22/10/2025

Ashfield District Council

# Proposed New Dwelling at 5 Orchard Road, Kirkby-in-Ashfield, NG17 8JX

## Biodiversity Net Gain Assessment

March 2025
Revised: October 2025

**A report to:**
Attila Property Group

**Report produced by:**
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## EXECUTIVE SUMMARY

| Feature | Results |
|---|---|
| ***Habitat Units*** | The site prior to development has a baseline of 0.21 Habitat Units. Post works there will be 0.02 Habitat Units, resulting in a loss of -0.19 Units (-88.85%). In addition, the trading rules are currently not satisfied within the metric. |
| ***Hedgerow Units*** | The hedgerow feature identified on site has been incorporated within the vegetated garden habitat. |
| ***Watercourse Units*** | There are no watercourses within 10m of the proposed works. |
| ***Recommendations to achieve mandatory net gain*** | As the project will result in a loss of both Habitat Units it will be necessary to achieve additional units via off-site creation (0.21 Habitat Units) in order to achieve a 10% net gain.<br><br>This could be achieved on land under the ownership of the client, or undertaken on land provided as a habitat bank (either arranged directly with the landowner, or via a broker). Any off-site habitat and hedgerow creation would need to be managed and maintained for at least 30 years and must achieve the distinctiveness and condition as intended. |

# 1. SURVEY AREA AND PROPOSALS

## 1.1 Site Location

The site consists of an area of vegetated garden, located adjacent to 5 Orchard Road, Kirkby-in-Ashfield, NG17 8JX (approximate grid reference SK 49359 56121). The location of the site is shown on Figure 1 in Appendix 1.

## 1.2 Proposals

The proposals include construction of a new dwelling with associated access and landscaping.

## 1.3 Survey Brief

This report has been prepared by Morph Ecological Consultants for Attila Property Group. It is understood that a planning application has been made (V/2024/0496 - Ashfield District Council), and a Biodiversity Net Gain (BNG) assessment has been requested by the council.

Morph Ecological Consultants brief was to undertake BNG calculations for the site and provide recommendations as to how mandatory BNG can be achieved.

# 2. METHODOLOGY

## 2.1 Habitat Survey

The survey involved a site walkover and a preliminary assessment of the habitats using the standard UK Habitat Classification System methodology (UKHab 2023) which involves visiting each parcel of land and on the basis of vegetation the habitats were classified to Level 5 where appropriate. Secondary codes were also used. Notes were made on species present, defining the UKHab types. Target notes were used to record any habitats or features of particular interest.

A UKHab map was produced, and target notes were labelled on the map (Figure 2 in Appendix 1).

## 2.2 Biodiversity Net Gain Assessment

The Statutory Biodiversity Metric was used for the Biodiversity Net Gain Assessment.

In order to use the Biodiversity Metric Calculator, habitat information from the walk-over survey (and from previous survey data and aerial imagery as the site was cleared prior to the survey) was used to form the baseline value in biodiversity units. To determine the quality of the habitats' present, assessments of the habitat types are made:

- Distinctiveness: Distinctiveness is a pre-assigned category for each habitat type. The habitat type is assigned through botanical species recorded during the walk-over survey.
- Condition: Habitat condition is calculated using the Statutory Biodiversity Metric Technical Supplement Condition Assessment Sheets are provided whereby positive indicators for each habitat types are listed and the number of these positive indicators met in a particular habitat type determine the condition.
- Strategic Significance: The appropriate description is selected from the drop-down list in the calculator. This category is based on the Local Nature Recovery Strategy, but in the absence of this document for the area, Biodiversity Action Plans were searched for.

The calculations are repeated for post-intervention, but risk components are also included:

- Difficulty of creating or enhancing a habitat: Automatically assigned within the calculator.
- Temporal risk: can select habitat created in advance or delay in starting habitat creation. Time to final target condition is then automatically assigned within the calculator.
- Spatial risk (if proposing off-site habitats): The appropriate description is selected from the drop-down list in the calculator depending on the distance away from the site.

The Biodiversity Net Gain Assessment was carried out in accordance with the Statutory Biodiversity Metric User Guide (DEFRA, 2024).

