseased, damaged or dead during monthly visits between March and September they will be replaced with the same species to the same specification in early spring or late autumn.			x	x	x	x	x	x	x			
		Weed-free ring of mulch	A weed-free ring (500 mm) of mulch will be maintained around each tree planted for the first five years to reduce competition from weed species. To be created at the same time as the planting.	x	x	x	x	x				x	x	x	x
		Tree guards / stakes	Trees planted shall be triple staked with timber cross bar and soft ties and be protected with 600mm spiral Rabbit guards. To be installed at the same time as the planting.	x	x	x	x	x				x	x	x	x

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
		Watering	Regular watering will occur weekly during the main growing season (May to September inclusive) and only as required outside these months.					x	x	x	x	x			
	Routine maintenance operations (Year 2 onwards)	Health inspections	Should any trees be observed to be diseased, damaged or dead during monthly visits between March and September they will be replaced with the same species to the same specification in early spring or late autumn.			x	x	x	x	x	x	x			
		Pruning	Pruning to occur twice yearly and should avoid the nesting bird season (March to August inclusive).	x	x	x	x					x	x	x	x
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the trees.					x	x	x	x	x			
	Routine maintenance operations (Year 3)	Health inspections	Should any trees be observed to be diseased, damaged or dead during annual visits between March and September they will be replaced with the same species to the same specification in early spring or late autumn.			x	x	x	x	x	x	x			
		Tree guards / stakes	When no longer necessary, typically after three to five years, guards and stakes may be removed from the planting.	x	x	x	x	x	x	x	x	x	x	x	x
		Pruning	Pruning to occur twice yearly and should avoid the nesting bird season (March to August inclusive).	x	x							x	x	x	x
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the trees.					x	x	x	x	x			
	Routine maintenance operations	Pruning	Pruning to occur twice yearly and should avoid the nesting bird season (March to August inclusive).	x	x							x	x	x	x
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
	(Year 4 onwards)	Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x			
Naturalised Bulbs (Bare Ground)	Pre-seeding preparation	Ground Preparation	Removal of undesirable species. Soil shall be levelled (minimum 150mm depth).	x	x	x	x	x	x	x	x	x	x	x	x
	Establishment	Bulb Planting	Bulb planting should take place according to manufacturer's instructions, ideally in spring, autumn or winter.	x	x	x	x	x				x	x	x	x
	Maintenance operations after seeding (Year 1)	Health inspections	Bulbs found to have not established during bi-monthly health visits between March and September will be replaced with the same species in autumn, winter or spring.	x	x	x	x	x				x	x	x	x
		Cutting	Geophytes will be left uncut for a period of 4 weeks after flowering. The bulbs can be cut along with the adjacent meadow habitat for the remainder of the year. Bulbs can be left in the ground all year round.		x	x					x			x	
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x			
Introduced Shrub	Establishment Maintenance operations after planting (Year 1)	Planting	Planting of ornamental species will be undertaken during the autumn, winter, or spring. Dead and damaged branches will be removed from plants post-planting.	x	x	x	x	x				x	x	x	x
		Mulching	All planted beds will be mulched with bark to a depth of at least 50mm to discourage weed growth. To occur at time of planting.	x	x	x	x	x				x	x	x	x
		Weeding	Undesirable species will be removed on a monthly basis. The use of pesticides (herbicides, insecticides, fungicides, and slug pellets etc.) will be avoided, and any removal will be undertaken by hand.	x	x	x	x	x	x	x	x	x	x	x	x

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
		Health inspections	Should any plants be observed to be diseased, damaged, or dead during monthly visits between March and September they will be replaced with the same species to the same specification in November.			X	X	X	X	X	X	X			
		Watering	Watering will be undertaken as required to maintain healthy plant growth.	X	X	X	X	X	X	X	X	X	X	X	X
	Routine maintenance operations (Year 2 onwards)	Health inspections	Should any plants be observed to be diseased, damaged, or dead during bi-monthly visits between March and September they will be replaced with the same species to the same specification in November.			X		X		X		X			
		Pruning	Pruning of shrub species to occur twice yearly and should avoid the nesting bird season (March to August inclusive). Formative pruning and cutting back of plants will be used to maintain a neat, tidy form.	X	X							X	X	X	X
		Cutting	All dead stems of grasses and perennial species from the previous summer's growth will be cut back after the winter period (mid to late March) on an annual basis, with all arisings removed and disposed of off-site. Deadheading of herbaceous plants will be undertaken following flowering and when flower heads have died off. This will be done on an annual basis between August and November depending on the species used. All arisings will again need to be removed.			X						X	X	X	
		Weeding	Monthly hand removal of undesirable species and pesticides (herbicides, insecticides, fungicides, and slug pellets etc.) to be avoided.	X	X	X	X	X	X	X	X	X	X	X	X
		Litter	To be removed as necessary before any pruning / weeding works.	X	X	X	X	X	X	X	X	X	X	X	X
		Watering	Watering will be undertaken as required to maintain healthy plant growth.	X	X	X	X	X	X	X	X	X	X	X	X

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
Rain Gardens	Establishment	Planting	Planting should take place according to manufacturer's instructions, ideally in spring, autumn or winter.	x	x	x	x	x				x	x	x	x
	Maintenance operations after seeding (Year 1 onwards)	Health inspections	Plants found to have not established during bi-monthly health visits between March and September will be replaced with the same species in autumn, winter or spring.	x	x	x	x	x				x	x	x	x
		Cutting	All dead stems of grasses and perennial species from the previous summer's growth will be cut back after the winter period (mid to late March) on an annual basis, with all arisings removed and disposed of off-site. Deadheading of herbaceous plants will be undertaken following flowering and when flower heads have died off. This will be done on an annual basis between August and November depending on the species used. All arisings will again need to be removed.			x						x	x	x	
		Litter	To be removed as necessary before any pruning works.	x	x	x	x	x	x	x	x	x	x	x	x
		Watering	As required during periods of drought to avoid death of the planting.					x	x	x	x	x			
Ornamental Hedgerow	Establishment Maintenance operations after planting (Year 1)	Planting	Planting of ornamental species will be undertaken during the autumn, winter, or spring. Dead and damaged branches will be removed from plants post-planting.	x	x	x	x	x				x	x	x	x
		Weeding	Undesirable species will be removed on a monthly basis. The use of pesticides (herbicides, insecticides, fungicides, and slug pellets etc.) will be avoided, and any removal will be undertaken by hand.	x	x	x	x	x	x	x	x	x	x	x	x
		Health inspections	Should any plants be observed to be diseased, damaged, or dead during monthly visits between March and September they will be replaced with the same species to the same specification in November.			x	x	x	x	x	x	x			
		Watering	Watering will be undertaken as required to maintain healthy plant growth.	x	x	x	x	x	x	x	x	x	x	x	x

