



BIODIVERSITY NET GAIN DESIGN STAGE REPORT

Client: Beck Homes

Site: Station Road, Baldock

02.12.2025

Version 005





aLyne Ecology Ltd.

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Report	This report remains valid for 12 to 18 months from date of issue. The report, conclusions and recommendations are valid for current development plans only. Should this change, the report should be reviewed and, if necessary, further survey work and desk study review undertaken.		
Survey Data	Survey data are valid for 12 to 18 months from the date the survey was undertaken.		

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The information which we have prepared and provided is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

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1. Summary

Site Details
- Site Address: Land at Station Road, Ashwell, Baldock, Hertfordshire, SG7 5RJ. - OS grid reference (Centre of Site): TL 2780 3970. - Approximate Area of Site: 30,000 m² (3 ha).
Scope of Works
- aLyne Ecology Ltd was commissioned by Beck Homes to undertake a Biodiversity Net Gain (BNG) Assessment, based on the Statutory Biodiversity Metric (DEFRA, 2025). This included the area within the Planning Application Boundary (hereafter referred to as 'on-site') (see Figure 1). - The baseline biodiversity units for on-site habitats have been based on the Preliminary Ecological Appraisal (PEA) and Ground Level Tree Assessment Report (GLTA) carried out by aLyne Ecology Ltd. in 2025 (see Figure 2) (aLyne Ecology, 2025). - Post-intervention biodiversity units have been based on the M3942-PA-01-V15 Landscape Layout by Barnes Walker (see Figure 3) (Barnes Walker, 2025) and are displayed in map form in Figure 4. - A biodiversity retention, loss/creation and enhancement plan is provided in Figure 5.
Development Proposals & Impacts
As shown in the M3942-PA-01-V15 Landscape Layout by Barnes Walker (Figure 3) (Barnes Walker, 2025) and BNG Post-Intervention Map (see Figure 4), the development proposals are for the following: On-site - Loss of modified grassland, non-cereal crop, other woodland; mixed (partial), developed land; sealed surface and species-rich native hedgerow with trees (partial). - Retention of a species-rich native hedgerow with trees and other woodland; mixed (partial). - Creation of a sustainable drainage system. - Creation of other neutral grassland and modified grassland habitats. - Enhancement of an existing area of modified grassland to other neutral grassland. - Enhancement of existing other woodland; mixed in poor condition to other woodland; mixed in moderate condition. - The development proposals include the following proposed landscaping: - Planting of one hundred and twenty-eight (128) individual trees. - Planting of a species-rich native hedgerow with trees - Planting of native hedgerows.

As BNG is 'additional' to the mitigation hierarchy, woodland and hedgerow creation that have been included as part of the mitigation and compensation measures as part of aLyne Ecology's Ecological Impact Assessment Version 001. 11.11.2025 (aLyne Ecology Ltd, 2025) have been discounted from the baseline and post-intervention measurements in the Statutory Biodiversity Metric (DEFRA, 2025) to avoid duplication and inaccurate reflection of BNG on-site. These include the following:

- Non-cereal crop to other broadleaved; woodland - 0.0177 ha
- Species rich native hedgerow – 10m

Biodiversity Net Gain Assessment

Habitats

- Under current proposals, other neutral grassland modified grassland, a sustainable drainage system, the planting of one hundred and twenty-eight (128) individual trees and the enhancement of existing other woodland; mixed at 'poor' condition to other woodland; mixed at 'moderate' condition. This will result in a biodiversity net gain of +63.61% (+4.16 units).
- Therefore, a biodiversity net gain for broad habitats and compliance with trading rules (i.e., habitats proposed should be like-for-like or better) can be achieved under the current proposals, providing the measures outlined in this report are implemented.

Hedgerows

- Under current proposals, most species-rich hedgerows with trees on site will be retained except for two locations for proposed access routes but not enhanced. A further 0.074 km of species-rich native hedgerows with trees and 0.309 km of native hedgerow will also be planted which will result in a biodiversity net gain of +26.43% (+1.50 units).
- Therefore, a biodiversity net gain for hedgerows and compliance with trading rules (i.e., habitats proposed should be like-for-like or better) can be achieved under the current proposals, providing the measures outlined in this report are implemented.

Hedgerow Priority Habitats are present on site. The site does not contain irreplaceable habitats (i.e., ancient woodland and veteran trees).

The watercourse module was not triggered for this project as they are absent from the site.

Recommendations & Conclusions

Mitigation Hierarchy

- The woodland and hedgerow habitats on site should be retained and enhanced, where possible.
- The hedgerow Priority Habitat and woodland should be retained and protected both during construction and following completion of development. A Construction and Environmental Management Plan (CEMP) and Biodiversity Enhancement Management and Maintenance Scheme (BEMMS) should be prepared, detailing how hedgerow Priority Habitat and woodland will be protected during construction operations.
- Native trees should be retained, where possible and any trees lost as a result of the proposed development, should be replaced with equivalent numbers of native species.

- Any removal of vegetation should be undertaken outside of the bird breeding season (March to August inclusive) to avoid destruction/disturbance of nesting birds.
- A sensitive lighting plan should be adopted, to ensure that outside lighting does not adversely affect adjacent habitats and wildlife, particularly bats when foraging and commuting.
- An Ecological Clerk of Works (ECoW) should be present on site during any site clearance activities, which are likely to involve the removal/disturbance of any vegetation.
- Any holes/trenches created as part of the construction works, should be closed at night or a mammal ladder provided to enable mammals a means of escape.

Further Ecological Enhancements

- The installation of Improved Crevice Bat Box (or similar) on suitable trees and buildings, would be beneficial to common and widespread bat species that are likely to be present on site.
- The installation of Improved Cavity Bat Box (or similar) on suitable trees and buildings, would be beneficial to common and widespread bat species that are likely to be present on site.
- The installation of Vivara Pro Barcelona WoodStone Open Nest Box on suitable buildings and trees would be beneficial to garden bird species.
- The installation of Vivara Pro Seville 28mm WoodStone Nest Box on suitable buildings and trees would be beneficial to garden bird species.
- The installation of a Hedgehog Nest Box.
- The installation of a hibernacula for invertebrates, such as the National Trust Apex Insect House,

Outline Habitat Management and Monitoring Plan (HMMP)

- See Section 6 for full details.

2. Introduction

2.1 BNG: Good Practice Principals

BNG has been defined as ‘*development that leaves biodiversity in a better state than before, and an approach where developers work with local governments, wildlife groups, landowners and other stakeholders in order to support their priorities for nature conservation*’ (DEFRA, 2025).

The system of biodiversity units used to measure biodiversity before and after site development is a quantitative assessment, demonstrating the change in biodiversity in a robust, consistent, and transparent way.

BNG, Good Practice Principles for Development (Baker, Hoskin, & Butterworth, 2019) sets out the principles for achieving net gain. Key principles include:

- Apply the ‘Mitigation Hierarchy’ (in line with CIEEM Guidelines for Ecological Impact Assessment (EcIA) (CIEEM, 2024) and be ‘additional’ by achieving outcomes that exceed existing obligations.
- Avoid losing biodiversity which cannot be off set elsewhere (e.g., irreplaceable habitats).
- Address risk (e.g., difficulty of achieving habitat creation / enhancement for net gain).
- Make a ‘measurable’ net gain contribution (e.g., calculated using an appropriate metric) and ensure that calculations consistent and transparent (i.e., limitations and assumptions are clearly identified).
- Ensure that net gain design achieves the best outcome for biodiversity (this may require both quantitative and qualitative assessment) and create a net gain legacy for long-term benefits.

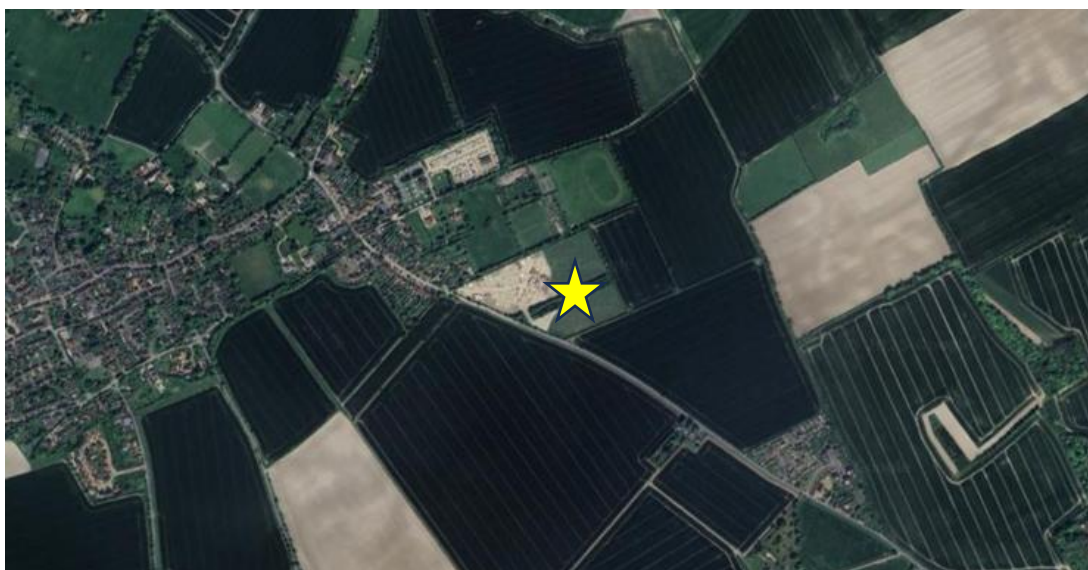
2.2 Site Details

Table 1 provides details of the site, intended as a summary of key features, as provided in aLyne Ecology’s PEA and GLTA report (aLyne Ecology, 2025).

Table 1. Site Details

Site Name	Station Road, Baldock
Site Address	Land at Station Road, Ashwell, Baldock, Hertfordshire, SG7 5RJ
OS Grid Reference (Centre of Site)	TL 2780 3970
Approximate Total Area of Site	30,000 m ² (3 ha).
Landowner and Local Authority	Beck Homes, North Herts Council
Geology and Soils	Freely draining lime-rich loamy soils and clayey soils
Hydrology	Freely draining
Nature Conservation Designations	None on site
Other Designations	None on site
The Woodland Trust Ancient and Notable Tree Inventory	None on site
Biodiversity Opportunity Area	None on site
National Habitat Network	Network Enhancement Zone 1 - Land connecting existing patches of primary and associated habitats, which is likely to be suitable for creation of the primary habitat. Action in the zone to expand and join up existing habitat patches and improve the connections between them can be targeted here (Natural England, 2020)
Current Land Use	Agricultural land

An aerial plan showing the location of the site is provided below.



Site Location (© Google Earth Pro, accessed 3rd September 2025).

2.3 Site Context

Table 2 provides details on the context of the site in terms of habitats, land use and connectivity to the wider landscape.

Table 2. Site Context

Surrounding Habitats and Land Use	Agricultural fields and hedgerows surround the site on all aspects
Urban Context / Locality	The site is located to the east of Ashwell, in agricultural land, bordered by Station Road to the south
Connectivity to Wider Landscape	Hedgerows on site connect to a network of hedgerows in the wider landscape. Fragmented patches of woodland are also in the locality
Priority Habitats within 1 km	• Hedgerows (on-site) • Traditional orchards • Lowland calcareous grassland • Deciduous woodland • Pond • Rivers
Ancient Woodland within 1 km	None
Non-Statutory Designated Sites within 1 km	• Ducklake Farm, Ashwell Local Wildlife Site (LWS) • Ruddery Pit County Wildlife Site (CWS)
Statutory Designated Sites within 1 km	Ashwell Springs Site of Special Scientific Interest (SSSI)
European Designated Sites within 5 km	None
EPSLs within 2 km	None

2.4 Project Background

Full details on ecological surveys carried out at the site are provided in the following reports produced by aLyne Ecology:

- aLyne Ecology's PEA and GLTA report (aLyne Ecology, 2025).
- aLyne Ecology's Badger Monitoring Report (aLyne Ecology Ltd., 2025).

Further surveys for hazel dormice and foraging/commuting bats are ongoing, and an updated Ecology Surveys Report will be provided once these surveys are completed.