It should be noted that the Biodiversity Metric Calculator does not take into account the presence of protected species and is only used as a tool in addition to best ecological practices. Professional judgement is used throughout and justified within this report, and the exact biodiversity units gained or lost should not be used independently.

## 2.3 Survey Details

The survey was carried out by Zoe Jackson MSc on the 10th of March 2025.

## 2.4 Surveyor Experience

Zoe Jackson has over 13 years' experience of ecological surveying, including numerous Preliminary Ecological Appraisals, using both UKHab and JNCC classification systems. Zoe specialises in botanical surveys including National Vegetation Classification surveys, and surveying local wildlife sites.

## 2.5 Survey Area

The area surveyed is shown on the UKHab map (Figure 2, Appendix 1).

## 2.6 Survey Limitations

Surveying in early spring is not an ideal time to carry out ecological surveys, as it is outside of the plant growing season therefore some plants may not be visible. However, an experienced surveyor can make reliable judgements about the condition and composition of habitats and their potential to support protected species.

It was noted during the survey that the site had been almost completely cleared, with most of the vegetation removed from the site. This was considered likely to have been recent clearance with several rubble piles noted on site. As such, a full assessment of the site could not be undertaken and the assessment had to be backdated with assumptions placed on the distinctiveness and composition of the habitats present. Given the likely habitats previously present, i.e., vegetated garden, and the value of this habitat, this is not considered a significant constraint on the assessment as the habitat is not subjected to a condition assessment and is only of a low distinctiveness.

# 3. BIODIVERSITY NET GAIN CALCULATIONS

## 3.1 UKHab Survey and Condition Assessments

3.1.1 *Baseline Habitats*

The UKHab habitat types and their descriptions, which were recorded within the survey area are shown in the table below. A map showing the locations of these habitats is shown in Figure 2, Appendix 1. Plant species listed within the text are referred to using their English names. A full list of plant species with their scientific names is provided in Appendix 2. Photographs of the survey area are provided within the table below. A summary of the habitat condition assessment is also detailed in the table below.

| Parcel Ref | UKHab Habitat | Description and Value | Condition Assessment | Photographs |
|---|---|---|---|---|
| 1 | **Vegetated garden (u1, 828)** | Most of the site had been cleared prior to the survey, however, it was likely previously comprised of vegetated garden. This was determined following an assessment of the species list obtained during the survey, a review of satellite imagery and Google Street View to look back at historical imagery. Species likely present included bramble, ivy, hawthorn (a small sized tree), holly, sycamore, willow.<br><br>A short section of hedgerow was located towards the east of the site. This was comprised of young sycamore, garden privet, elder, apple, dog rose and ivy. This has been incorporated within the vegetated garden habitat due to its species composition and its location within an area of private gardens. It was considered disproportionate to classify this feature as a separate linear feature within the BNG assessment. | This habitat is automatically assigned as 'Condition Assessment N/A'. |  |

| Parcel Ref | UKHab Habitat | Description and Value | Condition Assessment | Photographs |
|---|---|---|---|---|
| | | | |   |

| Parcel Ref | UKHab Habitat | Description and Value | Condition Assessment | Photographs |
|---|---|---|---|---|
| **2** | **Urban tree** | One medium Leyland cypress tree was noted along the boundary of the site.<br><br>Another medium sycamore tree was noted adjacent to the site. However, this is considered a significant distance away from the proposals and as such has not been included within the BNG assessment. | <u>Condition Sheet: Individual Trees</u><br>A – Failed due to non-native nature of the tree,<br>B – Passes as it is an individual tree.<br>C – Passes as it is mature.<br>D – Passes due to appropriate management practices.<br>E – Fails as ecological niches unlikely to be present.<br>F – Fails as it is mostly over hardstanding.<br><br>As such the tree is assessed as being in Moderate condition. |  <br>Onsite tree |

| Parcel Ref | UKHab Habitat | Description and Value | Condition Assessment | Photographs |
|---|---|---|---|---|
| | | | |  Offsite tree |

## 3.2 Assumptions

3.2.1 *Baseline Survey*
Only 'area' habitats were present within the site, therefore the 'habitat' calculations were used. The 'site' is defined as the area within the red line boundary.