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
	Routine maintenance operations (Year 2 onwards)	Health inspections	Should any plants be observed to be diseased, damaged, or dead during bi-monthly visits between March and September they will be replaced with the same species to the same specification in November.			X		X		X		X			
		Pruning	Hedgerows will be maintained formally and trimmed when necessary (avoiding the nesting bird season (March to August) to the required size and to ensure a neat appearance, whilst maintaining the structure of the hedgerow.	X	X							X	X	X	X
		Weeding	Monthly hand removal of undesirable species and pesticides (herbicides, insecticides, fungicides, and slug pellets etc.) to be avoided.	X	X	X	X	X	X	X	X	X	X	X	X
		Litter	To be removed as necessary before any pruning / weeding works.	X	X	X	X	X	X	X	X	X	X	X	X
		Watering	Watering will be undertaken as required to maintain healthy plant growth.	X	X	X	X	X	X	X	X	X	X	X	X
Species-rich Native Hedgerow and enhanced Native Hedgerow	Establishment	Planting	Planting of new hedgerows will be undertaken during the autumn, winter or spring.	X	X	X	X	X				X	X	X	X
	Maintenance operations (Year 1)	Reinforcement	Hedgerows protected with spiral guards, canes and mulch. To install at the time of planting.	X	X	X	X	X				X	X	X	X
		Health inspections	Should any plants be observed to be diseased, damaged, or dead during monthly visits between March and September they will be replaced with the same species to the same specification in November.			X	X	X	X	X	X	X			
		Watering	Hedgerows will be watered between March and September and only as required outside these months for the first year.					X	X	X	X	X			

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
	Routine maintenance operations (Year 2)	Health inspections	Should any plants be observed to be diseased, damaged, or dead during bi-monthly visits between March and September they will be replaced with the same species to the same specification in November.			X		X		X		X			
		Pruning / cutting	Hedge thinned, trimmed, and shaped twice yearly, dependent on growth rates, to reach desired specifications. Pruning should avoid the nesting bird season (March to August inclusive). If done in the fruiting season, should only be performed on one side of the hedgerow.	X	X							X	X	X	X
			Hedgerow margins will be allowed to grow 'tussocky' in character. They will be cut every two to three years between October and February. This cutting is best done on a rotational basis so that half the area remains undisturbed for wildlife. All arisings removed as for the grassland.	X	X								X	X	X
		Litter	To be removed as necessary before any cutting or pruning works.	X	X	X	X	X	X	X	X	X	X	X	X
		Watering	After the first year, hedgerows will be watered as required between March and September only.					X	X	X	X	X			
	Routine maintenance operations (Year 3 onwards)	Health inspections	Should any plants be observed to be diseased, damaged, or dead during bi-monthly visits between March and September they will be replaced with the same species to the same specification in November.			X		X		X		X			
		Pruning	Hedge thinned, trimmed, and shaped twice yearly, dependent on growth rates, to reach desired specifications. Pruning should avoid the nesting bird season (March to August inclusive). If done in the fruiting season, should only be performed on one side of the hedgerow.	X	X							X	X	X	X

Habitat	Item	Sub-category	Description	Timings											
				J	F	M	A	M	J	J	A	S	O	N	D
		Cutting	Hedgerows cut once yearly on a three-year rotation as required outside of the nesting bird season (March to August inclusive).	X	X							X	X	X	X
			Hedgerow margins will be allowed to grow 'tussocky' in character. They will be cut every two to three years between October and February. This cutting is best done on a rotational basis so that half the area remains undisturbed for wildlife. All arisings removed as for the grassland.	X	X								X	X	X
		Litter	To be removed as necessary before any cutting or pruning works.	X	X	X	X	X	X	X	X	X	X	X	X
		Watering	Hedgerows will be watered as required between March and September only.					X	X	X	X	X			

8. Monitoring and Remedial Measures

- 8.1 The monitoring of habitats will be completed every year for the first five years. Detailed monitoring will then be reduced to an appropriate frequency thereafter, likely every two years.
- 8.2 The results of this monitoring work will be fed back into the evolution of this strategy, to adjust the approach to management where necessary, to ensure that the development still delivers the defined aims and objectives.
- 8.3 Remedial measures for any habitat failed to establish will be undertaken as per the management methods detailed within this report.
- 8.4 Any unexpected events that require remedial action not detailed within this management plan will be assessed during the review of the management plan and discussed with the appointed management team. Where unexpected events occur that require immediate remediation, consultation with the management team, landscape architects and ecologists will be had and appropriate actions implemented.

