

Biodiversity Net Gain Assessment

Survey site:

Grove Court Hotel Cleator Cumbria, CA23 3DT

Client:

Frank Scott Builders Ltd

Project:

This report is prepared to inform a planning application with Cumberland Council (Copeland Area). The proposal is described as:
The construction of six dwellings.

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Industry Guidelines and Standards

This report has been written with due consideration to:

- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management, Construction Industry Research and Information Association & Institute of Environmental Management and Assessment (2019). Biodiversity Net Gain – Good Practice Principles for Development.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by Frank Scott Builders Ltd to undertake a Biodiversity Net Gain (BNG) Assessment at Grove Court Hotel Cleator Cumbria, CA23 3DT (hereafter referred to as “the site”). The assessment was required to inform a planning application for the construction of six dwellings. (hereafter referred to as “the proposed development”).

Arbtech Consulting Limited was instructed by Frank Scott Builders Ltd to undertake a Biodiversity Net Gain (BNG) Assessment at Grove Court Hotel, Cleator, Cumbria, CA23 3DT (hereafter referred to as “the site”). The assessment was undertaken to inform a planning application for the construction of six dwellings (hereafter referred to as “the proposed development”).

The baseline biodiversity value of the site comprises **0.96 area-based habitat units**, derived primarily from modified grassland, ruderal/ephemeral vegetation, and a single urban tree. The proposed development results in a **net loss of area-based habitat units**, equating to a **17.41% deficit** against the mandatory minimum requirement of 10% biodiversity net gain.

Due to site constraints and the predominance of built form and low-distinctiveness landscaping within the proposed layout, it is not considered feasible to achieve the required biodiversity net gain wholly on-site. As such, the delivery of biodiversity net gain will require **off-site compensation**, secured through an appropriate legal mechanism, such as the purchase of biodiversity units from a registered provider or a financial contribution towards an approved habitat creation scheme.

No baseline hedgerow units are present on site, and while hedge planting is proposed, this has not been included within the BNG calculation as a percentage net gain cannot be derived.

Subject to the implementation of appropriate off-site biodiversity compensation and a minimum 30-year management plan, the proposed development can be made compliant with the requirements of the Environment Act 2021.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Frank Scott Builders Ltd to undertake a Biodiversity Net Gain (BNG) Assessment at Grove Court Hotel Cleator Cumbria, CA23 3DT (hereafter referred to as “the site”). The assessment was required to inform a planning application for the construction of six dwellings. (hereafter referred to as “the proposed development”). A plan showing the proposed development is provided in Appendix 1.

This report should be read in conjunction with the following documents:

- Defra Statutory Biodiversity Metric
- Preliminary Ecological Appraisal PEA for the site

1.2 Site Location, Geology and Landscape Context

The survey site is centred on National Grid Reference NY 01931 14062 and has an area of approximately 0.389ha. The site comprises an area of previously developed land, where a hotel building was previously situated. The building has since been demolished, with associated works approved in line with planning permission 4/23/2106/001. The site also contains a strip of grassland and single tree, on the southern boundary of the site. The site is located within the village of Cleator, Cumbria and is bound by the A506 to the south, and dwellings to the east and west, the presence of which is likely to present a significant dispersal barrier for a number of faunal groups. A site location plan is provided in Appendix 2.

1.3 BNG Informative

BNG is a specific, measurable outcome of project activities that deliver demonstrable and quantifiable benefits to biodiversity compared to the baseline situation. In order to achieve BNG, a project must be able to demonstrate that it has followed all 10 of the Principles of Biodiversity Net Gain (as outlined in the British Standard 8683:2021 Process for Designing and Implementing Biodiversity Net Gain).

The legalised Environment Act (2021) requires developments in England to demonstrate a measurable net gain in biodiversity and sets a target of a minimum of 10% BNG for all developments. It also stipulates that a management plan with a minimum 30-year term, should be adopted to ensure biodiversity net gain can be delivered. The Environment Act 2021 mandates the delivery of a minimum 10% biodiversity net gain for most developments in England, with the requirement applying to major developments from February 2024 and to small sites from April 2024. The requirement for biodiversity net gain is also enshrined within the National Planning Policy Framework (NPPF, 2021). The DEFRA Statutory Biodiversity Metric is the widely accepted tool used to calculate BNG. It enables the calculation of habitat value pre- and post-development in order to determine the overall change in biodiversity value as a result of the proposed development. The Biodiversity Metric has separate BNG assessments for areas of habitat, hedgerows and watercourses. The biodiversity value of a site should be maximised. However, it may not always be possible to achieve a 10% biodiversity net gain within a site and therefore the Statutory Biodiversity Metric can also account for offsite habitat creation, where land is available. Alternatively,

developers can seek to provide an agreed financial contribution to an appropriate third party (such as the Local Authority, the UK Government or another landowner) to deliver the required biodiversity net gain elsewhere on their behalf.