2.5 Proposed Development

As shown in the M3942-PA-01-V15 Landscape Layout by Barnes Walker (Figure 3) (Barnes Walker, 2025) and BNG Post-Intervention Map (see Figure 4), the development proposals are for the following:

On-site

- Loss of modified grassland, non-cereal crop, other woodland; mixed (partial), developed land; sealed surface and species-rich native hedgerow with trees (partial).
- Retention of a species-rich native hedgerow with trees and other woodland; mixed (partial).
- Creation of a sustainable drainage system.
- Creation of other neutral grassland and modified grassland habitats.
- Enhancement of an existing area of modified grassland to other neutral grassland.
- Enhancement of existing other woodland; mixed in poor condition to other woodland; mixed in moderate condition.
- The development proposals include the following proposed landscaping:
 - Planting of one hundred and twenty-eight (128) individual trees.
 - Planting of a species-rich native hedgerow with trees.
 - Planting of native hedgerows.

The development will result in the loss or partial loss of the following habitats:

- Modified grassland.
- Non-cereal crop.
- Other woodland; mixed.
- Developed land; sealed surface.
- Species-rich native hedgerow with trees.

As BNG is 'additional' to the mitigation hierarchy, woodland and hedgerow creation that have been included as part of the mitigation and compensation measures in aLyne Ecology's Ecological Impact Assessment Version 001. 11.11.2025 (aLyne Ecology Ltd, 2025) have been discounted from the baseline and post-intervention measurements in the Statutory Biodiversity Metric (DEFRA, 2025) to avoid duplication and inaccurate reflection of BNG on-site. These include the following:

- Non-cereal crop to other broadleaved; woodland - 0.0177 ha
- Species rich native hedgerow – 10m

2.6 Aims and Objectives

The objectives of this BNG Assessment are as follows:

- Establish the baseline biodiversity units for the site, classifying the type, distinctiveness, condition, and strategic significance of habitats and hedgerows present prior to development. The baseline biodiversity units have been based on the PEA carried out by aLyne Ecology Ltd. in 2025 (see Figure 2) (aLyne Ecology, 2025).
- Establish the post-intervention biodiversity units for the proposed scheme, based on the habitats and hedgerows to be retained, enhanced, and created as detailed in the M3942-PA-01-V15 Landscape Layout by Barnes Walker (Figure 3) (Barnes Walker, 2025) and BNG Post-Intervention Map (see Figure 4).
- Determine whether the proposed scheme will result in a net loss or net gain for biodiversity (habitats and hedgerows).
- Make recommendations for maximising net gain, in accordance with the National Planning Policy Framework (NPPF), 2024 (HM Government, 2024) and North Hertfordshire Local Plan 2011-2031, adopted November 2022 (North Herts Council, 2022).
- Clearly identify limitations and assumptions.

The Statutory Biodiversity Metric (DEFRA, 2025) has been used to calculate biodiversity units before and after development.

2.7 Survey Limitations and Assumptions

2.7.1 Survey Limitations

The field survey (UK Habitat Classification) was carried out in April 2025, which is within 12 months of preparing this assessment. Therefore, the use of this data is concluded to be appropriate, in accordance with current guidelines set out by CIEEM concerning the lifespan of ecological data.

The site was visited over the period of one day, as such seasonal variations cannot be observed and only a selection of all species that potentially occur within the site have been noted. Therefore, the survey provides a general assessment of potential nature conservation value.

There were no limitations to the field survey in terms of the following:

- Optimal time of year for habitat condition assessments (April-October).
- The site could be fully accessed.
- Weather conditions (dry and sunny).
- Personal competence (qualifications, training, skills, and experience).
- Time spent surveying.

At the time of the UKHab survey, the field had been ploughed (April 2025), it was not attainable to understand the arable habitat type to Level 4 of the UKHab hierarchy until later visits (aLyne Ecology, 2025). Therefore, the arable habitat has been input into the metric as non-cereal crops as there were no cereal crops sown but the field is within active agricultural use.

2.7.2 BNG Assumptions

The following sections provide information on assumptions and rules relating to the Statutory Biodiversity Metric (DEFRA, 2025) as detailed in the most up to date user guide documentation (DEFRA, 2025).

Biodiversity Gain Hierarchy

There are three ways in which a project can deliver BNG.

1. In the first instance, biodiversity units should be delivered on-site (within the red line boundary of a development site) where possible.
2. If all of a project's unit deficit cannot be delivered on-site, they can be delivered through a mixture of on-site and off-site units or solely off-site. Off-site biodiversity gains can be made by the client outside of their red line boundary but within their land ownership. Alternatively, off-site biodiversity units can be bought on a range of BNG markets.
3. If BNG cannot be achieved on-site or off-site, statutory biodiversity credits can be purchased from the government as a last resort. The government will use the revenue to invest in habitat creation in England.

All three options can be combined but must follow the steps in order. This order of steps is called the biodiversity gain hierarchy.

Appropriate Targets

The classification of created and enhanced habitat, hedgerow and watercourse types (where present) have been selected based on those most closely matching the habitats outlined in the M3942-PA-01-V15 Landscape Layout by Barnes Walker (Figure 3) (Barnes Walker, 2025).

Appropriate targets have been set when assigning the post-intervention habitat types and conditions (created and enhanced) in line with the metric rules and principles. This means they are considered to be achievable and viable for the context of the site, taking into account the current and proposed land uses, time taken to reach target condition and environmental factors.

Supplementary Planning Documents (SPD's) & Local Nature Recovery Strategies (LNRS's)

Where available, local planning authority SPD's and/or LNRS's will be used to inform the selection of habitat, hedgerow and watercourse types to be retained, created or enhanced.

Irreplaceable Habitats

Impacts to on-site or off-site irreplaceable habitats (i.e. ancient woodland and veteran trees) should be avoided in line with planning policy. Impacts to these habitats cannot be calculated by the metric as they are deemed too difficult to recreate once destroyed or degraded. Bespoke compensation must be agreed for any losses or impacts to these habitats.

Where irreplaceable habitats are present but are not being impacted by the development proposals, enhancement of these habitats can contribute to the generation of post-intervention biodiversity units.

Habitat Clearance/Degradation

If evidence that habitat clearance or degradation has taken place to reduce the pre-development biodiversity value of the site prior to aLyne Ecology's involvement in the project, then the pre-degradation habitat type/condition will be used for the baseline. If a baseline date cannot be agreed, then the habitats present on 30th January 2020 will be selected as default (this is the day the Environment Bill entered parliament). A combination of historic data records, satellite imagery and field surveys (where available) will be used to help classify the type/condition of cleared habitats and a precautionary approach will be taken.

Private Gardens

For the purposes of BNG, a private garden is defined as any garden within the curtilage of a privately owned or tenanted dwelling house. The biodiversity value of private gardens should not be undervalued and therefore individual habitat parcels should be mapped where appropriate. This might include:

- Higher distinctiveness grassland habitats.
- Woodland.
- Dense scrub.
- Individual trees (medium, large and very large sized trees only).
- Hedgerows.
- Ponds.

However, as any created or enhanced habitats cannot be legally secured for 30 years post-development, all proposed habitats must be entered into the metric as either:

- Urban – vegetated garden; or
- Urban – unvegetated garden.

Any other habitats that are created or enhanced within the curtilage of a proposed dwelling cannot contribute towards BNG, including individual planted trees and hedgerows. However, any habitats within a private garden that are not proposed to be lost or impacted by the proposals can be recorded as retained.

Individual Trees

The tree helper located within the Statutory Biodiversity Metric (DEFRA, 2025) has been used to calculate the area of all individual trees on site. Tree helper values are a representation of canopy biomass, and are based on the root protection area formula, derived from BS 5837:2012 (BSI, 2012).

The following rules apply to individual trees:

Baseline:

- The area of the tree canopy as well as the area of habitat beneath it are included in BNG calculations.
- Only medium, large and very large sized trees should be recorded within private gardens at baseline.
- Trees within overgrown, non-native hedges (e.g. Leylandii) should be classified as non-native and ornamental hedgerows.
- Linear formations of trees within the urban environment should not be recorded as lines of trees in the hedgerow module, but as individual trees.

Post-Intervention:

- Any trees planted within private gardens cannot count towards BNG.
- Any trees planted as part of hedgerow creation and/or enhancement cannot count towards BNG.
- Natural size increases of retained and planted trees cannot count towards BNG.
- All proposed trees should be input as 'small', unless 'medium' sized at the time of planting.

3. Relevant Legislation and Planning Policy

3.1 National Planning Policy

3.1.1 Environment Act 2021

Under The Environment Act 2021 (HM Government, 2021), all granted planning applications in England will be required to deliver at least a 10% biodiversity net gain. This policy became mandatory as of February 2024.

3.1.2 National Planning Policy Framework (2024)

The NPPF, 2024 (HM Government, 2024) sets out policies for, *inter alia*, biodiversity and geological conservation directing that schemes should seek to protect and enhance, where possible, designated, and non-designated nature conservation sites and features.

Chapter 15 (Conserving and enhancing the natural environment), Paragraph 187 (d) states: “*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs.*”

Paragraph 192(b) states: “*promote the conservation, restoration, and enhancement of Priority Habitats, ecological networks and the protection and recovery of Priority Species and identify and pursue opportunities for securing measurable net gains for biodiversity.*”

3.2 Local Planning Policy

Policy NE4: Biodiversity and Geological Sites

Policy NE4 of the North Hertfordshire Local Plan 2011-2031, adopted November 2022 (North Herts Council, 2022), states, “ *Planning permission will only be granted for development proposals that appropriately protect, enhance and manage biodiversity in accordance with the hierarchy and status of designations and features listed in Policy SP12. All development should deliver measurable net gains for biodiversity and geodiversity, contribute to ecological networks and the water environment, and/or restore degraded or isolated habitats where possible. Applicants should, having regard to the status of any affected site(s) or feature(s):*

- a) *Submit an ecological survey that is commensurate to the scale and location of the development and the likely impact on biodiversity, the legal protection or other status of the site;*
- b) *Demonstrate that adverse effects can be avoided and / or satisfactorily minimised having regard to the hierarchy of protection below:*
 - i. *locating on an alternative site with a less harmful impact;*
 - ii. *providing adequate mitigation measures; or*
 - iii. *as a last resort compensated for. The acceptability of approach(es) to avoidance, mitigation and compensation will be commensurate with the status of the asset(s) likely to be affected by the application; Compensation is unlikely to be an appropriate solution for proposals affecting nationally or internationally designated sites other than in the most exceptional circumstances.*
- c) *Include appropriate measures to manage construction impacts by demonstrating how existing wildlife habitats supporting protected or priority species will be retained, safeguarded and managed during construction;*

- d) *Integrate appropriate buffers of complimentary habitat for designated sites and other connective features, wildlife habitats, priority habitats and species into the ecological mitigation and design. The appropriateness of any buffers will be considered having regard to the status of the relevant habitat. 12 metres of complimentary habitat should be provided around wildlife sites (locally designated sites and above), trees and hedgerows. It may be necessary to exceed this distance for fragile habitats such as ancient woodland or to provide appropriate root protection for mature trees; and*
- e) *Provide a long-term management and monitoring plan including mitigation measures as necessary.*

Local Geological Sites are ratified by the Herts & Middlesex Wildlife Trust (HMWT) and are afforded the same protection as Local Wildlife Sites”.

4. Methods

The following industry recognised best practice methods have been followed:

- The Statutory Metric User Guide updated July 2024 (DEFRA, 2025).
- Biodiversity Net Gain. Good Practice Principles for Development. A Practical Guide (Baker, Hoskin, & Butterworth, 2019).
- Biodiversity Net Gain Report & Audit Templates (CIEEM, 2021)
- BS42020 – Biodiversity Code of Practice for Planning and Development (BSI, 2013).
- BS8683 – Process for designing and implementing Biodiversity Net Gain – Specification (BSI, 2021).

North Hertfordshire Local Plan 2011-2031 adopted November 2022 (North Herts Council, 2022) has been taken into account.

4.1 Baseline Biodiversity Units Calculation

The extent of habitat loss, retention, creation and enhancement has been calculated using the Statutory Biodiversity Metric (DEFRA, 2025). All habitat mapping has been conducted using QGIS 3.34.4 'Pirzen' and the Natural England QGIS Template.

The habitat condition assessments and baseline biodiversity units for all on-site habitats, hedgerows and watercourses (where appropriate) have been based on data collected during the original field survey and PEA carried out by aLyne Ecology in April 2025 (see Figure 1 and Figure 2).