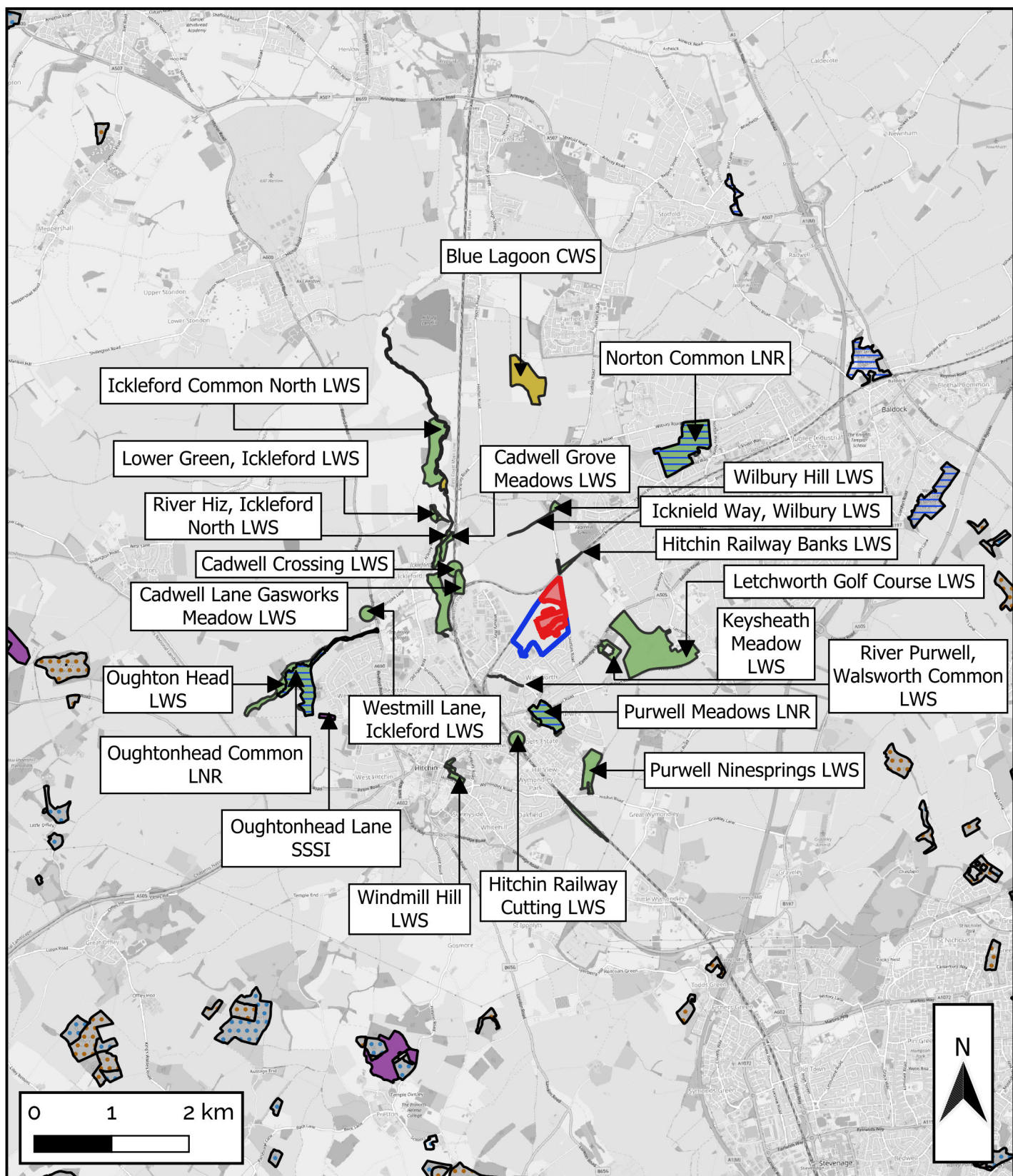
9. Summary and Conclusions

- 9.1 Ecology Solutions was commissioned in April 2025 by BDW North Thames to complete a LEMP for Phase 1 of the development on land north of Highover Farm, Hitchin.
- 9.2 The proposed outline application for this development, with all matters reserved other than access, comprises residential led development of up to 700 dwellings of use class C3 (dwellings), approximately 500 sqm of neighbourhood-level facilities (use classes A1, A2, A3, A4, A5), a new 2FE primary school, open space, play space, green infrastructure, and associated accesses (vehicular, pedestrian and cycle), including a new primary access off Stotfold Road with limited access off High Dane.
- 9.3 The planning application for the development was submitted to North Hertfordshire District Council in April 2018, the outcome of which was the conditional planning permission allowed in November 2024 (reference: 18/01154/OP).
- 9.4 An extended Phase 1 habitat survey was previously undertaken of the site in 2014 and 2016 by WSP and updated in July 2019 by Tyler Grange Group Limited. The results of this survey are detailed within the Biodiversity Offsetting Metric, dated January 2023, and are summarised below. Targeted surveys have been undertaken, including habitat surveys and protected species surveys in respect of bats, breeding birds, common reptiles, Great Crested Newts and Badger by Ecology Solutions in 2023. An updated Biodiversity Net Gain Metric was produced by Ecology Solutions in 2025. An updated walkover survey to assess the status of protected species on-site was undertaken in November 2025.
- 9.5 The purpose of this report is to address Conditions 21 of the planning permission which requires a LEMP for Phase 1 of the development. This document sets out the management of features of ecological and open space interest due to be retained, enhanced and established as part of the development and describes the wildlife enhancements and mitigation strategies to be implemented.
- 9.6 Opportunities for wildlife within the site will be retained and enhanced. Extant wildlife populations have been considered in the design process, and it is considered that these populations will be retained at a favourable conservation status throughout the development's lifetime.
- 9.7 Overall, it is considered that the production of this LEMP, and by following the habitat creation, enhancement, management and monitoring recommendations in this report, the proposed development will deliver significant ecological enhancements, allowing Condition 21 to be discharged.