3.2.2 *Proposed Development*
The proposed plans involve the construction of a new dwelling with associated access and landscaping (see Figure 5 in Appendix 1). As there no method of knowing what management the future owners will undertake within their garden, the proposed landscaped areas are all mapped as 'Vegetated Garden' as per the BNG user guidance. Anything falling within the curtilage of the properties is therefore categorised as 'Vegetated Gardens', this includes the four proposed planted trees within the garden.

3.2.3 *Habitat Degradation*
From looking at historical aerial imagery, it appears that habitat degradation has occurred. Specifically, the majority of the site has been cleared (save for a short section of hedgerow, a hawthorn shrub and the Leyland cypress tree). As such, the date used for the baseline assessment is February 2025, which is assumed to be the closest date known pre-degradation. Data records, aerial imagery, Google Street View, historical field surveys and the botanical species present on site were all used to determine the pre-degradation habitat types. A precautionary approach was applied when assigning condition assessment scores, whereby in the absence of contrary evidence, a higher condition score or higher distinctiveness habitat was applied.

3.2.4 *Irreplaceable Habitat*
There are no irreplaceable habitats within the area of works.

3.2.5 *Strategic Significance*
Ashfield District Council have provided guidance which states that 'The Biodiversity Opportunity Map for Ashfield (BOM)' should be used as a guide for BNG assessments until replaced by a Local Nature Recovery Strategy (LNRS). Following consultation of 'The Biodiversity Opportunity Map for Ashfield (BOM)', the habitats present on site were assigned as Medium Strategic Significance 'Location ecologically desirable but not in local strategy', as the site appears to form an ecological corridor to further parcels of woodland habitats which are listed on the BOM.

## 3.3 Calculations

Full habitat condition assessments and justifications for categorisation are provided within the Statutory Biodiversity Metric (user comments) and are detailed in Section 3.2.

3.3.1 *Habitat Units*
The site prior to development has a baseline of 0.21 Habitat Units. Post works there will be 0.02 Habitat Units, resulting in a loss of -0.19 Units (-88.85%).

3.3.2 *Trading Rules*
The trading rules are currently not satisfied within the metric. It is a mandatory component of Biodiversity Net Gain to ensure trading rules are satisfied as well as achieving 10% net gain.

## 3.4 Suggestions to Achieve 10% Biodiversity Net Gain

Currently an additional 0.21 habitat units are required to achieve mandatory 10% biodiversity net gain. This also needs to satisfy trading rules. Given the small size of the site and the development proposed, it is considered unlikely that the 10% net gain will be achieved on site within the current red line boundary size. The following recommendations are provided following the Biodiversity Gain Hierarchy:

3.4.1 *Revised Site Layout*

If feasible, in the first instance the site layout should be looked to be revised whereby an area can be dedicated to BNG enhancements. This area would need to be outside of the ownership of the new property to ensure that the BNG enhancements can be legally secured. Then enhancements such as tree planting could be implemented to provide 10% biodiversity net gain. Given the proposed site layout and the feasibility of this option, it is unlikely that this can be achieved.

3.4.2 *Offsite Habitat Enhancement / Creation*

Offsite habitat enhancement or creation may be required to deliver the 0.21 Habitat Units (again would need to satisfy the trading rules). This could either be in other land in the applicant's ownership or through a habitat bank / offsetting provider. The offsite land would need to be registered on the Biodiversity Gain Register, and therefore have a legal securement for the management and monitoring for 30 years, and the units allocated to this development. More units are required if the land is outside of the LPA boundary.

3.4.3 *Statutory Credits*

As a last resort, if no other options are feasible, statutory credits can be purchased from Natural England.

## 4. EVALUATION

The site prior to development has a baseline of 0.21 Habitat Units. Post works there will be 0.03 Habitat Units, resulting in a loss of -0.19 Units (-88.85%). As such, there is currently a unit deficit of 0.21 Habitat Units (to meet 10% net gain) and the trading rules are not satisfied.