The habitat condition assessments for each habitat parcel are provided in Appendix 2. Specific habitat parcel reference codes have been included in brackets throughout Section 5.1, which correspond to those displayed in Figure 2. A species list for each parcel habitat has been provided in Appendix 3.

The site does not contain irreplaceable habitats (i.e., ancient woodland and veteran trees) and there are no Priority Habitats on site.

The watercourse module was not triggered for this project as they are absent from the site.

4.2 Post-Intervention Biodiversity Units Calculation

The calculation of post-intervention biodiversity units has been based on the M3942-PA-01-V15 Landscape Layout by Barnes Walker (see Figure 3) (Barnes Walker, 2025) and are displayed in map form in Figure 4.

4.3 Change in Biodiversity Units

The change in biodiversity units is calculated by subtracting the baseline biodiversity units from post-intervention biodiversity units. A 10% net gain in biodiversity units for habitats, hedgerows and watercourses (where present) are required for the project to achieve biodiversity net gain. A biodiversity retention, loss/creation, and enhancement plan is provided in Figure 5.

5. BNG Assessment

The habitat distinctiveness for each habitat and hedgerow is auto populated in the Statutory Biodiversity Metric (DEFRA, 2025). The following sections provide information on how the habitat condition and the strategic significance have been scored.

Further information on scoring habitat distinctiveness, habitat condition, and strategic significance is provided in Appendix 1. The habitat condition assessments for each habitat parcel are provided in Appendix 2. Specific habitat parcel reference codes have been included in brackets throughout Section 5.1, which correspond to those displayed in Figure 2.

Strategic significance has been set according to the location of habitats on-site and where they appear within the strategic significance zones set by Herts Ecological Network mapping (North Herts Council, 2025). In line with the Statutory Biodiversity Metric user guide (DEFRA, 2025), as there is no LNRS yet produced for Hertfordshire, North Herts Council have stated that the Herts Ecological Network should be used to determine strategic significance (North Herts Council, 2025).

5.1 Baseline Habitat Biodiversity Units

The on-site biodiversity baseline habitats are presented in map form in Figure 2 and the calculation of baseline biodiversity units includes all habitats on site, recorded as follows:

Habitats:

- Modified Grassland – 0.0261 ha.
- Other Woodland; Mixed – 0.2918 ha.
- Developed Land; Sealed Surface – 0.0014 ha.
- Non-cereal crops – 2.6615 ha.

5.1.1 Modified Grassland

The grassland on site has been classified as modified grassland because it comprises species-poor vegetation (<9 species per square metre), dominated by fast-growing grasses on fertile, neutral soils and does not meet the definitions of acid grassland, calcareous grassland or neutral grasslands.

HCA (Section 10.1.1)

The parcel (MG1) of modified grassland has been set as 'Poor' condition. This is because although the grassland passes three of the seven condition criteria, the parcel both fails essential criteria A, which states that the habitat must comprise at least 6-8 species per square metre (including at least two forbs).

5.1.2 Other Woodland; Mixed

Other woodland; mixed habitat comprises habitats classified to Level 4 and Level 5 of the UKHab classification system. During the PEA, the habitat was classified to other woodland; mixed; mainly broadleaved (Level 5) and therefore has been inputted into the metric as other woodland; mixed.

HCA (Section 10.1.2)

The condition for the parcel (OWM1) of other woodland; mixed scored 23 out of 39 which results in 'Poor' condition. This is mainly a result of a two age classes being present, evidence of deer browsing, limited open space, limited evidence of woodland regeneration, signs of nutrient enrichment/damaged ground, as well as no veteran trees and standing/fallen deadwood.

5.1.3 Developed Land; Sealed Surface

In the UKHab classification system, developed land; sealed surface includes habitats classified to Level 4 and Level 5 of the UKHab classification system. These include developed land; sealed surface (Level 4), buildings (Level 5) and other developed land (Level 5).

Therefore, developed land; sealed surface habitat comprises all hard standing on site. As they are sealed by impervious materials.

HCA

Habitat condition for developed land; sealed surface is auto populated as 'N/A - Other' in the Statutory Biodiversity Metric.

5.1.4 Non-cereal Crops

In the UKHab classification system 'non-cereal crops' habitat (NCC) comprises habitats classified to Level 3 of the UKHab hierarchy. These include arable and horticulture (Level 3).

HCA

Habitat condition for non-cereal crops is auto populated as 'Condition Assessment N/A' in the Statutory Biodiversity Metric.

5.2 Baseline Hedgerow Biodiversity Units

The on-site biodiversity baseline hedgerows are presented in map form in Figure 2 and the calculation of baseline biodiversity units includes all hedgerows on site, recorded as follows:

Hedgerows:

- Species-rich Native Hedgerow with Trees – 0.53 km.

5.2.1 Species-rich Native Hedgerow with Trees

Species-rich native hedgerows with trees are located along the site boundaries. SRHT1 stretches from the southern western boundary to the north-eastern corner. SRHT2 sits along the northern boundary. The hedgerows have been classified under this habitat as it comprises a line of shrubs at least 20 metres in length and less than or equal to 2 metres in height from the ground with scattered mature trees present. The hedgerows also comprise more than 80% canopy cover of UK native or archaeophyte woody species. The hedgerows qualify as species-rich as it contains more than or equal to 5 UK native or archaeophyte woody species.

HCA (Section 10.2.1)

Species-rich native hedgerow with trees (SRHT1) was set as 'Moderate' condition as they fails four attributes but only one functional group (E1 and E2).

Species-rich native hedgerow with trees (SRHT2) was set as 'Poor' condition as they fail both attributes in more than one functional group (C1, C2, E1 and E2).

5.3 Post-Intervention Biodiversity Units

5.3.1 Habitat Creation

The following sections provide information on how the habitat condition and the strategic significance have been scored for habitats to be created on site. The habitat distinctiveness for each habitat is auto-populated in the Statutory Biodiversity Metric (DEFRA, 2025).

Other Neutral Grassland

The proposed other neutral grassland areas will total approximately 0.581 ha and comprise a general dry meadow mix. The following species would be sown:

- Betony (*Betonica officinalis*).
- Bladder campion (*Silene vulgaris*).
- Bulbous buttercup (*Ranunculus bulbosus*).
- Common bent (*Agrostis capillaris*).
- Common knapweed (*Centaurea nigra*).
- Common sorrel (*Rumex acetosa*).
- Cowslip (*Primula veris*).
- Crested dog's-tail (*Cynosurus cristatus*).
- Lady's bedstraw (*Galium verum*).
- Meadow buttercup (*Ranunculus acris*).
- Meadow crane's-bill (*Geranium pratense*).
- Oxeye daisy (*Leucanthemum vulgare*).
- Red fescue (*Festuca rubra*).
- Ribwort plantain (*Plantago lanceolata*).
- Salad burnet (*Poterium sanguisorba* ssp. *sanguisorba*).
- Selfheal (*Prunella vulgaris*).
- Smaller cat's-tail (*Phleum bertolonii*).
- Smooth-stalked meadow-grass (*Poa pratensis*).
- Wild carrot (*Daucus carota*).
- Yarrow (*Achillea millefolium*).

The habitat distinctiveness is auto populated by the Biodiversity Metric as 'medium' distinctiveness. The habitat condition has been assessed as 'moderate' as the proposed other neutral grassland will be able to realistically pass at least five of the six condition criteria but likely to fail essential criterion F for non-acid grassland types provided the management and monitoring recommendations have been followed.

The strategic significance for 0.0387 ha of the other neutral grassland was set as 'low' i.e., 'Area/compensation not in local strategy / no local strategy'. This is because this area onsite is not designated within any strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

The strategic significance for 0.4151 ha of other neutral grassland was set as 'medium' i.e., 'Location ecologically desirable but not in local strategy'. This is because this area onsite is designated within a semi-strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

The strategic significance for 0.1272 ha of other neutral grassland was set as 'high' i.e., 'Formally identified in local strategy'. This is because this area onsite is designated within a strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

Sustainable Drainage System

The proposed sustainable drainage system waterbodies on site will act to reduce flooding and improve water quality. This would total approximately 0.143 ha. The following planting will be incorporated:

- Planting of marginal aquatic species and oxygenators such as yellow flag iris (*Iris pseudacorus*), water plantain (*Alisma plantago-aquatica*), bog bean (*Menyanthes trifoliata*), marsh marigold (*Caltha palustris*), water forget-me-not (*Myosotis scorpioides*), water mint (*Mentha aquatica*) and brooklime (*Veronica beccabunga*).
- Areas of grassland around the circumference of the pond could be seeded with a wildflower mix suitable for the geology of the site such as Meadow Mixture for Wetlands EM8. Which would include (but not limited to) betony (*Stachys officinalis*), common bent-grass (*Agrostis capillaris*), common knapweed (*Centaurea nigra*), common sorrel (*Rumex acetosa*), Cowslip (*Primula veris*), crested dog's-tail (*Cynosurus cristatus*), great burnet (*Sanguisorba officinalis*), lady's bedstraw (*Galium verum*), meadow buttercup, meadowsweet (*Filipendula ulmaria*), ragged robin (*Silene flos-cuculi*), and wild angelica (*Angelica sylvestris*).

The habitat distinctiveness is auto populated by the Biodiversity Metric as 'low' distinctiveness. The habitat condition has been assessed as 'good', provided the above management and monitoring measures are carried out, the Sustainable Drainage System habitat will pass five of the five condition criteria including the essential criterion C.

The strategic significance for 0.1341 ha of sustainable drainage system was set as 'medium' i.e., 'Location ecologically desirable but not in local strategy'. This is because this area onsite is designated within a semi-strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

The strategic significance for 0.0089 ha of sustainable drainage system was set as 'high' i.e., 'Formally identified in local strategy'. This is because this area onsite is designated within a strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

Tree Planting (Individual Trees - Urban Trees)

One hundred and twenty-eight (128) individual trees will be planted on site, with a Root Protection Area totalling overall 0.5212 ha. The broad habitat type 'Individual trees' has been selected for all proposed individual trees as they will be larger than 7.5 cm in DBH when target condition has been reached. All proposed individual trees on site have been classified as 'urban' trees rather than 'rural' trees as they will occur within the boundaries of the proposed and comprise planted trees which are located within close proximity to hard standing paths and roads. Planted trees will include (but not be limited) to the following:

- Common beech (*Fagus sylvatica*).
- Pedunculate oak (*Quercus robur*).
- European hornbeam (*Carpinus betulus*).
- Field maple (*Acer campestre*).
- Guelder-rose (*Viburnum opulus*).
- Holly (*Ilex aquifolium*).
- Rowan (*Sorbus aucuparia*).
- Spindle (*Euonymus europaeus*).
- Silver birch (*Betula pendula*).
- Wild cherry (*Prunus avium*).

- Wild service tree (*Sorbus torminalis*).
- White willow (*Salix alba*).
- Whitebeam (*Sorbus aria*).

The habitat distinctiveness is auto populated by the Biodiversity Metric as 'medium' distinctiveness. The habitat condition has been assessed as 'poor' condition as trees will likely only pass two of the five criteria.

The strategic significance for 0.0285 ha of the individual trees - urban was set as 'low' i.e., 'Area/compensation not in local strategy / no local strategy'. This is because this area onsite is not designated within any strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

The strategic significance for 0.4153 ha of individual trees - urban was set as 'medium' i.e., 'Location ecologically desirable but not in local strategy'. This is because this area onsite is designated within a semi-strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

The strategic significance for 0.0774 ha of individual trees - urban was set as 'high' i.e., 'Formally identified in local strategy'. This is because this area onsite is designated within a strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

Developed Land; Sealed Surface

Buildings and Hardstanding

The construction of the proposed new roads, parking, properties and structures have been classified as developed land; sealed surface because the soil surface will be sealed with impervious materials. This would total approximately 0.9713 ha.

The habitat distinctiveness is auto populated by the Biodiversity Metric as 'very low' distinctiveness. The habitat condition is auto populated by the Biodiversity Metric as 'N/A'.

The strategic significance for the habitat was set as 'low' i.e., 'Area/compensation not in local strategy / no local strategy'. This is because developed land; sealed surface is not ecologically valued within the Statutory Metric (DEFRA, 2025).

Vegetated Garden

All garden areas within the curtilage of a proposed private property have been classified as vegetated garden. This would total approximately 0.7463 ha.