Plans

PLAN ECO1

Site Location and Ecological Designations



KEY:

- SITE BOUNDARY
- WIDER SITE BOUNDARY
- SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
- LOCAL NATURE RESERVE (LNR)
- BEDS COUNTY WILDLIFE SITE (CWS)
- HERTS LOCAL WILDLIFE SITE (LWS)
- ANCIENT & SEMI-NATURAL WOODLAND
- ANCIENT REPLANTED WOODLAND



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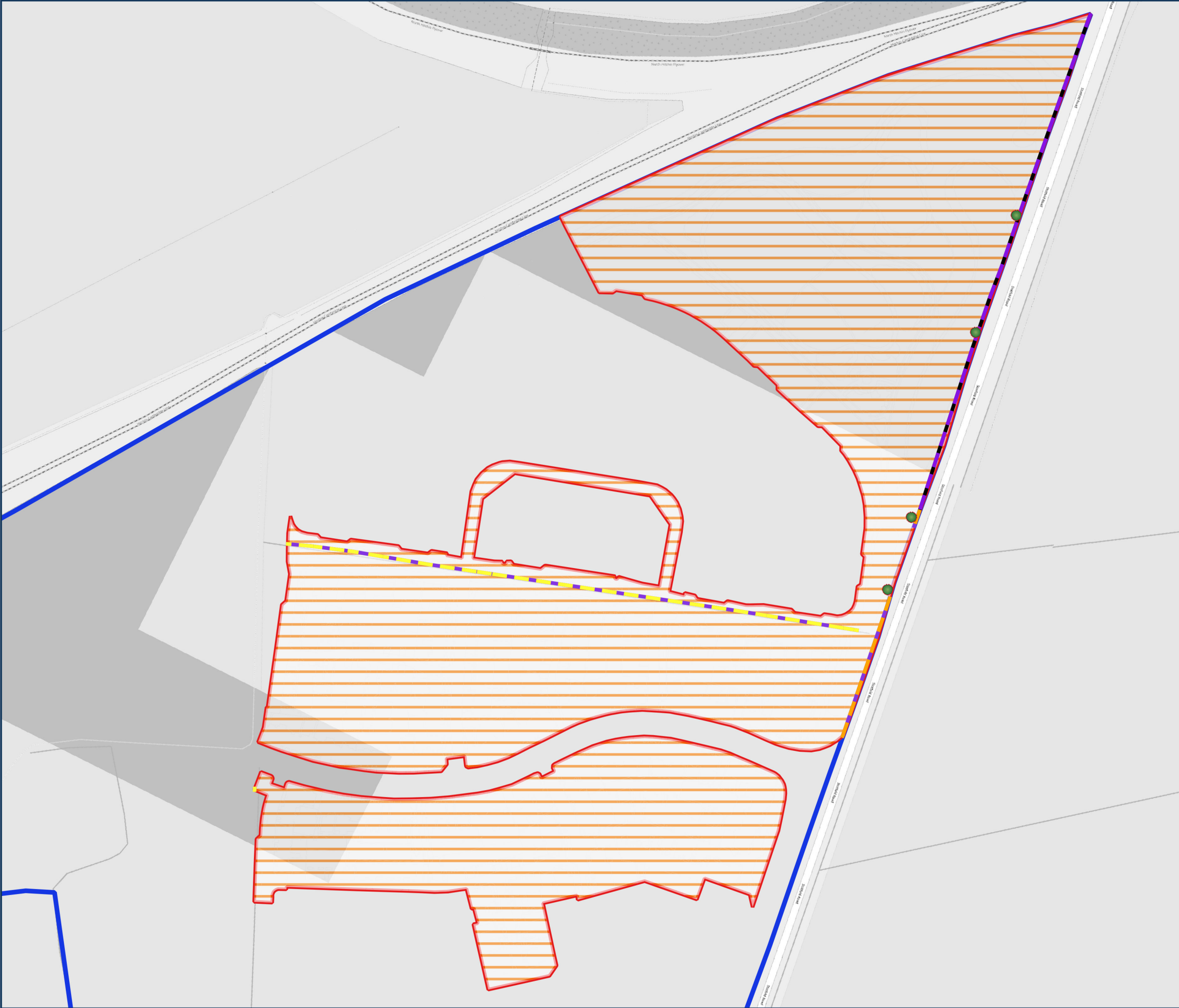
11467: HIGHOVER FARM , HITCHIN

PLAN ECO1: SITE LOCATION AND
ECOLOGICAL DESIGNATIONS

Rev: A
Feb 2026

PLAN ECO₂

Ecological Features



KEY:

- PHASE 1 BOUNDARY
- WIDER SITE BOUNDARY
- BAT POTENTIAL TREE
- BASELINE HABITATS
 - CEREAL CROPS
 - MODIFIED GRASSLAND
- BASELINE HEDGEROWS
 - NATIVE HEDGEROW
 - NATIVE HEDGEROW WITH TREES
 - SPECIES-RICH NATIVE HEDGEROW WITH TREES