Recommendations have therefore been provided to address this loss of units. However, given the nature of the proposals (new residential property with residential garden) and the size of the site, it is not considered feasible to address this loss on site. As such, offsite offsetting will be required to deliver the 0.21 Habitat Units (as well as the trading rules).

The applicant currently aims to address this loss via purchase of units from a habitat bank.

## REFERENCES

**Ashfield District Council 2022** *Developer Guide to Biodiversity and Nature Conservation.* https://democracy.ashfield.gov.uk/documents/s24358/Enc.%202%20for%20Adoption%20of%20the%20Developer%20Guide%20to%20Biodiversity%20and%20Nature%20Conservation.pdf.

**Department for Environment, Food & Rural Affairs (DEFRA) 2024** *The Statutory Biodiversity Metric: User Guide*. Available Online: https://assets.publishing.service.gov.uk/media/669e45fba3c2a28abb50d426/The_Statutory_Biodiversity_Metric_-_User_Guide__23.07.24_.pdf

**MAGIC** Available Online: https://magic.defra.gov.uk/MagicMap.aspx

**Ministry of Housing, Communities & Local Government 2024** *National Planning Policy Framework.* Available Online: https://assets.publishing.service.gov.uk/media/675abd214cbda57cacd3476e/NPPF-December-2024.pdf

**Nottinghamshire Local Biodiversity Action Plan** *https://nottsbag.org.uk/lbap/lbap-introduction-and-sections-1-to-6/*

**Nottinghamshire Biodiversity Action Group 2016** *The Nottinghamshire Biodiversity Opportunity Mapping Project Ashfield District.* https://nottsbag.org.uk/wp-content/uploads/2021/01/The-Ashfield-BOM-Project-Report-FINAL-November2016.pdf.

**UKHab 2023** *The UK Habitat Classification User Manual Version 2.0* at www.ukhab.org

## APPENDIX 1: FIGURES

### Figure 1: Site Location Plan


**Appendix 1, Figure 1**

**Site Location**

**Key**
Site Boundary

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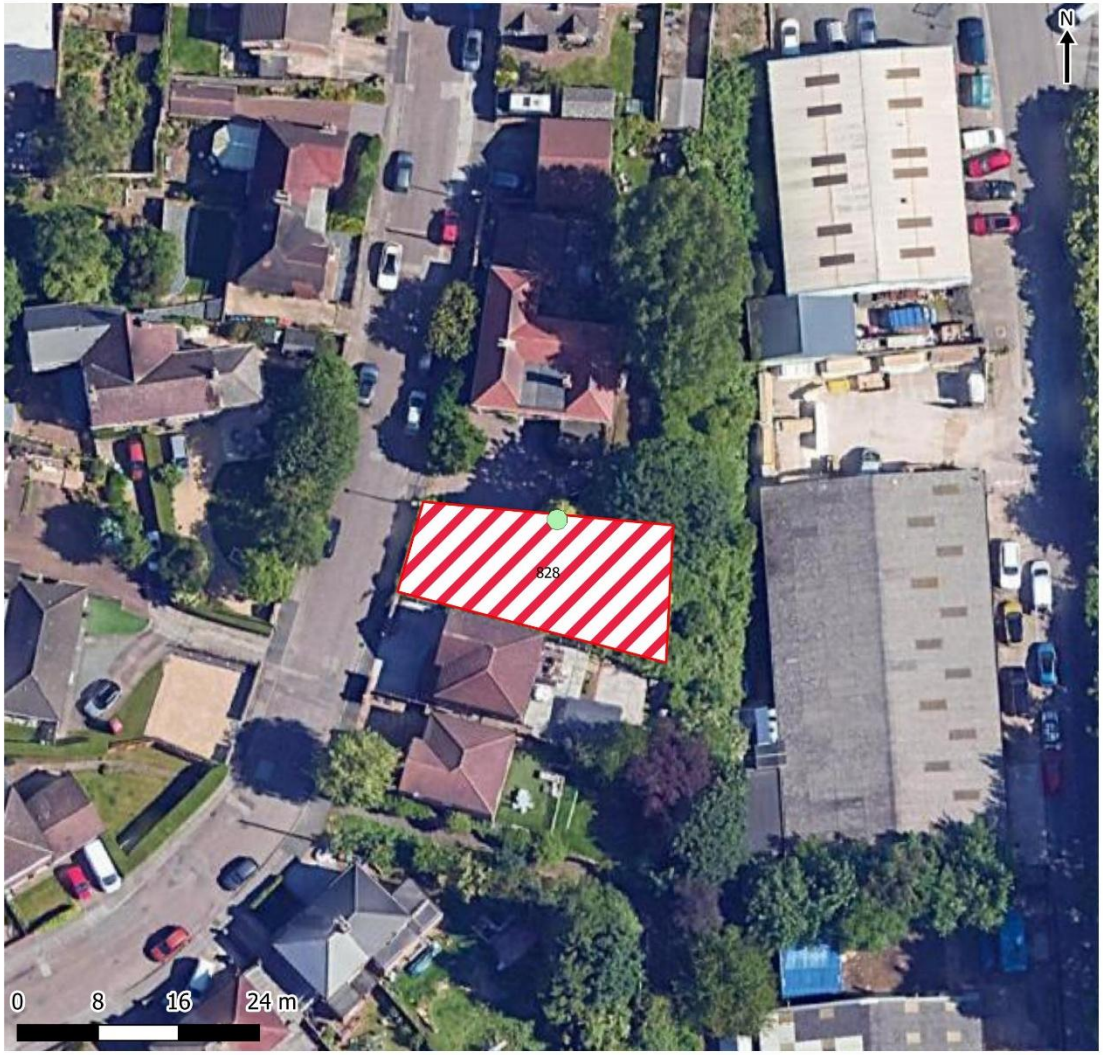
Project Number: 1853-1