The habitat distinctiveness is auto populated by the Biodiversity Metric as 'low' distinctiveness. The habitat condition is auto populated by the Biodiversity Metric as 'N/A'.

The strategic significance for the habitat was set as 'low' i.e., 'Area/compensation not in local strategy / no local strategy'. This is because developed land; sealed surface is not ecologically desired within the Statutory Metric (DEFRA, 2025).

Modified Grassland

Proposed grass verges will be subject to management which will be more intense and mown more regularly. It is considered that once target condition has been reached the sward will most closely match the habitat description of modified grassland. This would total approximately 0.1903 ha.

The habitat distinctiveness is auto populated by the Biodiversity Metric as 'low' distinctiveness. The habitat condition has been assessed as 'poor' as the new grassland will be sown with a native wildflower mix suitable for regular mowing.

The strategic significance for 0.0084 ha of the modified grassland was set as 'low' i.e., 'Area/compensation not in local strategy / no local strategy'. This is because this area onsite is not designated within any strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

The strategic significance for 0.155 ha of modified grassland was set as 'medium' i.e., 'Location ecologically desirable but not in local strategy'. This is because this area onsite is designated within a semi-strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

The strategic significance for 0.0269 ha of modified grassland was set as 'high' i.e., 'Formally identified in local strategy'. This is because this area onsite is designated within a strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

Other Woodland; Broadleaved

Woodland to be created as part of the proposals on-site has been classified as 'other woodland; broadleaved' as this is likely to be the most realistic woodland type to be created once target condition has been reached, totalling 0.0747 ha. Proposed larger tree and understorey plant species could include the following:

- Pedunculate oak.
- European hornbeam.
- Beech.
- Rowan.
- Wild cherry.
- Field maple.
- Dog-rose (*Rosa canina*).
- Guelder-rose.
- Hawthorn.
- Hazel.

The habitat distinctiveness is auto populated by the Biodiversity Metric as 'medium' distinctiveness. The habitat condition has been assessed as 'poor' condition as the proposed woodland planting is likely to achieve a total score less than 26 of the required criteria.

The strategic significance for 0.0427 ha of other woodland; broadleaved was set as 'medium' i.e., 'Location ecologically desirable but not in local strategy'. This is because this area onsite is designated within a semi-strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

The strategic significance for 0.032 ha of other woodland; broadleaved was set as 'high' i.e., 'Formally identified in local strategy'. This is because this area onsite is designated within a strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

5.3.2 Habitat Enhancements

The following sections provide information on how the broad habitat type/condition of habitats listed below would change as a result of enhancing the retained areas on site.

Other woodland; mixed (Poor Condition) → Other woodland; mixed (Moderate Condition)

The existing other woodland; mixed woodland scores 23 condition points, which qualifies the woodland as 'poor' condition. In order to enhance this parcel of woodland to 'moderate' condition (0.2741 ha) the following management techniques could be implemented:

- Removal of diseased trees.
- Open areas created in the woodland to allow sunlight to reach the woodland ground layer and supplementary planting of woodland seeds and bulbs appropriate for the soil type.
- Supplementary understorey planting of species such as hawthorn, blackthorn, guelder rose, spindle and holly.
- Fertilisers, pesticides, and herbicides will be avoided.
- Any litter or evidence of fly tipping could be removed.

Provided the above measures are carried out; the other woodland; mixed woodland will score above 26 criteria points and therefore qualify as 'moderate' condition.

The habitat distinctiveness will be unchanged.

The strategic significance for other woodland; mixed was set as 'high' i.e., 'Formally identified in local strategy'. This is because this area onsite is designated within a strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

5.3.3 Hedgerow Creation

Species-Rich Native Hedgerow with Trees

The proposed species-rich native hedgerows with trees will total a length of 0.074 km will be planted outside of private gardens and will be subject to control through a management company. These have been classified under this habitat as they comprise a line of shrubs at least 20 metres in length and less than or equal to 2 metres in height from the ground. The hedgerow will also comprise more than 80% canopy cover of UK native or archaeophyte woody species with scattered mature trees present. This hedgerow qualifies as species-rich as it contains more than or equal to 5 UK native or archaeophyte woody species. Species to be planted include:

Hedgerow

- Common beech.
- Dog-rose.
- Field maple.
- Guelder-rose.
- Hawthorn.
- Hazel.

Specimen Standard Trees

- Hornbeam.
- Small-leaved lime (*Tilia cordata*).
- Silver birch.
- Field maple.
- Wild cherry.

The habitat distinctiveness is auto populated by the Biodiversity Metric as 'high' distinctiveness. The habitat condition has been assessed as 'poor' condition as the hedgerow will likely achieve no more than 5 failures in total but could fail both attributes in more than one functional group.

The strategic significance for 0.021 km of species-rich native hedgerow with trees was set as 'medium' i.e., 'Location ecologically desirable but not in local strategy'. This is because this area onsite is designated within a semi-strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

The strategic significance for 0.053 km of species-rich native hedgerow with trees was set as 'high' i.e., 'Formally identified in local strategy'. This is because this area onsite is designated within a strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

Native hedgerow

A network of formal single-species hedgerows (0.311 km) will be planted outside of private gardens and will be subject to control through a management company. This habitat has been classified as native hedgerows as they will comprise more than 80% canopy cover of UK native or archaeophyte woody species.

The habitat distinctiveness is auto populated by the Biodiversity Metric as 'low' distinctiveness. The habitat condition has been assessed as 'moderate' condition as the hedgerow will likely achieve no more than 4 failures overall and not fail any attributes in more than one functional group of condition criteria.

The strategic significance for 0.014 km of native hedgerow was set as 'low' i.e., 'Area/compensation not in local strategy / no local strategy'. This is because this area onsite is not designated within any strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

The strategic significance for 0.244 km of native hedgerow was set as 'medium' i.e., 'Location ecologically desirable but not in local strategy'. This is because this area onsite is designated within a semi-strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

The strategic significance for 0.052 km of native hedgerow was set as 'high' i.e., 'Formally identified in local strategy'. This is because this area onsite is designated within a strategic zone on Herts Ecological Network mapping (North Herts Council, 2025).

5.4 Baseline Biodiversity Units Calculation

Table 3 below provides the baseline biodiversity units for the site.

Table 3. Baseline Biodiversity Units

Site Habitat Baseline	Area (ha)	Habitat Distinctiveness	Habitat Condition	Strategic Significance	Suggested Action to Address Habitat Losses	Baseline Biodiversity Units	Area Retained	Area Enhanced	Baseline Units Retained	Baseline Units Enhanced	Area Lost	Units Lost
Non-cereal Crops	2.6615	Low	N/A	Low	Same distinctiveness or better habitat required	5.32	0	0	0.00	0.00	2.66	5.32
Modified Grassland	0.0261	Low	Poor	Low	Same distinctiveness or better habitat required	0.05	0	0	0.00	0.00	0.03	0.05
Developed Land; Sealed Surface	0.0014	Very low	N/A	V.Low	Compensation Not Required	0.00	0	0	0.00	0.00	0.00	0.00
Other Woodland; Mixed	0.0177	Medium	Poor	Medium	Same broad habitat or a higher distinctiveness habitat required	0.07	0	0	0.00	0.00	0.02	0.07
Other Woodland; Mixed	0.2741	Medium	Poor	Medium	Same broad habitat or a higher distinctiveness habitat required	1.10	0	0.2741	0.00	1.10	0.00	0.00
Total Habitat Baseline Units						6.54	0.00	0.27	0.00	1.10	2.71	5.45

Site Hedgerow Baseline	Length (km)	Habitat Distinctiveness	Habitat Condition	Strategic Significance	Suggested Action to Address Habitat Losses	Baseline Biodiversity Units	Length Retained	Length Enhanced	Baseline Biodiversity Units Retained	Units Enhanced	Length Lost	Units Lost
Species-rich Native Hedgerow with Trees	0.417	High	Moderate	Low	Like for like or better	5.00	0.408	0	4.90	0.00	0.01	0.11
Species-rich Native Hedgerow with Trees	0.112	High	Poor	Low	Like for like or better	0.67	0.108	0	0.65	0.00	0.00	0.02
Total Hedge Baseline Units						5.68	0.52	0	5.54	0	0.01	0.13

5.5 Post-Intervention Biodiversity Units Calculation

Table 4 below provides the post-intervention biodiversity units for created habitats on site.

Table 4. Biodiversity Units for Created Habitats

Proposed Habitat	Area (ha)	Habitat Distinctiveness	Habitat Condition	Strategic Significance	Habitat Units Delivered
Modified grassland	0.0084	Low	Poor	Low	0.02
Modified grassland	0.0269	Low	Poor	High	0.06
Modified grassland	0.155	Low	Poor	Medium	0.33
Other neutral grassland	0.0387	Medium	Moderate	Low	0.26
Other neutral grassland	0.1272	Medium	Moderate	High	0.98
Other neutral grassland	0.4151	Medium	Moderate	Medium	3.06
Developed land; sealed surface	0.9713	V. Low	N/A Other	Low	0.00
Sustainable drainage system	0.0089	Low	Good	High	0.03
Sustainable drainage system	0.1341	Low	Good	Medium	0.50
Vegetated garden	0.7463	Low	Condition Assessment N/A	Low	1.44
Other woodland; broadleaved	0.0427	Medium	Poor	Medium	0.16
Other woodland; broadleaved	0.032	Medium	Poor	High	0.12
Urban tree	0.0774	Medium	Poor	High	0.25
Urban tree	0.4153	Medium	Poor	Medium	1.28
Urban tree	0.0285	Medium	Poor	Low	0.08
Total Habitat Post-Intervention Units					8.56

Proposed Hedgerow	Length (km)	Habitat Distinctiveness	Habitat Condition	Strategic Significance	Hedgerow Units Delivered
Native hedgerow	0.014	Low	Moderate	Low	0.05
Native hedgerow	0.052	Low	Moderate	High	0.20
Native hedgerow	0.244	Low	Moderate	Medium	0.90
Species-rich native hedgerow with trees	0.053	High	Poor	High	0.35
Species-rich native hedgerow with trees	0.021	High	Poor	Medium	0.13
Total Hedgerow Post-Intervention Units					1.63

Table 5 below provides the post-intervention biodiversity units for enhanced habitats on site.

Table 5. Biodiversity Units for Enhanced Habitats

Baseline Habitat Type	Area (ha)	Proposed Habitat	Habitat Distinctiveness Change	Habitat Condition Change	Strategic Significance	Units Delivered
Woodland and forest – Other woodland; mixed	0.2741	Woodland and forest – Other woodland; mixed	Medium to Medium	Poor to Moderate	High	2.14
Total Habitat Post-Intervention Units						2.14

5.6 Conclusions & Recommendations

5.6.1 Mitigation Hierarchy

Priority Habitats and Woodland

Hedgerows, which are a Priority Habitat, form the northern, southern, and eastern boundaries of the site. The following avoidance and mitigation measures relating to Priority Habitats and woodland are recommended:

- Hedgerows and woodland on site should be retained, protected, and enhanced, where possible.
- Access to the site should be from the pre-existing gate to avoid the loss of hedgerow habitats. However, if hedgerow habitats are lost, this can be mitigated through the creation of new and enhancement of existing hedgerow.
- Hedges should be trimmed on a two- to three-year rotation. This management will maintain a winter food source for winter migrants recorded in the data search, such as the redwing and fieldfare. The hedges should also be managed to form an 'A' profile. This will provide benefits to a range of wildlife and enhance the hedgerow for hazel dormice.
- Buffer zones should be created adjacent to the hedgerows and woodland on site, comprising areas of grassland, managed to increase its floristic diversity. The buffer zones will provide protection to the hedgerows and the wildlife they could support, including butterflies, nesting birds, reptiles, foraging/commuting bats, and the hazel dormouse. There should be no direct access from the development into the buffer. The buffer should only be accessed for maintenance. Materials should not be stored in or near the buffer.
- Any planting of shrubs and trees should include native species of local provenance, such as English oak, blackthorn, and hawthorn.
- A sensitive lighting plan should be adopted, to ensure that outside lighting does not adversely affect adjacent habitats and wildlife, particularly bats when foraging and commuting.

Providing the recommendations given above are adhered to, Priority Habitats should not be negatively impacted upon by the development proposals.