2.0 Methodology

2.1 Baseline Biodiversity Value

The baseline BNG Calculation was informed by Preliminary Ecological Appraisal (PEA) (Arbtech Consulting Ltd, 2025). A baseline habitat plan is provided in Appendix 3.

Habitat Classification

The PEA report classified the habitats on site according to The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023).

Habitat Area/Length

The area or length of each habitat was calculated using qGIS software. In calculating the area or length of each habitat, habitats which occur as two or more isolated parcels across the site were combined, where they were deemed to be of a similar composition and condition. Distinctions were made between habitats to be retained (i.e. left as found in baseline), enhanced (i.e. improved condition) or lost (i.e. destroyed by proposed development).

Areas of scattered trees were calculated using the Tree Helper tool within the Statutory Biodiversity Metric. Class sizes for urban trees are set out in Table 8-1 of the Statutory Biodiversity Metric User Guide (Natural England, 2023).

Habitat Condition

Habitat condition was assessed using the relevant condition assessment sheets found in the Statutory Biodiversity Metric User Guide (Natural England, 2023).

Strategic Significance

Strategic significance was assigned for each habitat based upon a review of the following:

- Ecological value
- Function within the landscape
- Any site or habitat allocations under the Cumberland Council Local Development Scheme.

2.2 Post Development Biodiversity Value

The post development BNG Calculation was informed by Site Plan which is included in Appendix 1. A post development habitat plan is provided in Appendix 4.

Habitat Classification

Proposed habitats were translated to their equivalents in the UK Habitat Classification using The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023) and the information provided within the Site plan (Appendix 1).

Habitat Area/Length

The area or length of each proposed habitat was calculated using qGIS software. In calculating the area or length of each habitat, habitats which occur as two or more isolated parcels across the site were combined, where they were deemed to be of similar composition and condition. Distinctions were made between habitats to be retained (i.e. left as found in baseline), enhanced (i.e. improved condition) or newly created.

Areas of scattered trees were calculated using the Tree Helper tool within the Statutory Biodiversity Metric. Class sizes for urban trees are set out in Table 8-1 of the Statutory Biodiversity Metric User Guide (Natural England, 2023).

Habitat Condition

Target habitat condition for each proposed habitat was determined assessed using the Temporal Multipliers Tool and the Enhancement Temporal Multipliers Tool included in the Statutory Biodiversity Metric spreadsheet as well as the relevant condition assessment sheets found in the Statutory Biodiversity Metric User Guide (Natural England, 2023). This is based on the assumption that a 30-year management plan will be adopted for the site.

Strategic Significance

Strategic significance was assigned for each proposed habitat based upon a review of the following:

- Likely ecological value
- Function within the landscape
- Any site or habitat allocations under the Cumberland Council Local Development Scheme.

2.3 Limitations

N/A

3.0 Results

3.1 Baseline Habitats

Table 1 details the baseline habitats present within the site along with their area/length, condition and strategic significance.

Table 1: Baseline Biodiversity Value

Habitat	Area / Length	Description	Condition Assessment	Strategic Significance
Other developed land.	0.1065ha.	On the northern and western boundaries of the site is an area of hardstanding, utilised for vehicular access to dwellings off-site to the north. This area also previously formed access to the former hotel. There is no associated vegetation, and the area is of minimal ecological value.	N/A	Low.
Sparsely vegetated urban land with ruderal/ ephemeral.	0.1939ha.	Within the area of the site where the hotel used to be positioned is an area of previously developed land, where several opportunistic plant species have colonised. Species present include willowherb, rush, broadleaved dock, ragwort, chickweed, white clover, creeping thistle and dandelion, which are all present occasionally. The cover of vegetation within this area is approximately 50%.	Poor. a. Vegetation structure is not varied b. The habitat parcel does not contain different plant species that are beneficial for wildlife. c. Invasive non-native plant species and others which are to the detriment of native wildlife cover less than 5% of the total vegetated area.	Low.
Modified grassland.	0.0643ha.	Towards the southern section of the site is a strip of modified grassland, that previously formed an area of amenity grassland for the hotel. Species composition is poor, being dominated by a rye-grass mix,	Poor. a. There are less than 6 plant species per m ² . b. Sward height is not varied.	Low.