Date Produced: 13/03/25

Version Number: 1

**Figure 2: UKHab Baseline Map**




**Appendix 1, Figure 2**

**UKHab Map - Baseline**

**Key**

Site Boundary

Urban Tree

u1 Built-up areas and gardens

Secondary Codes

828 - Vegetated gardens

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**Figure 3: Assessment Areas**


**Appendix 1, Figure 3**

**UKHab Map - Assessment Areas**

**Key**

- Site Boundary
- Urban Tree
- u1 Built-up areas and gardens

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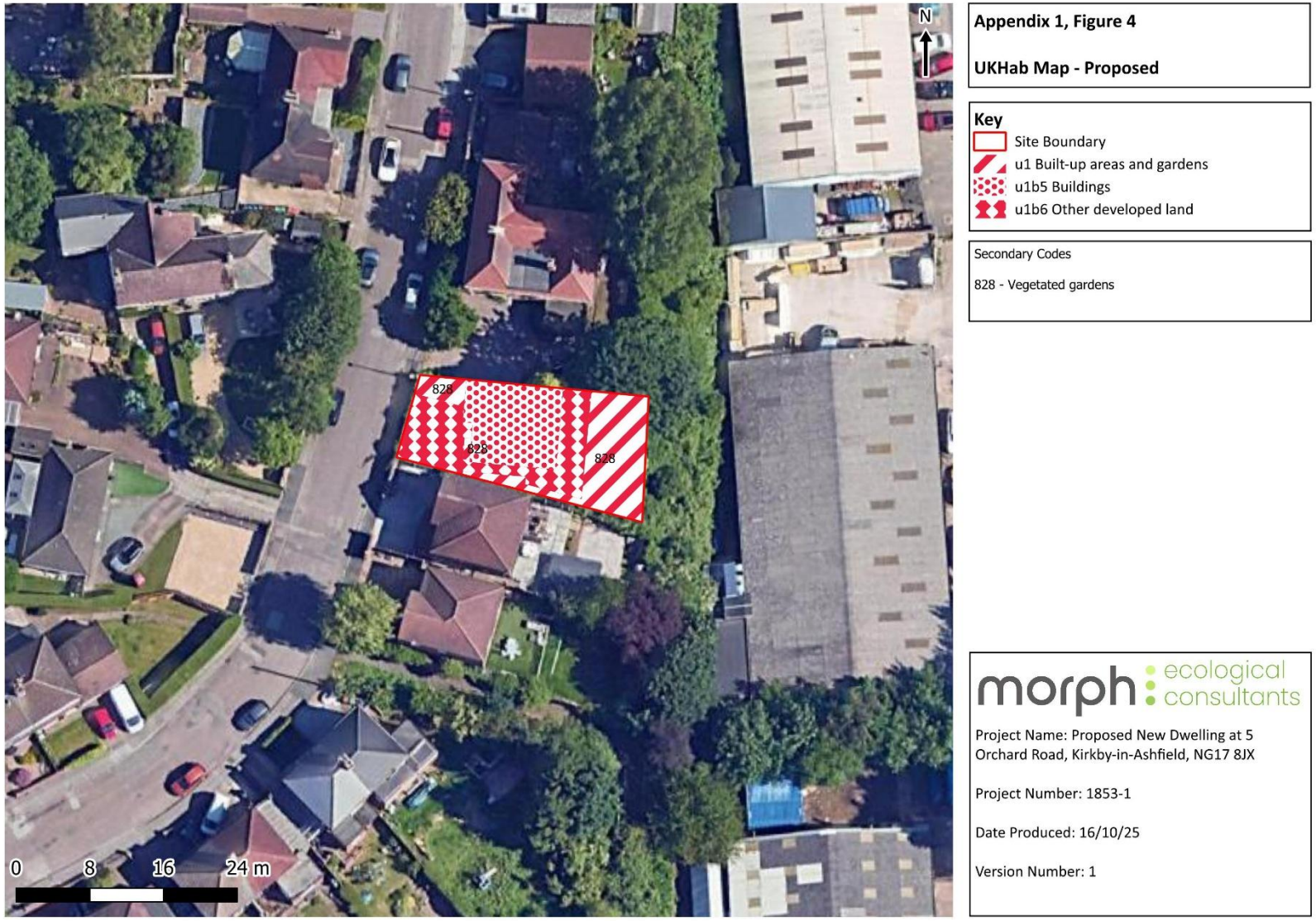
Version Number: 1

**Figure 4: UKHab Proposed Map**




**Appendix 1, Figure 4**

**UKHab Map - Proposed**

**Key**

- Site Boundary
- u1 Built-up areas and gardens
- u1b5 Buildings
- u1b6 Other developed land

Secondary Codes

828 - Vegetated gardens

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Version Number: 1

**Figure 5: Proposed Plans**

## APPENDIX 2: BOTANICAL SPECIES LIST

| **Common Name** | **Scientific Name (Kent/Stace)** |
|---|---|
| an apple | *Malus sp.* |
| Bramble | *Rubus fruticosus* agg. |
| Common Ivy | *Hedera helix* ssp. *helix* |
| Dog Rose | *Rosa canina* agg. |
| Elder | *Sambucus nigra* |
| Hawthorn | *Crataegus monogyna* |
| Holly | *Ilex aquifolium* |
| Leyland cypress | *Cupressus* × *leylandii* |
| a privet | *Ligustrum* sp. |
| Sycamore | *Acer pseudoplatanus* |
| a willow | *Salix* sp. |

## APPENDIX 3: LEGISLATION

**Biodiversity Net Gain**

In England, BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). Developers must deliver a BNG of a minimum of 10% unless exempt.

# Quality Assurance

## Quality Information

| | |
|---|---|
| **Project** | Proposed New Dwelling at 5 Orchard Road, Kirkby-in-Ashfield, NG17 8JX: Biodiversity Net Gain Assessment |
| **Contract Number** | 1853-1 |
| **Description** | Final Report |
| **Prepared by** | Helen Chambers MSc by Res |
| **Checked by** | Steve Ralph MSc MCIEEM |
| **Date Sent** | 19th March 2025 |

## Revision History

| | | | |
|---|---|---|---|
| **Version** | 1 | | |
| **Version Date** | 16/10/25 | | |
| **Details** | Proposed plans updated | | |
| **Prepared by** | Helen Chambers MSc ACIEEM | | |

## Disclosure

The information, data, evidence, advice and opinions which have been prepared and provided are true, and have been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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