It is recommended a CEMP (Biodiversity), enforced via an appropriate planning condition, is prepared for the site. The CEMP (Biodiversity) should include the following:

- A map showing the locations of all ecological features.
- A risk assessment of the potentially damaging construction activities.
- Practical measures to avoid and reduce impacts during construction.
- Location and timing of works to avoid harm to biodiversity features, namely the hedgerows and woodland.
- Responsible persons and lines of communications.
- Use of protective fences, exclusion barriers, and warning signs.

It is also recommended a BPES, enforced via an appropriate planning condition, is prepared, detailing how the hedgerow Priority Habitats and woodland, will be protected post-construction and how the enhancements will be implemented and managed in the long term.

Trees

Native trees should be retained, where possible and any trees lost as a result of the proposed development, should be replaced with equivalent numbers of native species.

To prevent damage to retained trees during development, a buffer zone should be put in place to protect the rooting area (Root Protection Area, which is calculated in accordance with British Standard 5837, 'Trees in Relation to Construction'), in which no construction activities should be permitted (BSI, 2012).

Reptiles, Stag Beetles and Hedgehogs

Habitat for reptiles, hedgehogs and stag beetles, including woodland and hedgerow should be retained on site. An ECoW should be present on site during any site clearance activities, which are likely to involve the removal/disturbance of any vegetation. Any reptiles, stag beetles or hedgehogs found, should be allowed to move away into adjacent retained habitats unharmed, of their own accord.

Nesting Birds

Nesting bird habitat within the woodland and hedgerow on site should be retained. Any removal of vegetation should be undertaken outside of the bird breeding season (March to August inclusive) to avoid destruction/disturbance of nesting birds. However, if works which are likely to damage bird nests need to be carried out during the nesting period, there is potential that nesting birds could be harmed and disturbed. To ensure legal compliance, a check should be undertaken by an ecologist within 48 hours of works commencing, to confirm the presence/absence of nest sites. If nest sites are identified, works to that feature should be delayed until the nest site becomes inactive (species specific, but approximately 4-6 weeks maximum).

Bats

Recommendations to minimise the potential impacts of artificial external lighting on bat activity, are provided below (Bat Conservation Trust, 2023):

- Avoid prolonged use of outside lighting during the period dusk to dawn, particularly during the bat active season (April to October).
- Security lighting should be on a motion sensor and short duration timer (1 minute).
- Lighting that is required for security or safety reasons, should use a lamp of no greater than 2000 lumens (150 Watts) and should comprise sensor activated lamps.
- Red light bulbs should be used, where possible.
- LED luminaires with a warm white spectrum (<2700 Kelvin) are the preferred option and should be used where possible. Luminaires should feature peak wavelengths higher than 550 nm to minimise disturbance to bats. All luminaires should lack UV elements, metal halide and fluorescent sources should not be used.
- Lighting should be directed to where it is needed with minimal light spillage. This can be achieved by limiting the height of the lighting columns and by using as steep a downward angle as possible and/or a specialist bollard that directs the light below the horizontal plane (<90°).
- Internal luminaires should be recessed where installed in proximity to windows to reduce glare and light spill.

- Waymarking inground markers with a low output and with cowls should be used to delineate path edges.
- Artificial lighting should not directly illuminate any potential bat roosting features or habitats of value to foraging bats, i.e., hedgerows and woodland.

Brown Hares

As brown hares may forage within the survey area, any holes/trenches created as part of the construction works, should be closed at night or a mammal ladder provided to enable mammals a means of escape.

5.6.2 BNG Assessment

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	4.16
	<i>Hedgerow units</i>	1.50
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	63.61%
	<i>Hedgerow units</i>	26.43%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

Habitats

Under current proposals, other neutral grassland, modified grassland, a sustainable drainage system, the planting of one hundred and twenty-eight (128) individual trees and the enhancement of existing other woodland; mixed at 'poor' condition to other woodland; mixed at 'moderate' condition (Figure 5) will result in a biodiversity net gain of +63.61% (+4.16 units).

Therefore, a biodiversity net gain for broad habitats and compliance with trading rules (i.e., habitats proposed are like-for-like or better) can be achieved under the current proposals.

Hedgerows

Under current proposals, most species-rich hedgerows with trees on site will be retained except for two locations for proposed access routes but not enhanced. A further total of 0.074 km of species-rich native hedgerows with trees and a total of 0.309 of native hedgerow will also be planted which will result in a biodiversity net gain of +26.43% (+1.50 units).

Therefore, a biodiversity net gain for hedgerows and compliance with trading rules (i.e., hedgerows proposed are like-for-like or better) can be achieved under the current proposals.

5.6.3 Further Ecological Enhancements

The further ecological enhancements for the site recommended in aLyne Ecology Ltd.'s PEA & GLTA report (aLyne Ecology, 2025) could be implemented, where possible.

Bat Boxes

The following bat boxes could be installed on site.

- Improved Cavity Bat Box.
- Improved Crevices Bat Box.

The boxes will be installed on suitable trees, at least 3 m above ground, facing a southerly direction.

Bird Boxes

The following bird boxes, suitable for a range of bird species known to be present on site could be installed on suitable buildings and trees.

- Vivara Pro Barcelona WoodStone Open Nest Boxes.
- Vivara Pro Seville 32mm WoodStone Nest Boxes.

In order to minimise disturbance and effects of adverse weather, the boxes should be positioned 3 to 4 m high, facing between north and east. Ideally, the nest boxes should be installed in the autumn, ready for the nesting bird season (March to August, inclusive).

Invertebrate and Hedgehog Refugia

A National Trust Apex Insect House could be installed on a suitable tree adjacent to a grass verge. The National Trust Apex Insect Houses.

A Hedgehog House could be installed on site.

A Frogilo Frog & Toad House could be installed on site.

6. Outline Habitat Management and Monitoring Plan (HMMP)

The management and monitoring of habitats to be retained, created, and enhanced is crucial to achieving biodiversity net gain. An outline HMMP is provided below which details the measures required for the successful creation and establishment of habitats and hedgerows to be created and enhanced as described in Section 5.3. The management and monitoring methods in this outline HMMP could be subject to changes following planning permission being granted. The full HMMP and companion document which are likely to be requested as a pre-commencement planning condition should be referred to for ongoing management and monitoring of the habitats to be retained, created and enhanced on site.

Management and monitoring will be the responsibility of the landscape contractor and a suitably qualified ecologist, appointed by the developer.

Biodiversity Enhancement	Management and Monitoring		
	Years 1-3	Years 5, 7 & 10	Every Subsequent 5 Years
Other Neutral Grassland	Appointed landscape contractors to carry out management in years 1-3 to include the following. Ground Preparation Prepare seed by removing weeds using repeated cultivation. Then plough or dig to bury the surface vegetation, harrow or rake to produce a medium tilth, and roll, or tread, to produce a firm surface. Areas within the 30m badger exclusion zone should adhere to the levels of activity type restrictions and not use hand tools or dig within 10m of the active sett (aLyne Ecology Ltd., 2025). Sowing Seed to be sown in autumn to allow species such as yellow rattle to germinate. To be applied by machine	Remove any undesirable species including fast-growing grass species or emerging scrub, Re-seed any bare ground areas. Management within the badger exclusion area should note the activity types and restrict management pending the proximity to the badger sett. No hand tools should be used within 10m of the badger sett (aLyne Ecology Ltd., 2025). Suitably qualified Ecologist to monitor habitat condition.	Remove any undesirable species including fast-growing grass species or emerging scrub, Re-seed any bare ground areas. Management within the badger exclusion area should note the activity types and restrict management pending the proximity to the badger sett. No hand tools should be used within 10m of the badger sett (aLyne Ecology Ltd., 2025). Suitably qualified Ecologist to monitor habitat condition.

Biodiversity Enhancement	Management and Monitoring		
	Years 1-3	Years 5, 7 & 10	Every Subsequent 5 Years
	or hand. To get an even distribution divide the seed into two or more parts and sow in overlapping sections. Firm in with a roll, or by treading, to give good soil/seed contact. First Year Management Most sown meadow species are perennial and slow to establish. The initial flush of annual weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. First cut should be in following spring, and arisings removed and composted. The young meadow can then be kept short by mowing through to the end of March of the following year. Dig out any residual perennial weeds such as docks. Management within the badger exclusion area should note the activity types and restrict management pending the proximity to the badger sett. No hand tools should be used within 10m of the badger sett (aLyne Ecology Ltd., 2025).		

Biodiversity Enhancement	Management and Monitoring		
	Years 1-3	Years 5, 7 & 10	Every Subsequent 5 Years
	Water to aid establishment as and when required. Second and Third Years To be managed via traditional meadow management comprising an annual main summer hay cut in combination with autumn and possibly spring mowing. The grassland should not be cut from spring through to late July/August to allow wildflowers to set seed. After flowering in July or August take a 'hay cut': cut back with a scythe, petrol strimmer or tractor mower to c50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow or graze the re-growth through to late autumn/winter to c 50mm and again in spring if needed. Management within the badger exclusion area should note the activity types and restrict management pending the proximity to the badger sett. No hand tools should be used		

Biodiversity Enhancement	Management and Monitoring		
	Years 1-3	Years 5, 7 & 10	Every Subsequent 5 Years
	within 10m of the badger sett (aLyne Ecology Ltd., 2025). Re-seed any bare ground areas. Suitably qualified Ecologist to monitor habitat condition.		
Modified Grassland	Appointed landscape contractors to prepare ground for seeding and seed with an amenity grassland seed mix. Remove any undesirable species including fast-growing grass species or emerging scrub. Re-seed any bare ground areas. Suitably qualified Ecologist to monitor habitat condition.	Remove any undesirable species including fast-growing grass species or emerging scrub, Re-seed any bare ground areas. Management within the badger exclusion area should note the activity types and restrict management pending the proximity to the badger sett. No hand tools should be used within 10m of the badger sett (aLyne Ecology Ltd., 2025). Suitably qualified Ecologist to monitor habitat condition.	Remove any undesirable species including fast-growing grass species or emerging scrub, Re-seed any bare ground areas. Management within the badger exclusion area should note the activity types and restrict management pending the proximity to the badger sett. No hand tools should be used within 10m of the badger sett (aLyne Ecology Ltd., 2025). Suitably qualified Ecologist to monitor habitat condition.
Tree and Woodland Planting	Tree planting to be carried out by appointed landscape contractors in first year from October to February. Trees will be well-watered to aid establishment, for at least one year following planting. In the initial maintenance period (the first three years), the planting area will be kept	All established trees will be checked by appointed landscape contractors for damage/disease and replaced on a like-for-like basis. Management within the badger exclusion area should note the activity types and restrict management pending the proximity	All established trees will be checked by appointed landscape contractors for damage/disease and replaced on a like-for-like basis. Management within the badger exclusion area should note the activity types and restrict management pending the proximity

Biodiversity Enhancement	Management and Monitoring		
	Years 1-3	Years 5, 7 & 10	Every Subsequent 5 Years
	weed-free using herbicides approved by Natural England, or by hand. All new trees will be checked annually for damage/disease. At the end of the first growing season, the landscape contractor will mark all dead, dying, and diseased whips, which will be replaced during the following planting season. Dead/dying/diseased specimens will be replaced each year. Management within the badger exclusion area should note the activity types and restrict management pending the proximity to the badger sett. No hand tools should be used within 10m of the badger sett (aLyne Ecology Ltd., 2025). Protective fencing/guards will be checked bimonthly for damage/adjustments. Hedgerow plants will be pruned annually at the end of the growing season (winter months, avoiding the bird breeding season), to facilitate healthy and bushy growth. Suitably qualified Ecologist to monitor habitat condition.	to the badger sett. No hand tools should be used within 10m of the badger sett (aLyne Ecology Ltd., 2025). Suitably qualified Ecologist to monitor habitat condition.	to the badger sett. No hand tools should be used within 10m of the badger sett (aLyne Ecology Ltd., 2025). Suitably qualified Ecologist to monitor habitat condition.