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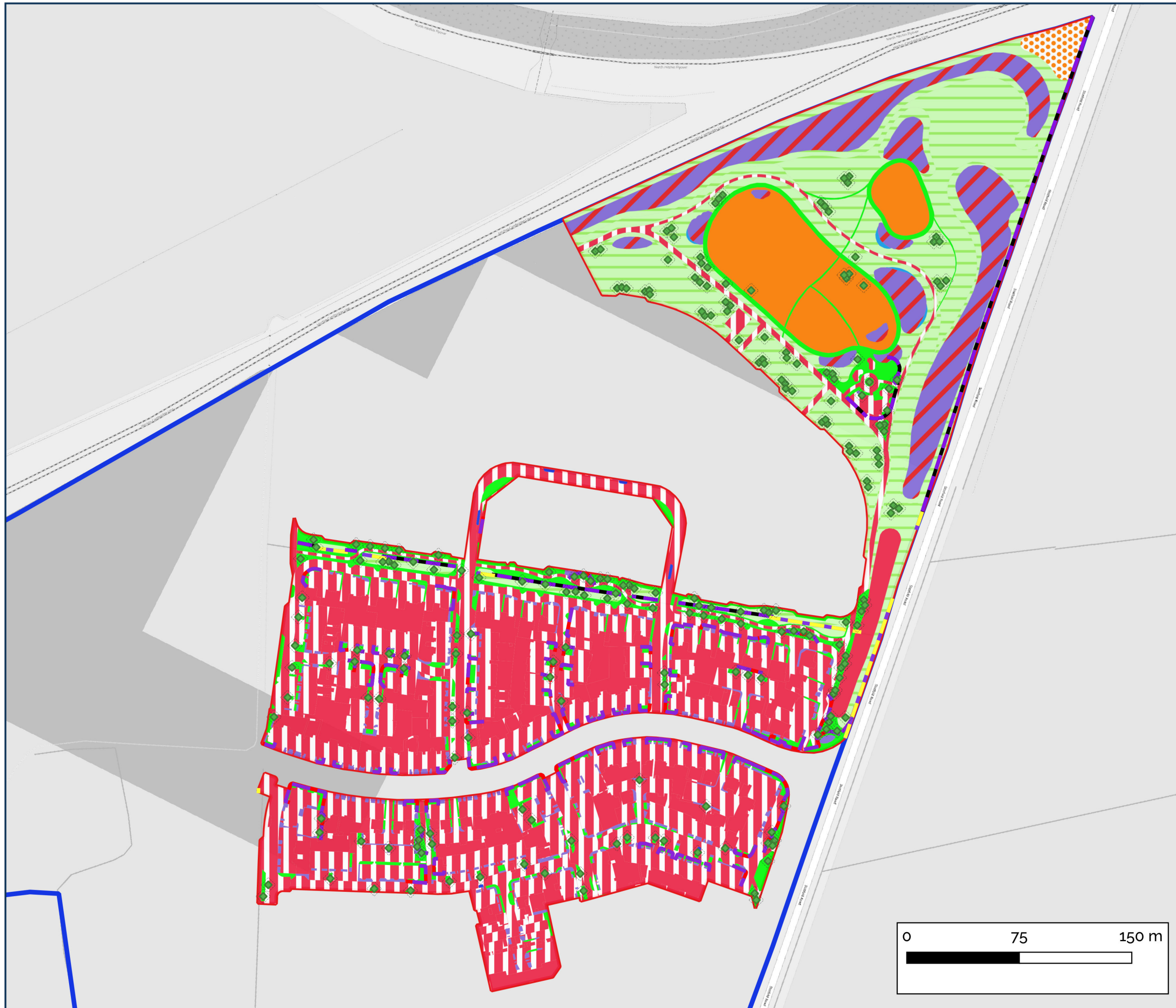
11467: HIGHOVER FARM, HITCHIN

PLAN ECO2: ECOLOGICAL
FEATURES

Rev: A
Feb 2026

PLAN ECO₃

Post-development Habitats



- KEY:
- PHASE 1 BOUNDARY
 - WIDER SITE BOUNDARY
- PROPOSED HABITATS
- ARABLE FIELD MARGINS GAME BIRD MIX
 - ARTIFICIAL UNVEGETATED, UNSEALED SURFACE
 - BIOSWALE
 - DEVELOPED LAND; SEALED SURFACE
 - INTRODUCED SHRUB
 - MIXED SCRUB
 - MODIFIED GRASSLAND
 - OTHER NEUTRAL GRASSLAND
 - RAIN GARDEN
 - SUSTAINABLE DRAINAGE SYSTEM
 - VEGETATED GARDEN
 - BARE GROUND
- PROPOSED HEDGEROWS
- NON-NATIVE AND ORNAMENTAL HEDGEROW
 - NATIVE HEDGEROW
 - NATIVE HEDGEROW WITH TREES
 - SPECIES-RICH NATIVE HEDGEROW
 - SPECIES-RICH NATIVE HEDGEROW WITH TREES
- PROPOSED INDIVIDUAL TREES
- X224 PROPOSED SMALL URBAN TREES

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11467: HIGHOVER FARM, HITCHIN	
PLAN ECO3: POST-DEVELOPMENT HABITATS	Rev: A Feb 2026

PLAN ECO4

Landscape and Ecological Management and
Enhancements

Due to the current land use, the arable land that is to be converted to grassland in the north of the site will need to undergo nutrient stripping prior to the seeding of wildflower grassland. This will involve seeding a high yielding sacrificial crop without fertiliser for at least a year to be removed once grown, prior to a deep plough bringing nutrient poor subsoil to the surface.

Health inspections to occur monthly between April and September in the first year and bi-monthly in the second and third years. Any plants identified as diseased, damaged, or dead will be replaced with the same species, to the same specification.

New and enhanced native hedgerow, grassland and shrub planting will ensure that foraging and shelter potential for Badgers, bats, birds, Hedgehogs, and reptiles is maintained and enhanced post-development.

The SuDS features will offer new opportunities for amphibian species, complemented by adjacent high quality grassland offering suitable terrestrial habitat for this group.

An area of cropland planted with a game-bird mix annually and left undisturbed over winter will provide compensatory habitat and foraging for farmland birds, including Partridge and Corn Bunting.

Litter found within any created habitats or open spaces is to be removed, as necessary.

Additional species enhancements will include the installation of log piles, insect towers, and bird and bat boxes, including swift bricks incorporated directly into proposed buildings.

Mixed scrub will be cut back rotationally, maintaining a range of age classes present. Additionally sheltered edges and glades will be established.

Any arboricultural management will be undertaken outside of the breeding bird season (March to August inclusive), or after a suitably qualified ecologist has undertaken checks to ensure that no nesting birds are present.

PHASE 1 BOUNDARY

WIDER SITE BOUNDARY

PROPOSED HABITATS

ARABLE FIELD MARGINS GAME BIRD MIX

ARTIFICIAL UNVEGETATED, UNSEALED SURFACE

BIOSWALE

DEVELOPED LAND; SEALED SURFACE

INTRODUCED SHRUB

MIXED SCRUB

MODIFIED GRASSLAND

OTHER NEUTRAL GRASSLAND

RAIN GARDEN

SUSTAINABLE DRAINAGE SYSTEM

VEGETATED GARDEN

BARE GROUND

PROPOSED HEDGEROWS

NON-NATIVE AND ORNAMENTAL HEDGEROW

NATIVE HEDGEROW

NATIVE HEDGEROW WITH TREES

SPECIES-RICH NATIVE HEDGEROW

SPECIES-RICH NATIVE HEDGEROW WITH TREES

PROPOSED INDIVIDUAL TREES

X224 PROPOSED SMALL URBAN TREES

SPECIES ENHANCEMENTS

X4 WOODSTONE SEVILLE 28MM BIRD BOXES

X3 WOODSTONE SEVILLE 32MM BIRD BOXES

X1 BARN OWL NEST BOX

X1 SCHEGLER 1SP SPARROW TERRACE

X2 CHAVENAGE CAVITY BAT BOXES

X4 SCHWEGLER 1FF BAT BOXES

X6 LOG PILES

X4 CJ WILDLIFE APEX INSECT TOWERS

Hedgehog gateway and Swift Nest Box locations are not detailed on this plan.