		with occasional broadleaved herbs including white clover, dandelion, broadleaved dock, creeping buttercup, spear thistle and ribwort plantain all present, rarely. The sward height is consistently short across the parcel ranging from 4cm-8cm, less than 20% is more than 7cm.	c. There is no scrub present. d. Physical damage is present in less than 5% of the area. e. Cover of bare ground is between 1 and 10%. f. There is no bracken cover. g. There is an absence of invasive species.	
Scattered trees.	0.0366ha.	On the southern boundary of the site is a single semi-mature sycamore tree, situated within the strip of grassland. The tree is approximately 15m tall, with a DBH of approximately 65cm.	Good a. The tree is not a native species b. The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion). c. The tree is mature d. There is little or no evidence of an adverse impact on tree health by human activities. e. Natural ecological niches for vertebrates and invertebrates are not present. f. More than 20% of the tree canopy area is oversailing vegetation beneath.	Low.

3.2 Post Development Habitats

Table 2 details the post development habitats present within the site along with their area/length, condition and strategic significance.

Table 2: Post Development Biodiversity Value

Habitat	Area / Length	Description	Target Condition	Strategic Significance
Developed land sealed surface	0.0366ha retained 0.182 created	Retained paved areas and creation of new access and six new dwellings and associated hardstanding.	N/A	Low.
Artificial unvegetated unsealed surfaces	0.0292ha created	Permeable road.	N/A	Low.
Vegetated garden	0.1168ha created	Amenity lawn areas part of dwellings.	N/A	Low.
Urban tree	0.0366ha retained 0.0407ha created	Large tree retained with the proposed planting of 10 birch trees.	Large tree retained as it is with newly planted trees proposed to meet moderate condition passing criteria A, B, D and F.	Low.

3.3 Change in Biodiversity Value of the Site

Full details are provided in the Defra Statutory Biodiversity Metric. The headline results are presented in Appendix 5.

Areas of Habitat

The baseline habitat value of the site is 0.96 units, comprising hardstanding (no value), 0.13 units modified grassland. 0.39 units ruderal/ ephemeral and 0.44 units of urban tree.

The post development habitat value for the site comprises 0.79 units, comprising hardstanding and unsealed surfaces (no value), vegetated garden (0.23 units), and urban trees (0.44 + 0.12 units).

Hedgerows

There are no baseline hedgerow units present on site. Although laurel hedge planting is proposed, hedgerows have been excluded from the BNG assessment as the Statutory Biodiversity Metric does not allow a percentage net gain to be calculated where baseline hedgerow units are zero.

4.0 Recommendations to Deliver BNG

4.1 Discussion

The proposed development results in a **17.41% net loss of area-based habitat units**, which does not meet the mandatory requirement of a minimum 10% biodiversity net gain. To achieve compliance with BNG trading rules, an additional **0.12 habitat units of low distinctiveness** are required.

Due to the constrained nature of the site and the dominance of built development and private amenity space, there is limited scope to deliver additional habitat creation or enhancement on-site or within land under the applicant's control. Private gardens and amenity grassland cannot be enhanced beyond low distinctiveness and are therefore insufficient to offset the identified deficit.

As such, the delivery of biodiversity net gain will require **off-site compensation**, secured via an appropriate mechanism agreed with the Local Planning Authority. This may include the purchase of biodiversity units from a registered provider, habitat creation on third-party land, or a financial contribution towards an approved biodiversity scheme. Any off-site provision must be supported by a minimum 30-year management and monitoring commitment and secured through a Section 106 agreement.

4.2 Post Development

A Biodiversity Net Gain (BNG) Management Plan must be produced for the site. This should include recommendations for the implementation, management and monitoring of the site for at least 30 years.