Biodiversity Enhancement	Management and Monitoring		
	Years 1-3	Years 5, 7 & 10	Every Subsequent 5 Years
Hedgerow Planting	Hedgerow planting to be carried out by appointed landscape contractors in first year from October to February. Whips will be well-watered to aid establishment, for at least one year following planting. In the initial maintenance period (the first three years), the planting area will be kept weed-free using herbicides approved by Natural England, or by hand. All new whips will be checked annually for damage/disease. At the end of the first growing season, the landscape contractor will mark all dead, dying, and diseased whips, which will be replaced during the following planting season. Dead/dying/diseased specimens will be replaced each year. Protective fencing/guards will be checked bimonthly for damage/adjustments. Hedgerow plants will be pruned annually at the end of the growing season (winter months, avoiding the bird breeding season), to facilitate healthy and bushy growth. Suitably qualified Ecologist to monitor habitat condition.	All established hedgerow plants will be checked by appointed landscape contractors for damage/disease and replaced on a like-for-like basis. Suitably qualified Ecologist to monitor habitat condition.	All established hedgerow plants will be checked by appointed landscape contractors for damage/disease and replaced on a like-for-like basis. Suitably qualified Ecologist to monitor habitat condition.

Biodiversity Enhancement	Management and Monitoring		
	Years 1-3	Years 5, 7 & 10	Every Subsequent 5 Years
Sustainable Drainage System	The Sustainable Drainage System should be planted with common reed (<i>Phragmites australis</i>) and reedmace (<i>Typha latifolia</i>). Management yearly in rotation in the autumn to no lower than 10 cm in height and removing the arisings to reduce the nutrient input into the soil and prevent fast-growing grass species from dominating. Fertilisers, pesticides, and herbicides could be avoided . Planting aquatic marginal and submerged vegetation. Banks will also be seeded with a suitable wetland mix by appointed landscape contractors. Plants will be checked regularly, particularly during the first growing	Management of dominance of reedmace and common reed will be checked by appointed landscape contractors for damage/disease and replaced on a like-for-like basis. The wetland wildflower mix will be check to ensure establishment has been achieved and any undesirable species including fast-growing grass species or emerging scrub will be removed. Areas of bare ground to be re-seeded. Suitably qualified Ecologist to monitor habitat condition.	Management of dominance of reedmace and common reed will be checked by appointed landscape contractors for damage/disease and replaced on a like-for-like basis. The wetland wildflower mix will be check to ensure establishment has been achieved and any undesirable species including fast-growing grass species or emerging scrub will be removed. Areas of bare ground to be re-seeded. Suitably qualified Ecologist to monitor habitat condition.

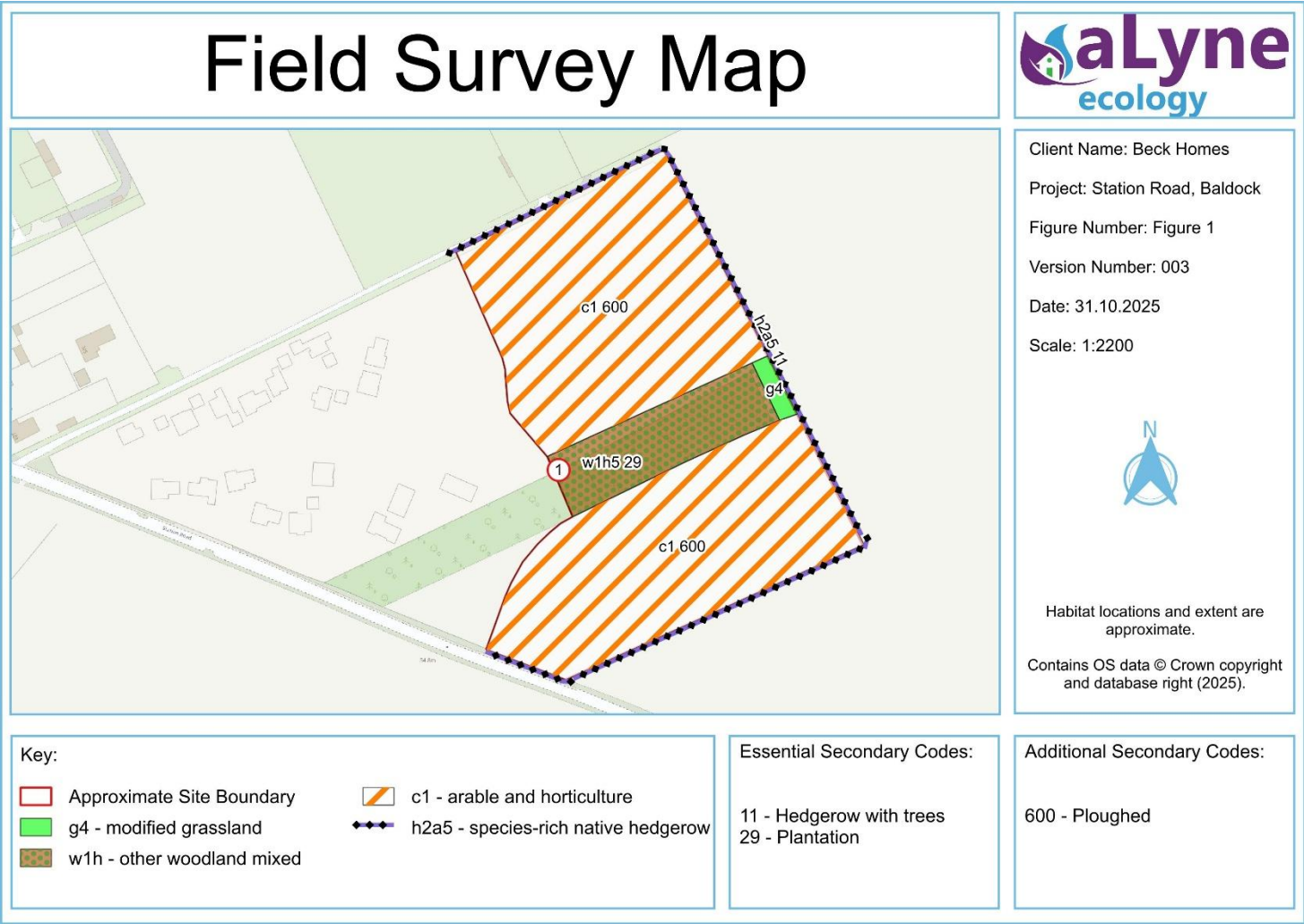
Biodiversity Enhancement	Management and Monitoring		
	Years 1-3	Years 5, 7 & 10	Every Subsequent 5 Years
	season, to replace any dead/dying/diseased specimens. Suitably qualified Ecologist to monitor habitat condition.		

7. References

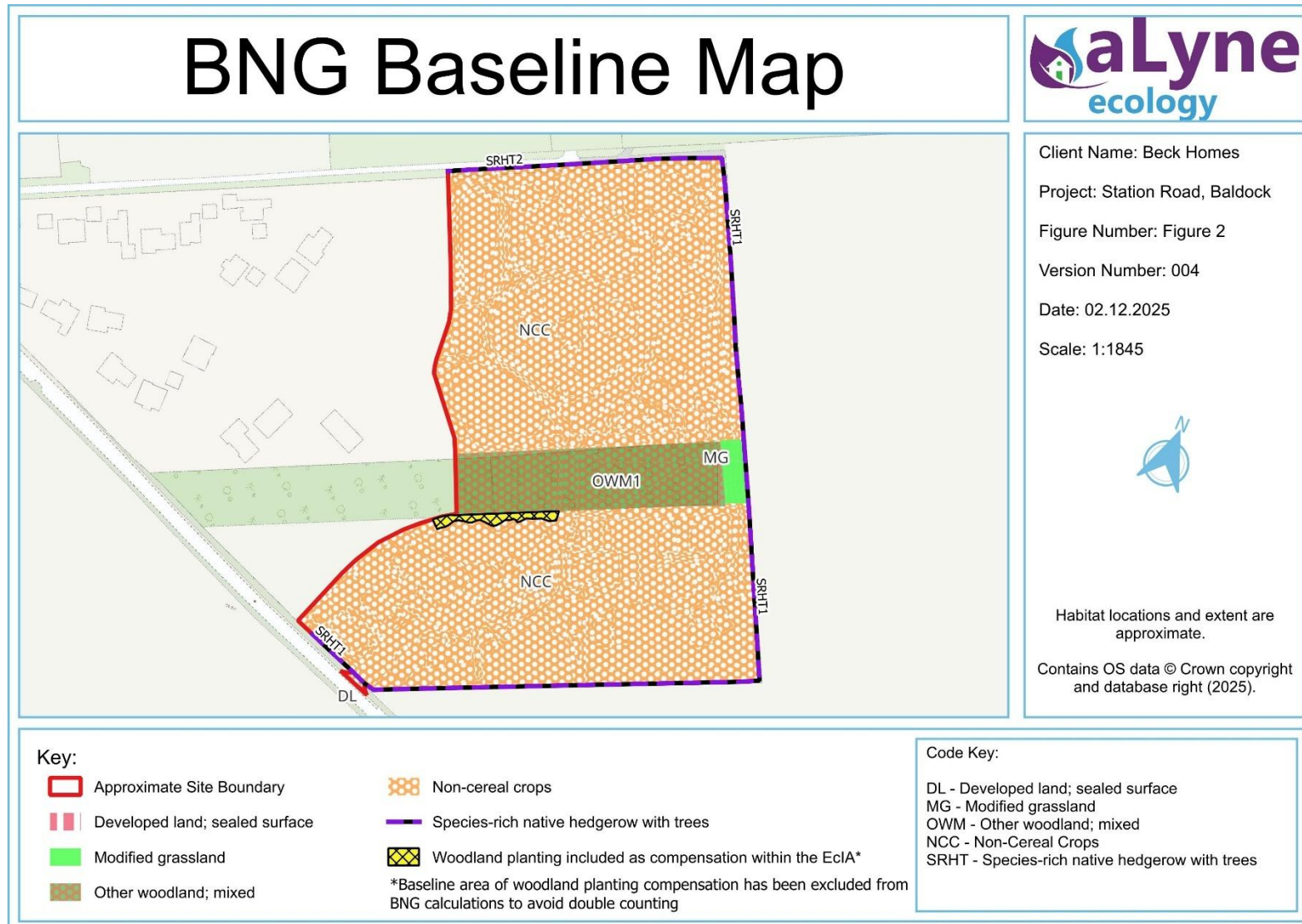
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8. Figures