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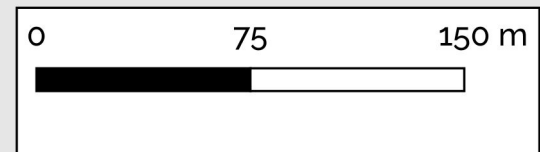
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11467: HIGHOVER FARM, HITCHIN

PLAN ECO4: LANDSCAPE AND ECOLOGICAL MANAGEMENT AND ENHANCEMENTS

Rev: A
Feb 2026



Appendices

APPENDIX 1

Condition Compliance Tracker Table

Planning Condition	Clause	Requirement Summary	Where Addressed in Document
Condition 21 – OLEMP	a	Measures to protect and enhance retained features	See OLEMP
Condition 21 – OLEMP	b	Opportunities to create new biodiversity assets	See OLEMP
Condition 21 – OLEMP	b	Links to existing off-site ecological networks	See OLEMP
Condition 21 – OLEMP	c	Measures to achieve a 10% minimum net gain target	See OLEMP
Condition 21 – OLEMP	d	Framework management and maintenance strategy	See OLEMP
Condition 21 – LEMP	a	Description, areas and evaluation of features to be managed	Section 5
Condition 21 – LEMP	b	Aims and objectives of management	Section 3
Condition 21 – LEMP	c	Contribution towards 10% net gain and what the percentage is in that phase	Paragraphs 5.3 and 5.4, Table 5.1
Condition 21 – LEMP	d	Management options for achieving target condition habitats	Section 5, Objective 2
Condition 21 – LEMP	e	Detail of bat and bird boxes (minimum of integrated)	Section 5, Objective 3
Condition 21 – LEMP	e	Bat and Bird boxes clearly marked on plans	Plan ECO4
Condition 21 – LEMP	f	Confirmation that planting will occur in the first planting season following commencement of each phase	Section 5, Objective 2; Section 7
Condition 21 – LEMP	f	Prescription for planting replacement measures	Section 5, Objective 2
Condition 21 – LEMP	g	Details of body responsible for implementation	Section 6
Condition 21 – LEMP	h	Detail of legal and funding mechanisms	Section 6
Condition 21 – LEMP	h	Detail of remedial actions	Section 8
Condition 21 – LEMP	i	Monitoring methodology and frequency	Section 8
Condition 13 – Open Space	a	Landscape management & maintenance plans	Section 5 and Appendix 2
Condition 13 – Open Space	b	Planting, grass cutting, weeding, pruning	Section 5 and 7
Condition 13 – Open Space	c	Management of SUDS features	Paragraphs 5.22– 5.41
Condition 13 – Open Space	d	Management of biodiversity enhancements	Section 5, Objective 3
Condition 13 – Open Space	e	Inspection, repair & maintenance of hard landscaping	Appendix 2
Condition 13 – Open Space	f	Monitoring and operational restrictions	Appendix 2

Condition 13 – Open Space	g	Management and planting replacement program	Section 7
Condition 13 – Open Space	-	Phasing and implementation timing	Section 4 and Appendix 2

APPENDIX 2

Golby & Luck Maintenance and Management Plan

Highover Farm, Hitchin
Open Space Management & Maintenance
Plan (*non BNG elements*)
Phase: 1

Client: BDW North Thames

17th February 2025 – Issue 2



Report Issue 1: DATE: 03/06/2025 Status: INITIAL ISSUE
Report Issue 2: DATE: 17/02/2026 Status: PLANNING

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**APPENDIX A – Phase 1 On-plot Landscape Proposals - GL2435 LP 10-14 &
Phase 1 POS Landscape Proposals – GL2024 LP 15-18**



1 MANAGEMENT OPERATIONS

Introduction

1.1 This Phase 1, Open Space Management & Maintenance Plan has been prepared by Golby + Luck Landscape Architects and has been produced in association with the Phase 1 Landscape and Ecology Management Plans (LEMP), **Appendix A**, prepared by Ecology Solutions, in support of the application submitted by BDW North Thames for their residential development at Highover Farm. This document provides a comprehensive schedule of maintenance operations covering both annual maintenance activities and the long-term management of the proposed open spaces.

1.2 This report specifically relates to the Phase 1 Residential Reserved Matters Application (App no.25/02794/RM) and seeks to partially discharge (Phase 1) Planning Condition 13 of the approved outline planning permission (Ref: 18/01154/OP), which states:

Prior to or concurrent with the first reserved matters submitted in each phase identified in Condition 5 Phasing and Delivery a detailed Open Space Management and Maintenance Scheme for the management and maintenance of all areas of open space (to include parks, greenways, allotments, play areas, informal open space, semi-natural green space, public squares) shall be submitted to and agreed in writing by the Local Planning Authority and implemented in accordance with an agreed timetable and approved phasing strategy. Details to be submitted shall include:

- a) Details of landscape management and maintenance plans;*
- b) Details of planting, grass cutting, weeding and pruning;*
- c) Management of sustainable urban drainage features;*
- d) Management of biodiversity enhancements;*
- e) Inspection, repair and maintenance of all hard landscaping and structures;*
- f) Management, monitoring and operational restrictions; and*
- g) Maintenance and planting replacement programme for the establishment period of landscaping.*

The open spaces provided shall be retained for their intended purpose and in



accordance with the approved management plan unless otherwise agreed in writing by the local planning authority.