5.0 Bibliography

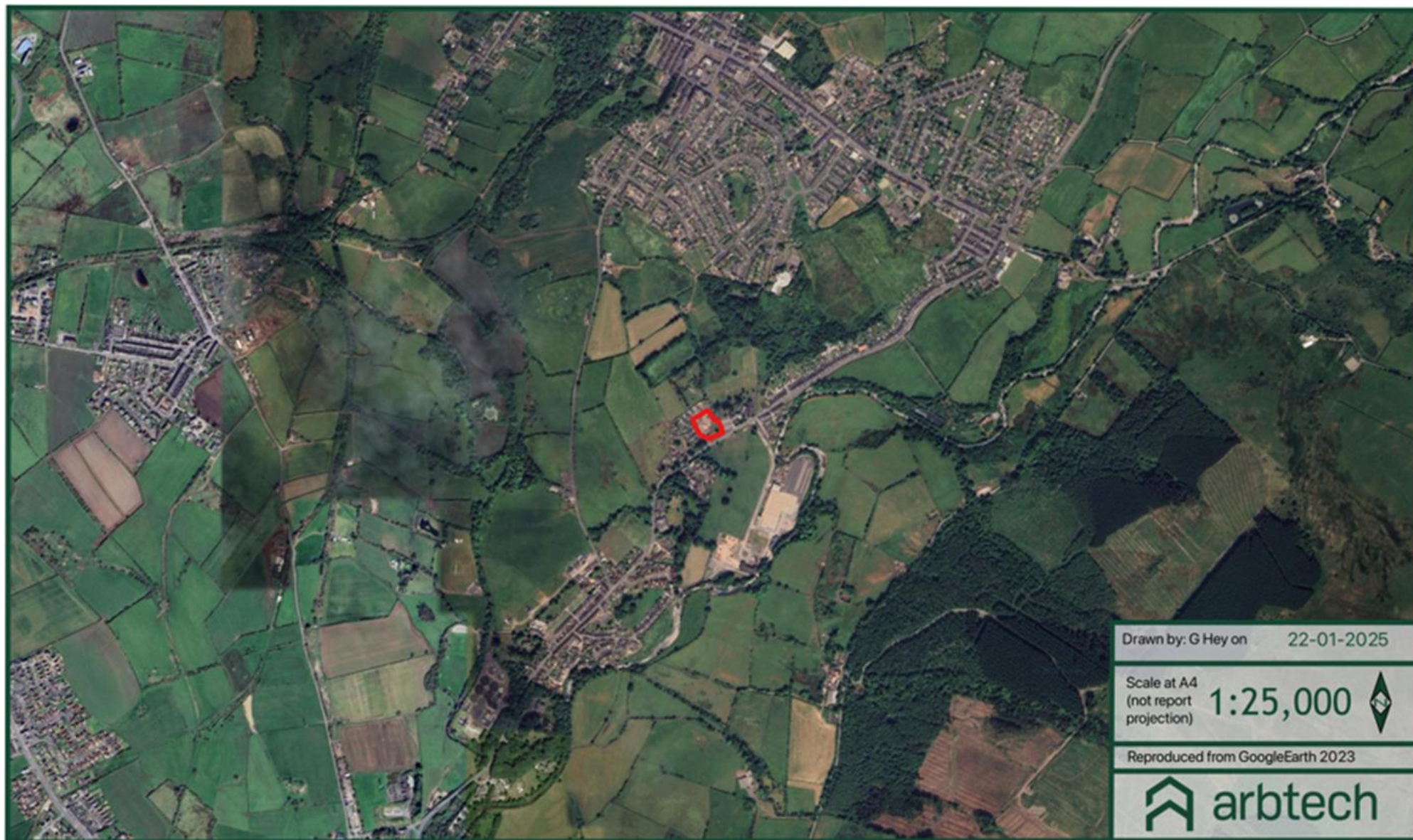
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- The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023)

Version control			
Status	Issue	Name	Date
Draft	0.1	Alexie Jenkins BSc (Hons), MRes, AMRSB, Consultant Ecologist	24-01-2025
Proof	0.2	Nicole Gullan BSc (Hons) MRSB TechArborA, Senior Ecologist	27-01-2025
Final	1.0	Alexie Jenkins BSc (Hons), MRes, AMRSB, Consultant Ecologist	27-01-2025
Updated	2.0	Alexie Jenkins BSc (Hons), MRes, AMRSB, Consultant Ecologist	22-12-2025