8.1 Figure 1: Results of Field Survey



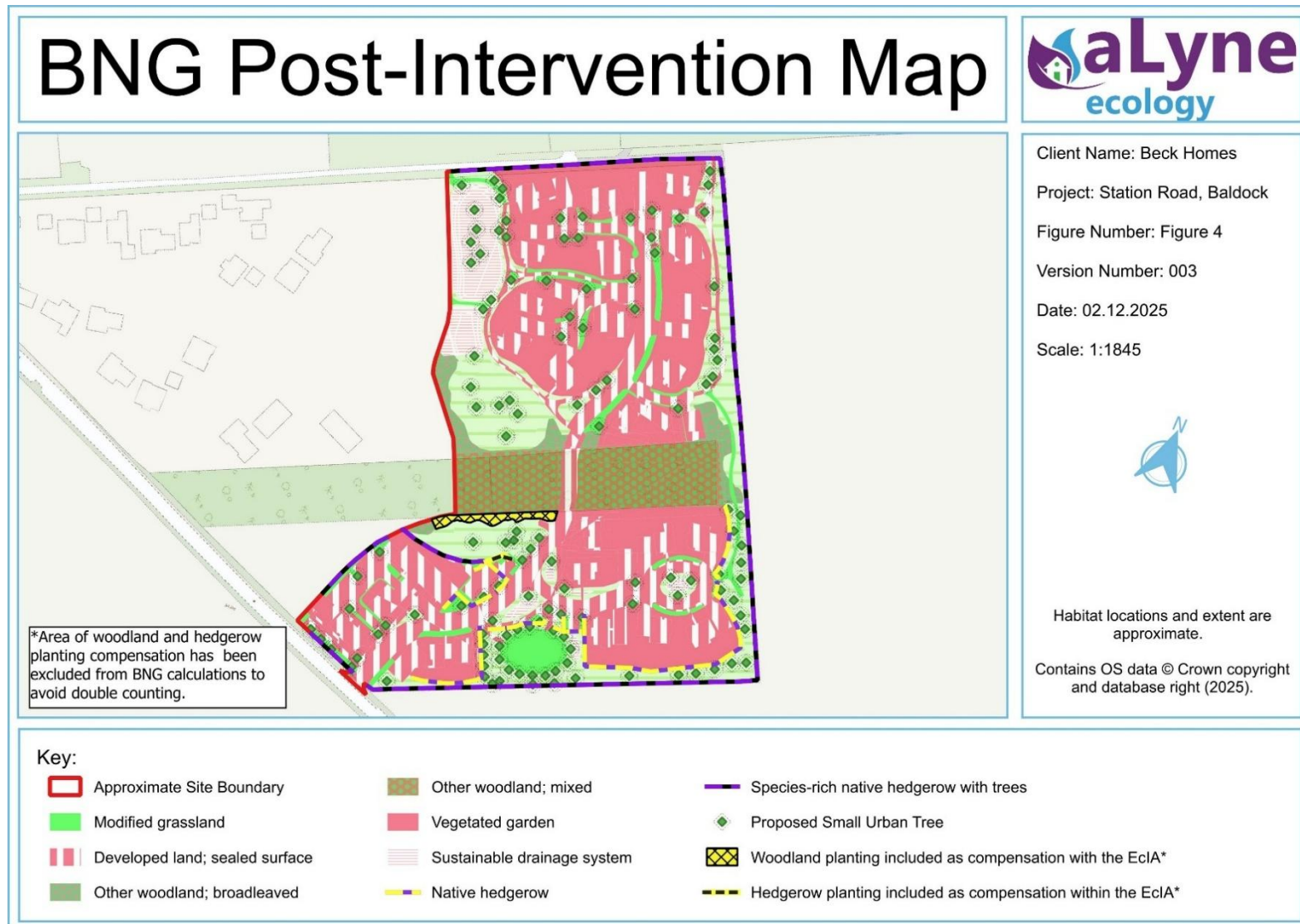
8.2 Figure 2: BNG Baseline Map



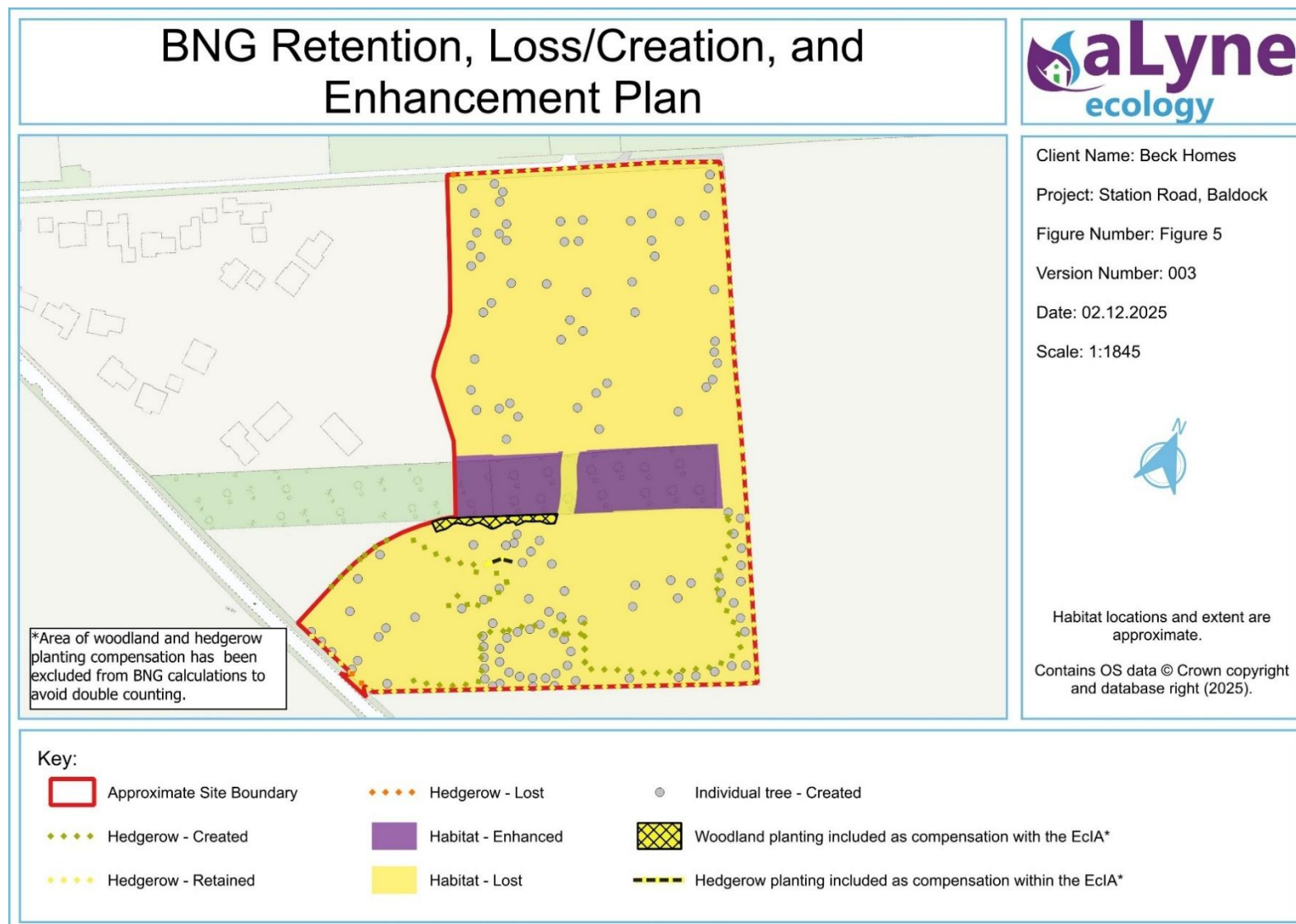
8.3 Figure 3: Proposed Site Plan



8.4 Figure 4: BNG Post-Intervention Map



8.5 Figure 5: BNG Retention, Loss/Creation, and Enhancement Plan



9. Appendix 1 – BNG

9.1 Introduction

9.1.1 What is Biodiversity Net Gain?

Biodiversity Net Gain is defined as: “*Development that leaves biodiversity in a better state than before, and an approach where developers works with local governments, wildlife groups, landowners and other stakeholders in order to support their priorities for nature conservation*” (Baker, Hoskin, & Butterworth, 2019). The UK’s Good Practice Principles for Biodiversity Net Gain provides a framework for development projects to show that they are following good practice (Baker, Hoskin, & Butterworth, 2019).

Biodiversity Net Gain has been described as a measurable target for development projects, where impacts on biodiversity are outweighed by a clear mitigation hierarchy approach to first avoid and then minimise impacts, including through restoration and/or compensation. Adhering to these Biodiversity Net Gain principles will help in underpinning good practice for achieving and sustaining Biodiversity Net Gain. Biodiversity compensation should be planned for a sustained net gain over at least the lifetime of the development (often 25-30 years), with the objective of Biodiversity Net Gain management continuing in the future.

Biodiversity Net Gain should be proportionate to the scale of the development and scale of biodiversity impact, fit in with the project’s lifespan and have the appropriate level of detail for the complexity of the Biodiversity Net Gain targets.

9.2 Legislation and Policy Drivers

For some time, the requirement to include ecological enhancements in development projects has been supported by the National Planning Policy Framework (HM Government, 2024) and the Natural Environment and Rural Communities (NERC) Act, 2006 (HM Government, 2006). Both place a requirement on Local Planning Authorities to thread ecological enhancement requirements through regional and local planning policy.

The forthcoming Environment Bill will make the implementation of Biodiversity Net Gain mandatory for development projects. Part 3(1) of Schedule 15 of the Environment Bill makes it clear that planning authorities will only approve a Biodiversity Net Gain plan if they are satisfied with the following:

1. The existing pre-development biodiversity value of the site is identified.
2. The proposed post-development biodiversity value of the site is as specified in the Biodiversity Net Gain plan.
3. That any required off-site Biodiversity Net Gain is formally registered and allocated and delivers sufficient gain.
4. That any biodiversity credits specified in the plan have been purchased.
5. Overall, the Biodiversity Net Gain objective has been met.

Local Planning Authorities will be required to prepare Local Nature Recovery Strategies (LNRS), which will provide the local framework for the delivery of Biodiversity Net Gain and inform the development planning process. In the meantime, Biodiversity Net Gain plans should be aligned to existing local plan biodiversity targets and Supplementary Planning documents.

9.3 Biodiversity Net Gain Principles

The following principles are taken from Biodiversity Net Gain. Good Practice Principles for Development (Baker, Hoskin, & Butterworth, 2019).

9.3.1 Principle 1 – Applying the Mitigation Hierarchy

Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.

9.3.2 Principle 2 – Avoid Losing Biodiversity that cannot be Offset by Gains Elsewhere

Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve No Net Loss or Net Gain.

9.3.3 Principle 3 – Be Inclusive and Equitable

Engage stakeholders early, and involve them in designing, implementing, monitoring, and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible and share the benefits fairly among stakeholders.

9.3.4 Principle 4 – Address Risks

Mitigate difficulty, uncertainty, and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.

9.3.5 Principle 5 – Make a Measurable Net Gain Contribution

Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.

9.3.6 Principle 6 – Achieve the Best Outcomes for Biodiversity

Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly justified choices when:

- Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses.
- Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation.
- Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional, and national levels.
- Enhancing existing or creating new habitat.
- Enhancing ecological connectivity by creating more bigger, better, and joined areas for biodiversity.

9.3.7 Principle 7 – Be Additional

Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e., do not deliver something that would occur anyway).

9.3.8 Principle 8 – Create a Net Gain Legacy

Ensure Net Gain generates long-term benefits by:

- Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity.
- Planning for adaptive management and securing dedicated funding for long-term management.

- Designing Net Gain for biodiversity to be resilient to external factors, especially climate change
- Mitigating risks from other land uses.
- Avoiding displacing harmful activities from one location to another.
- Supporting local-level management of Net Gain activities.

9.3.9 Principle 9 – Optimise Sustainability

Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.

9.3.10 Principle 10 – Be Transparent

Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

9.4 Exclusions

Biodiversity Net Gain does not apply to statutory designated sites (i.e., Sites of Special Scientific Interest – SSSIs) or irreplaceable habitats (i.e., ancient woodlands).

9.5 Biodiversity Net Gain Processes and Pathways

The following is a summary of the process of designing a Biodiversity Net Gain plan, once the feasibility of the plan has been tested, the mitigation hierarchy has been applied to the project and the pre and post development baseline biodiversity of a sites' individual features have been measured.

- Consider and justify choices for delivering Biodiversity Net Gain, including whether to deliver the same or different type of habitat, locating either within or outside of the site, enhancing existing habitats, or creating new habitats, creating more, bigger and better linked habitats, improving the quality of local wildlife sites, optimising social and economic benefits and being additional.
- Deliver like-for-like or better (trading in kind, trading between low distinctiveness habitats, trading carefully between moderate distinctiveness habitats, trading up where possible and appropriate and not trading between high distinctiveness habitats).
- Designing enhancement measures to deliver local biodiversity objectives and achieve net gains in features affected by the development in ways which contribute towards strategic policies.
- Avoid or minimise time-lags between losses and delivery.
- Avoid or minimise risks to delivering Biodiversity Net Gain.
- Measure the predicted net gain for individual habitats using the same metrics throughout.
- Specify timescales for the long-term.
- Develop a Biodiversity Net Gain management and monitoring plan.

9.6 Measuring Biodiversity Net Gain

Defra have produced the Statutory Biodiversity Metric (DEFRA, 2025) to measure Biodiversity Net Gain. The metric is based on the following parameters. Full details can be found in Natural England Joint Publication JP029 – The Statutory Biodiversity Metric Technical Supplement.

- Habitat condition.
- Distinctiveness.

A summary of these parameters is provided in the following sections:

9.6.1 Habitat Condition

The 'condition' component of quality measures the biological 'working-order' of a habitat type judged against the perceived ecological optimum state for that particular habitat. It is – therefore – a means of measuring variation in quality of patches of the same habitat type (i.e., an 'intra-habitat' quality measure) rather than a measure of quality between habitat types (i.e., an 'inter-habitat' quality measure) – which is assessed through the 'distinctiveness' of habitats. Full details of how habitat condition is assessed is provided in Natural England Joint Publication JP029.

9.6.2 Distinctiveness

In the Statutory Biodiversity Metric habitats have been assigned to distinctiveness bands based on the following criteria of distinguishing features:

- Total amount of remaining habitat in England (its rarity).
- Percentage of habitat protected in SSSI: where less is protected in SSSI's, it is considered of higher distinctiveness.
- UK Priority Habitat Status: Priority Habitats area classed as High or Very High.
- European Red List Categories for the habitat.