Reason: To ensure adequate open space and amenity provision as per North Hertfordshire Local Plan Policy NE6.

- 1.3 This Open Space Management & Maintenance Plan deals with the non-ecological maintenance elements (BNG) found within the public open space network, not covered by the Phase 1 LEMP, but that require consideration to deliver a successful public open space network.
 - 1.4 The Open Space Management & Maintenance Plan is an evolving plan. During the course of the development at Highover Farm the plan will be updated and supplemented as more of the phases of the development associated with the wider site are designed and delivered.
 - 1.5 The initial landscape contract will include 12 months maintenance and defect liability period. Following the initial 12-month maintenance defect liability period the landscape areas will be covered by the approved Contractor who will take responsibility for all hard and soft landscape elements on a running contract managed by the appointed Management Entity. This plan will run in perpetuity and will be reviewed at 5 year intervals so that operations can be adapted to the development of the landscaping scheme.
 - 1.6 The overall objectives for this management plan are:
 - To establish a multi-functional and attractive public open space network that contributes to the visual amenity of the site and enjoyment by users;
 - To ensure best horticultural, environmental and health and safety practices at all times;
 - To ensure that methods employed respect and encourage wildlife and promote climate resilience; and
 - To ensure defects in the landscape are identified early and addressed promptly.
 - 1.7 This document should be read in conjunction with the latest revision of the site landscape proposals, see **Appendix B**. This drawing details all existing and proposed habitats.
- Insurances and Certification**
- 1.8 The appointed Contractor must provide details of all necessary insurances and certification to carry-out the works specified in this management plan. It is the responsibility



of the Management Entity to ensure that all submitted insurances and certificates are up to date and provide the appropriate level of cover for the specified works.

Landscape Operations

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

- Litter and debris removal;
- SUDS maintenance;
- Hard landscape and site furniture maintenance; and
- Children's play area.

Environmental Considerations

1.10 All chemical weed control must be carried out by suitably trained staff in accordance with the manufacturers recommendations and the legislation set out below:

- The Food and Environment Protection Act (1985);
- The Control of Pesticides Regulations 1986 (COPR) (as amended 1997);
- The Control of Substances Hazardous to Health Regulations (2002);
- The Environment Protection Act (1990)

1.11 It is the Contractors responsibility to ensure that all operatives are conversant with the foregoing legislation and other relevant Codes of Practice and British Standards. The Contractor will make any notifications as are required under the terms of The Food and Environment Protection Act (1985), and will be responsible for any damage caused through the inappropriate use or application of any such hazardous substances.

1.12 Horticultural peat is not to be used as mulch on any beds or as a soil conditioner.

1.13 Where appropriate arisings from the site should be recycled. In the case of fallen or lopped tree material this can be located within areas of undergrowth, away from key public spaces, to form eco-stacks. The creation of such features must be done so in consultation with the Management Entity and should not be used as a measure to dump arisings on the site.

1.14 All arisings (unless otherwise specified) will be removed from site and deposited at an approved tip or registered green compost facility.



- 1.15 Watering operations will be carried out as specified in this management plan. A water source will be identified by the Management Entity. If no water source is available then watering will be carried out using a bowser.

Landscape Management Preambles

- 1.16 The Contractor will 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.
- 1.17 At all times care will 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 and vegetation. Damage so occasioned is to be made good at the Contractors expense.
- 1.18 All work will be carried out by experienced and qualified operatives holding the necessary training certificates to undertake the prescribed works. 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, undertaken in such a manner that avoids damage and/or nuisance to the site and its surroundings. Any plant material that dies as a result of the Contractors neglect will be replaced at their cost.

Litter Removal

- 1.19 The Contractor will ensure that the entire site is kept free of litter and other debris through a regular programme of monitoring, collection and disposal, coinciding with visits to maintain grassed areas and planting. All bins, including both litter and dog waste, will be emptied at each maintenance visit.
- 1.20 Particular care will be taken to remove all broken bottles, glass, tins, sharp objects and other items likely to constitute a hazard to the public.
- 1.21 The Contractor will take particular care when carrying out litter collection to ensure that any discarded needles or syringes are removed as soon as they are discovered. Such items must be packaged separately from other litter, and be contained within appropriately labelled, puncture-proof sharps containers and disposed of in a safe manner.
- 1.22 The Contractor must ensure that all operatives likely to come into contact with needles and syringes have been instructed in the means of safe collection and disposal, and that



they have been issued with, and wear, adequate protective gloves and footwear to protect against penetration of needles and other sharp objects.

- 1.23 All litter and debris shall be removed off site to an authorised tip specified by the Contractor.
- 1.24 This shall be carried out in accordance with the Code of Practice on Litter and Refuse issued under Section 89 of the Environment Protection Act (1990).

SUDS Facility

- 1.25 The grass areas within the facility have been specified to cater for seasonal flooding and damp conditions, and will only require limited management as per details in the LEMP and/or HMMP.
- 1.26 The attenuation pond will be managed in accordance with CIRIA SUDs Manual C753. At each maintenance visit the Contractor will inspect the SUDS facility and remove any branches and leaf debris and/or any other object that are likely to restrict water flow/capacity. All areas will be inspected and cleared of litter and other debris in accordance with the details set out above.
- 1.27 The Contractor will inspect all outfall features, check grilles (if present), and remove any obstructions.
- 1.28 Excess silt is to be removed from the base of facilities to maintain volume capacity and safeguard functionality of the balancing ponds themselves as necessary. A suggested 5-10 year clean-out cycle is to be adopted initially but this is to be monitored and reviewed by the contractor.
- 1.29 Where material is removed it should be placed for a 2 week period at the edge of the pond to allow insects and creature to return to the waterbody. Following this period all material will be removed from site to the Contractor's tip.
- 1.30 The management of the pond should be reviewed by the ecological consultant and in conjunction with the LEMP and/or HMMP to enhance biodiversity and wildlife potential where appropriate, and without affecting the drainage function of the pond.