Appendix 1: Proposed Development Plan



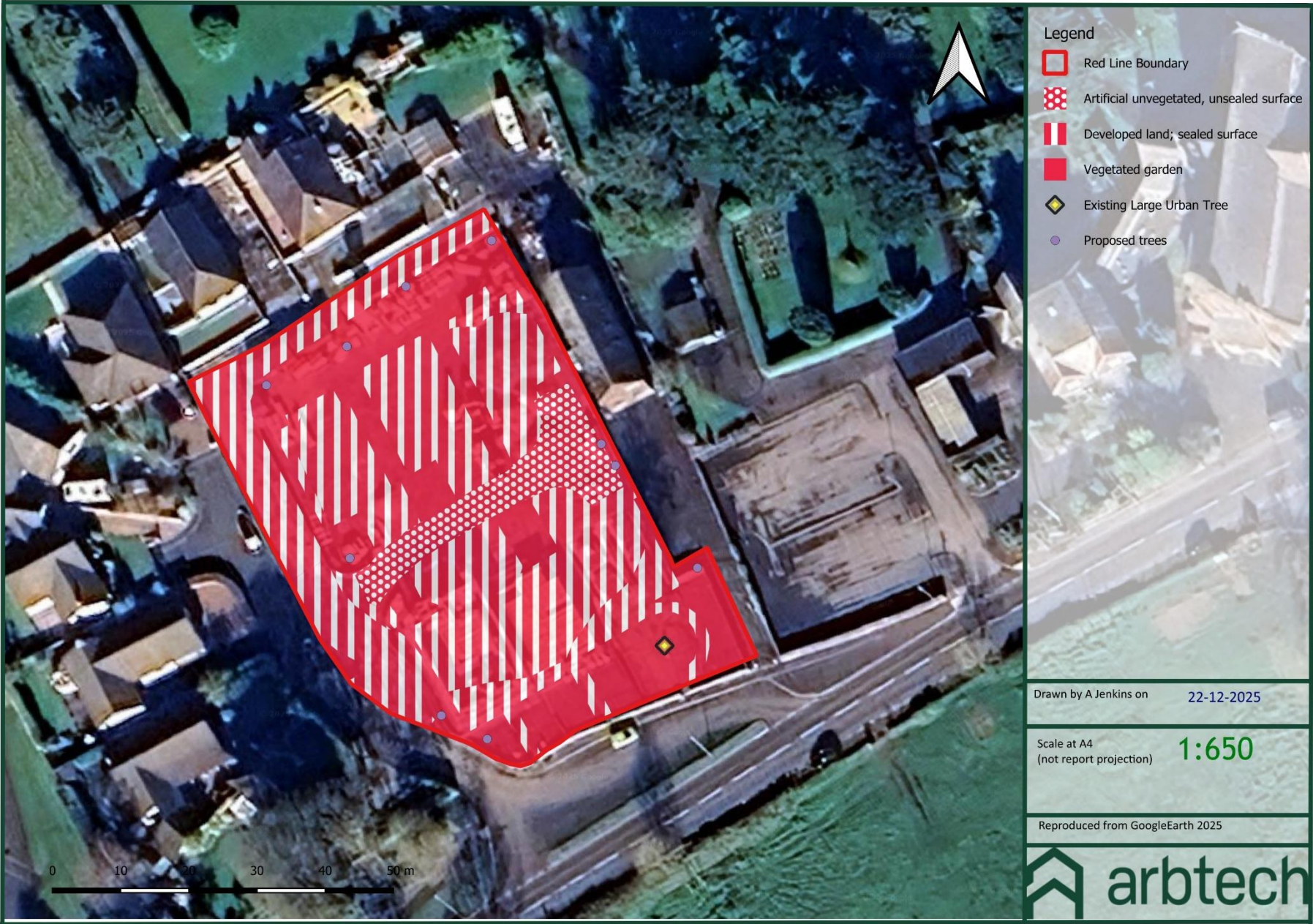
Appendix 2: Site Location Plan



Appendix 3: Baseline Habitat Plan



Appendix 4: Post Development Habitat Plan



Appendix 5: Headline BNG Results

The Defra Statutory Biodiversity Metric is provided as a separate excel spreadsheet.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.17
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-17.41%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.96	1.05	0.26
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional hedgerow units required to meet target ✓

No additional watercourse units required to meet target ✓