Distinctiveness categories are as follows:

Distinctiveness Band	Criterion Threshold
Very High Distinctiveness	Small amount of remaining habitat with a lot of it unprotected by designation. Endangered or Critical European red List habitats.
High Distinctiveness	Remaining Priority Habitats not in very high distinctiveness band & other red list of habitats.
Medium Distinctiveness	Non-Priority Habitats with significant wildlife benefit and 1 replaceable Priority Habitat (Arable field Margins).
Low Distinctiveness	Agricultural and Urban land use of lower biodiversity value.
Very Low Distinctiveness	Urban – with artificial structure which are un-vegetated, unsealed surface or built linear features of very low biodiversity value.

9.6.3 Strategic Significance

The following options are available in the Statutory Biodiversity Metric for Strategic Significance:

- Within area formally identified in local strategy (high strategic significance).
- Local ecologically desirable, but not in local strategy (medium strategic significance).
- Area/compensation not in local strategy/no local strategy (low strategic significance).

9.7 Management and Monitoring

Costed management and monitoring plans are essential to the success of Biodiversity Net Gain. Plans should keep track of timing, extent, quality, and condition.

The purpose of monitoring is to determine success or failure, gives an early warning system when aspects of management are not working and provides an opportunity to plan for remedial measures (adaptive management). Monitoring needs to take into consideration frequency, duration, timing, and costs. The results of monitoring need to be clearly documented.

Management and monitoring plans should set out activities over at least 5 years, with objectives for the longer-term.

The responsibility for management can fall to the main contractor, a broker, a local stakeholder, or a third-party company.

10.1.2 Other Woodland; Mixed

Condition Sheet: WOODLAND Habitat Type					
UK Habitat Classification (UKHab) Habitat Types					
Woodland and forest - Lowland beech and yew woodland					
Woodland and forest - Lowland mixed deciduous woodland					
Woodland and forest - Native pine woodlands					
Woodland and forest - Other coniferous woodland					
Woodland and forest - Other Scot's pine woodland					
Woodland and forest - Other woodland; broadleaved					
Woodland and forest - Other woodland; mixed					
Woodland and forest - Upland birchwoods					
Woodland and forest - Upland mixed ashwoods					
Woodland and forest - Upland oakwood					
Woodland and forest - Wet woodland					
Habitat Description					
ukhab – UK Habitat Classification					
This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here:					
Woodland Wildlife Toolkit (sylva.org.uk)					
IMPORTANT: This biodiversity metric woodland condition assessment must be used to assess woodland being input into the biodiversity metric. The outputs of this condition assessment are not equivalent to, nor are they comparable with the scores from the EWBG condition assessment, because the EWBG assessment has been adapted for the biodiversity metric, including the removal of EWBG Indicator 7 (Proportion of favourable land cover around woodland) and Indicator 14 (Size of woodland), and minor changes to other indicators.					
On-site or off-site, site name and location	On-site, Station Road, Baldock	Survey date and Surveyor name	Charlie Gardiner BSc (Hons) ACIEEM - 14th April 2025		
Limitations (if applicable)	None	Survey reference (if relating to a wider survey)	None		
Grid reference	TL2791639680	Habitat parcel reference	OWM1		
Condition Assessment Criteria					
Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator	Notes (such as justification)
A Age distribution of trees	Three age-classes ¹ present.	Two age-classes ¹ present.	One age-class ¹ present.	2	young understory to flanks of wood. intermediate planted centre
B Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ² .	Evidence of significant browsing pressure is present in less than 40% of whole woodland ² .	Evidence of significant browsing pressure is present in 40% or more of whole woodland ² .	1	evidence deer browsing present
C Invasive plant species	No invasive species ³ present in woodland.	Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, and other invasive species ³ <10% cover.	Rhododendron or cherry laurel present, or other invasive species ³ ≥10% cover.	3	non present
D Number of native tree species	Five or more native tree or shrub species ⁴ found across woodland parcel.	Three to four native tree or shrub species ⁴ found across woodland parcel.	Two or less native tree or shrub species ⁴ across woodland parcel.	3	5+ species
E Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native ⁵ .	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native ⁵ .	<50% of canopy trees and <50% of understory shrubs are native ⁵ .	3	more than 80% trees

F	Open space within woodland	10 - 20% of woodland has areas of temporary open space ⁶ . Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted ⁷ .	21 - 40% of woodland has areas of temporary open space ⁶ .	<10% or >40% of woodland has areas of temporary open space ⁶ . But if woodland <10ha has <10% temporary open space, please see Good category ⁷ .	1	big continuous block
G	Woodland regeneration	All three classes present in woodland ⁸ ; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland ⁸ .	No classes or coppice regrowth present in woodland ⁸ .	2	saplings coming through with understory trees 4 to 7
H	Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback ⁹ .	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present ⁹ .	Greater than 25% tree mortality and or any high-risk pest or disease present ⁹ .	1	ash dieback present
I	Vegetation and ground flora	Recognisable NVC plant community ¹⁰ at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community ¹⁰ at ground layer present.	No recognisable woodland NVC plant community ¹⁰ at ground layer present.	1	no nvc community present
J	Woodland vertical structure	Three or more storeys across all survey plots, or a complex woodland ¹¹ .	Two storeys across all survey plots ¹¹ .	One or less storey across all survey plots ¹¹ .	2	upper and lower canopies
K	Veteran trees	Two or more veteran trees ¹² per hectare.	One veteran tree ¹² per hectare.	No veteran trees ¹² present in woodland.	1	none
L	Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities ¹³ .	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	1	none
M	Woodland disturbance	No nutrient enrichment or damaged ground evident ¹⁴ .	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground ¹⁴ .	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground ¹⁴ .	2	disturbed ground
Total Score (out of a possible 39) 23						
Condition Assessment Result				Condition Assessment Score		Result Achieved
Total score >32 (33 to 39)				Good (3)		Poor
Total score 26 to 32				Moderate (2)		
Total score <26 (13 to 25)				Poor (1)		

10.2 Hedgerows

10.2.1 Species-rich Native Hedgerow with Trees

Condition sheet: HEDGEROW Habitat Types													
Habitat Type													
Native hedgerow													
Native hedgerow - associated with bank or ditch													
Native hedgerow with trees													
Native hedgerow with trees - associated with bank or ditch													
Species-rich native hedgerow													
Species-rich native hedgerow - associated with bank or ditch													
Species-rich native hedgerow with trees													
Species-rich native hedgerow with trees - associated with bank or ditch													
Habitat Description													
ukheh - UK Habitat Classification													
On-site or off-site, site name and location	On-site, Station Road, Baldock				Survey date and Surveyor name	Charlie Gardiner BSc (Hons) ACIEEM - 14th April 2025							
Limitations (if applicable)	None				Survey reference (if relating to a wider survey)	None							
Condition Assessment Details													
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.													
This assessment is based on the Hedgerow Survey Handbook ¹ and Favourable Conservation Status document ² . For further clarification please refer to the Hedgerow Survey Handbook.													
Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.													
Hedgerow favourable condition attributes													
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Habitat parcel reference										
			TL280	TL278									
			08396	59397									
			Grid reference										
			SRHT	SRHT									
			1	2									
Core groups - applicable to all hedgerow types			Criterion passed (Yes or No)										
			Notes (such as justification)										
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Y	Y								SRHT1 - Av 2.2m height across length . SRHT2 - Exceed 2.7 m height
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	Y	Y								SRHT1 - Average. 1.5 - 2m width . SRHT2 - Woody growth more than 1.5m wide
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	N	Y								SRHT1 - spiral guards left on causing growth of stems to be higher SRHT2 - No Gaps

B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Y	Y													SRHT1 and 2 -No gaps- gates at either end.
C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	Y	N													SRHT1 -Margin left on one side at least of undisturbed vegetation SRHT2 - ploughing closer than SRHT1
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	Y	N													SRHT1 - Cleavers not exceed 20% SRHT2 - exceeds 20%
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA ³) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora' ⁶ contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁷ .	Y	Y													SRHT1 and 2 - sycamore present but treated as archaeophyte according to UKHAB
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	N	N													SRHT1 and 2 - plough along 90%
Additional group - applicable to hedgerows with trees only																		
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient ⁸), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	N	N													SRHT1 and 2 - same age class throughout
E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	N	N													SRHT1 and 2 - ploughed within 1.5m of hedge. likely to affect roots.

Condition categories for hedgerows with trees		
Category	Category Requirements	Metric score
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3
Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2
Poor	Fails a total of more than 5 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1
Score achieved:		Poor

11. Appendix 3 – Species Lists

On-site Habitat	Baseline Habitat	Habitat Reference Number	Parcel Number	Common Name	Species Name
Other mixed	woodland;	OWM1		<u>Canopy</u> Beech Field maple Oak Scot's-pine Silver birch Sycamore <u>Understory</u> Blackthorn Dog-rose Guelder-rose Hazel Hawthorn Wild privet <u>Ground layer</u> Cleavers Common nettle Cowslip Ragwort St John's Wort Violet Wood avens Wood forget-me-not	<u>Canopy</u> <i>Fagus sylvatica</i> <i>Acer campestre</i> <i>Quercus robur</i> <i>Pinus sylvestris</i> <i>Betula pendula</i> <i>Acer pseudoplatanus</i> <u>Understory</u> <i>Prunus spinosa</i> <i>Rosa canina</i> <i>Viburnum opulus</i> <i>Corylus avellana</i> <i>Crataegus monogyna</i> <i>Ligustrum vulgare</i> <u>Ground layer</u> <i>Galium aparine</i> <i>Urtica dioica</i> <i>Primula veris</i> <i>Jacobaea vulgaris</i> <i>Hypericum perforatum</i> <i>Viola</i> sp. <i>Geum urbanum</i> <i>Myosotis sylvatica</i>
Modified grassland		MG1		Blackthorn Cleavers Cow parsley Daffodil Dandelion Hogweed Yorkshire-fog	<i>Prunus spinosa</i> <i>Galium aparine</i> <i>Anthriscus sylvestris</i> <i>Narcissus</i> sp. <i>Taraxacum officinale</i> <i>Heracleum sphondylium</i> <i>Holcus lanatus</i>
Non-cereal crop		NCC		Common nettle Cow parsley Hogweed Ragwort Rosebay willowherb	<i>Urtica dioica</i> <i>Anthriscus sylvestris</i> <i>Heracleum sphondylium</i> <i>Jacobaea vulgaris</i> <i>Chamerion angustifolium</i>
Species-rich hedgerow with trees		SRHT1 and SRHT2		<u>Trees</u> Ash Beech Field maple Silver birch Sycamore <u>Shrubs</u> Ash Blackthorn Elder Field maple Hawthorn Hazel <u>Ground layer</u> Bent Blackthorn Cleavers Common knapweed Cow parsley Dandelion Ox-eye daisy Self-heal White dead nettle Yarrow Yorkshire-fog	<u>Trees</u> <i>Fraxinus excelsior</i> <i>Fagus sylvatica</i> <i>Acer campestre</i> <i>Betula pendula</i> <i>Acer pseudoplatanus</i> <u>Shrubs</u> <i>Fraxinus excelsior</i> <i>Prunus spinosa</i> <i>Sambucus nigra</i> <i>Acer campestre</i> <i>Crataegus monogyna</i> <i>Corylus avellana</i> <u>Ground layer</u> <i>Agrostis</i> sp. <i>Prunus spinosa</i> <i>Galium aparine</i> <i>Centaurea nigra</i> <i>Anthriscus sylvestris</i> <i>Taraxacum officinale</i> <i>Leucanthemum vulgare</i> <i>Prunella vulgaris</i> <i>Lamium album</i> <i>Achillea millefolium</i> <i>Holcus lanatus</i>

12. Appendix 4 – Further Ecological Enhancements



Improved Crevise Bat Box



Improved Cavity Bat Box



Vivara Pro Woodstone® Starling Nest Box



Vivara Pro Barcelona Woodstone® Open Nest Box



Vivara Pro Seville 32mm Woodstone® Nest Box



Vivara Pro Woodstone® House Sparrow Nest Box



National Trust Apex Insect House



Hedgehog House



Frogilo Frog and Toad House