Hard Surfaces and Street Furniture

- 1.31 The Contractor will check at each visit that all the hard surfaces and street furniture is safe and fit for purpose.



- 1.32 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.
- 1.33 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.
- 1.34 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.

Children's Play Area

- 1.1 Prior to the play area opening for public use the Management Entity will produce a play area risk assessment in accordance with the Management of Health and Safety at Work Regulations 1999 and RoSPA guidelines. This will include the identification of 'risk', assessing the risk and actions for risk reduction. This will be retained by the Management Entity and reviewed on an annual basis.
- 1.2 At each maintenance visit all areas will be cleared of litter and debris in accordance with the section set out above.
- 1.3 Dog fouling presents a significant health and safety risk within play areas. Play areas shall be inspected at every maintenance visit (no less frequently than weekly) and any issues with dog fouling addressed immediately. All play areas are to be maintained as dog free zones to prevent fouling and risk of dog attacks. The Management Entity shall take appropriate action to enforce this measure at all times.
- 1.4 All 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).
- 1.5 Recorded weekly safety inspections will be carried out by RoSPA qualified play inspectors, followed up by a 6 weekly structural check. The frequency may vary depending on use or



with any variation agreed with the Management Entity and Local Authority following best practice guidance.

- 1.6 A visual assessment of all facilities will be undertaken at each site visit by the Management Entity. Any defects or hazards considered dangerous are to be dealt with immediately by immobilising the item and making the item safe until repair and only if necessary, will the play facilities will be closed until appropriate measures have been taken to make the facilities safe and fit for purpose. The Local Authority is to be notified of any closures
- 1.7 All inspections as set out above are to be carried out by a suitably qualified person (please refer to the Register of Play Inspectors International (RPII) for requirements).
- 1.8 An Outdoor Annual Inspector accredited by the RPII shall carry out certified inspections annually, and permanent record maintained to ensure continued compliance with legislation.
- 1.9 Contact details for the Management Entity will be displayed in a suitable location at each play facility and updated should this change promptly. The contact information must include a direct telephone number so that any faults can be reported and dealt with in an appropriate timeframe. The Management Entity to have out of hours arrangements to allow reporting of faults at any time.
- 1.10 Maintenance of equipment and safety surfacing will be undertaken in strict accordance with the manufacturer's recommendations. This will include painting, vandalism, graffiti and sweeping.
- 1.11 All replacement parts must be sourced from an accredited manufacturer/supplier and be appropriate for the intended use. The Management Entity 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.



2 MANAGEMENT SCHEME REVIEW & MAINTENANCE SCHEDULES

2.1 The sequence of agreement, monitoring and review is set out below. It is envisaged that at each stage agreement will be reached between the Contractor, Management Entity, and the Local Authority. It is the responsibility of the Contractor to bring to the attention of the Management Entity any issues that require immediate attention. Any such issues left unchecked that result in permanent damage or degradation of the landscape and associated environment will be put right at the Contractors expense. The stages of agreement, monitoring and review are set out below:

- Management scheme and annual maintenance schedules to be agreed by all parties involved (including the Local Authority) in the on-going management of the landscape and features specific to this plan;
- At the end of year 1 the Contractor, Management Entity and the Local Authority are to meet on site and review all open spaces;
- Following this monitoring stage appropriate adjustments to the management objectives, operations and frequencies of visits are to be agreed in writing between the Contractor, Management Entity, and the Local Authority;
- Monitoring visits and amendments to the plan are to be continuous between years 1 to years 5;
- At the end of year 5 there will be a wholesale review of this scheme and any changes to it (including the removal/insertion of operations and/or the change in frequency of operations) will be agreed between the Contractor, Management Entity, and the Local Authority.

2.2 The following tables set out the Year 1 maintenance schedule.



Management Scope: Maintenance Activity	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Litter & debris removal												
Pick all litter from areas of hard and soft landscape and remove from site.	•	•	•	•	•	•	•	•	•	•	•	•
SUD's Facility												
Inspect SUDS facility and remove all litter and debris. Ensure that channel and outfalls are free of obstructions.	•	•	•	•	•	•	•	•	•	•	•	•
Programme specific operation to remove leaf litter during autumn months. Allow for 2 week creep back period.	•	•								•	•	•
Annual inspection to review management in conjunction with the LEMP and/or HMMP.										•		
Hard landscape & site furniture												
Inspect, clean, repair or replace.	•	•	•	•	•	•	•	•	•	•	•	•
Where repairs cannot be made good at time of visit and additional visit will be programmed as soon as practically possible to make any repair good and the item fit for purpose. During any such delay it is the Contractor's responsibility to ensure that all areas are made safe and remain safe until any such repairs are completed.	•	•	•	•	•	•	•	•	•	•	•	•
Children's Play Area												
Visually inspect children's play areas. Inspection to be carried out by qualified staff member. Observe any hazards, defect or act of vandalism.	•	•	•	•	•	•	•	•	•	•	•	•
20-24no. recorded inspection of the children's play areas. Inspection to be carried out by qualified staff member.	•	•	•	•	•	•	•	•	•	•	•	•



Initially frequency of play area maintenance to be every visit. To be reviewed / determined more accurately once in use and usage pattern can be confirmed. Best practice to be followed with any variation to monthly inspections will be agreed with the appointing authority.

Any repairs are to be carried out during the inspection. Otherwise the facility is to be made safe and works programmed within a reasonable timeframe.

Any repair works that cannot be carried out at the maintenance visit are to be programmed in as soon as practically possible taking into consideration order lead in times etc. Any temporary closure of and/or partial closure of the facility is to be checked on a daily basis to ensure that the area remain safe and for purpose until such time that the facility is in full working order.



APPENDIX A

Phase 1 On-plot Landscape Proposals - GL2435 LP 10-14 &;

Phase 1 POS Landscape Proposals – GL2024 LP 15-18



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