



Biodiversity Net Gain Assessment

148-154 High Street, Uxbridge, London UB8 1JY

DNA Uxbridge Ltd

Status	Issue	Name	Date
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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 DNA Uxbridge Ltd to undertake a Biodiversity Net Gain (BNG) Assessment at 148-154 High Street, Uxbridge, London UB8 1JY (hereafter referred to as “the site”). The survey was required to inform a planning application for the demolition of the existing site and full redevelopment for a mix of co-living, hotel and commercial floorspace (hereafter referred to as “the proposed development”).

The current proposed plan results in a **net gain** in habitat units. A percentage cannot be calculated due to the site delivering 0.0 units predevelopment. Therefore, the proposed plans are compliant in exceeding the mandatory 10% net gain.

A Biodiversity Net Gain (BNG) Management Plan is not required for this site due to all post development habitats being of poor condition where applicable.

Contents

1.0 Introduction and Context..... 6

1.1 Background..... 6

1.2 Site Location, Geology and Landscape Context..... 6

1.3 BNG Informative..... 6

2.0 Methodology 7

2.1 Baseline Biodiversity Value..... 7

2.2 Post Development Biodiversity Value 7

2.3 Limitations 8

3.0 Results 9

3.1 Baseline Habitats 9

3.2 Post Development Habitats 9

3.3 Change in Biodiversity Value of the Site 9

4.0 Recommendations to Deliver BNG 11

4.1 Discussion 11

5.0 Bibliography..... 12

Appendix 1: Proposed Development Plan..... 13

Appendix 2: Site Location Plan 14

Appendix 3: Baseline Habitat Plan 15

Appendix 4: Post Development Habitat Plan 16

Appendix 5: Headline BNG Results..... 17

1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by DNA Uxbridge Ltd to undertake a Biodiversity Net Gain (BNG) Assessment at 148-154 High Street, Uxbridge, London UB8 1JY (hereafter referred to as “the site”). The survey was required to inform a planning application for the demolition of the existing site and full redevelopment for a mix of co-living, hotel and commercial floorspace (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 & Preliminary Roost Assessment for (PEA/PRA)(Arbtech 2023).

1.2 Site Location, Geology and Landscape Context

The site is located at National Grid Reference TQ 05506 84207 and has an area of approximately 0.4ha comprising commercial buildings and hardstanding. It is surrounded by urban infrastructure on all aspects, with habitats of elevated ecological value nearby in the wider landscape, including good quality woodland habitat, several waterbodies, and frequent recreational grounds. 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 where applicable. The requirement for biodiversity net gain is also enshrined within the National Planning Policy Framework (NPPF, 2023).

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 Statutory 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 & Preliminary Roost Assessment for 148-154 High Street, Uxbridge, London UB8 1JY (PEA/PRA)(Arbtech 2023).

A baseline habitat plan is provided in Appendix 3.

Habitat Classification

The PEA/PRA (Arbtech 2023) 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 (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 Hillingdon Local Strategy 2022-2026

2.2 Post Development Biodiversity Value

The post development BNG Calculation was informed by the Design Development - Ground Floor Organisation Plan (Child Gradon Lewis, Dec 2023) 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 Design Development - Ground Floor Organisation Plan (Child Gradon Lewis, Dec 2023).

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 Hillingdon Local Strategy 2022-2026

2.3 Limitations

It was not considered that there were any significant limitations to the completion of this assessment.

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
Developed land; sealed surface	0.4 ha	There is one large complex building on-site: B1 is a three-storey commercial building. Within the confines of B1, is a hardstanding car park. There is no vegetation on site. Therefore, this has limited ecological value.	N/A	Area/compensation not in local strategy/ no local strategy

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	0.355 ha	This consists of the of co-living, hotel and commercial buildings in addition to parking and access.	N/A	Area/compensation not in local strategy/ no local strategy
Modified grassland	0.046 ha	To the centre and east of the new development there will be several small patches of amenity grassland in the form of modified grassland.	Poor	Area/compensation not in local strategy/ no local strategy
Urban trees	0.045 ha	Within the areas of grassland and around, there will be 11 small trees planted post development.	Poor	Area/compensation not in local strategy/ no local strategy

3.3 Change in Biodiversity Value of the Site

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

Areas of Habitat

The baseline habitat value of the site is 0.0 units, due to the site being solely made up of developed land; sealed surface which hold no value.

The post development habitat value of the site is 0.21 units, comprising the creation of buildings and hardstanding (no value), modified grassland (0.09 units), and urban trees (0.13 units).

This results in a net gain in biodiversity. A percentage cannot be calculated due to the absence of habitat units predevelopment.

4.0 Recommendations to Deliver BNG

4.1 Discussion

The current proposed plan results in a **net gain** in habitat units. A percentage cannot be calculated due to the site delivering 0.0 units predevelopment. Therefore, the proposed plans are compliant in exceeding the mandatory 10% net gain.

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 to ensure that biodiversity net gain is delivered.

5.0 Bibliography

- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- CIEEM-CIRIA-IEMA (2019) Biodiversity Net Gain – Good Practice Principles for Development.
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey a technique for environmental audit.
http://jncc.defra.gov.uk/PDF/pub10_handbookforphase1habitatsurvey.pdf
- Natural England (2023). The Statutory Biodiversity Metric (JP039).
- Natural England (2023). The Statutory Biodiversity Metric User Guide (JP039).
- Natural England (2023). The Statutory Biodiversity Metric Technical Annex 1 - Condition Assessment Sheets and Methodology (JP039).
- Natural England (2023). The Statutory Biodiversity Metric Technical Annex 2 – Technical Information (JP039).
- The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023)

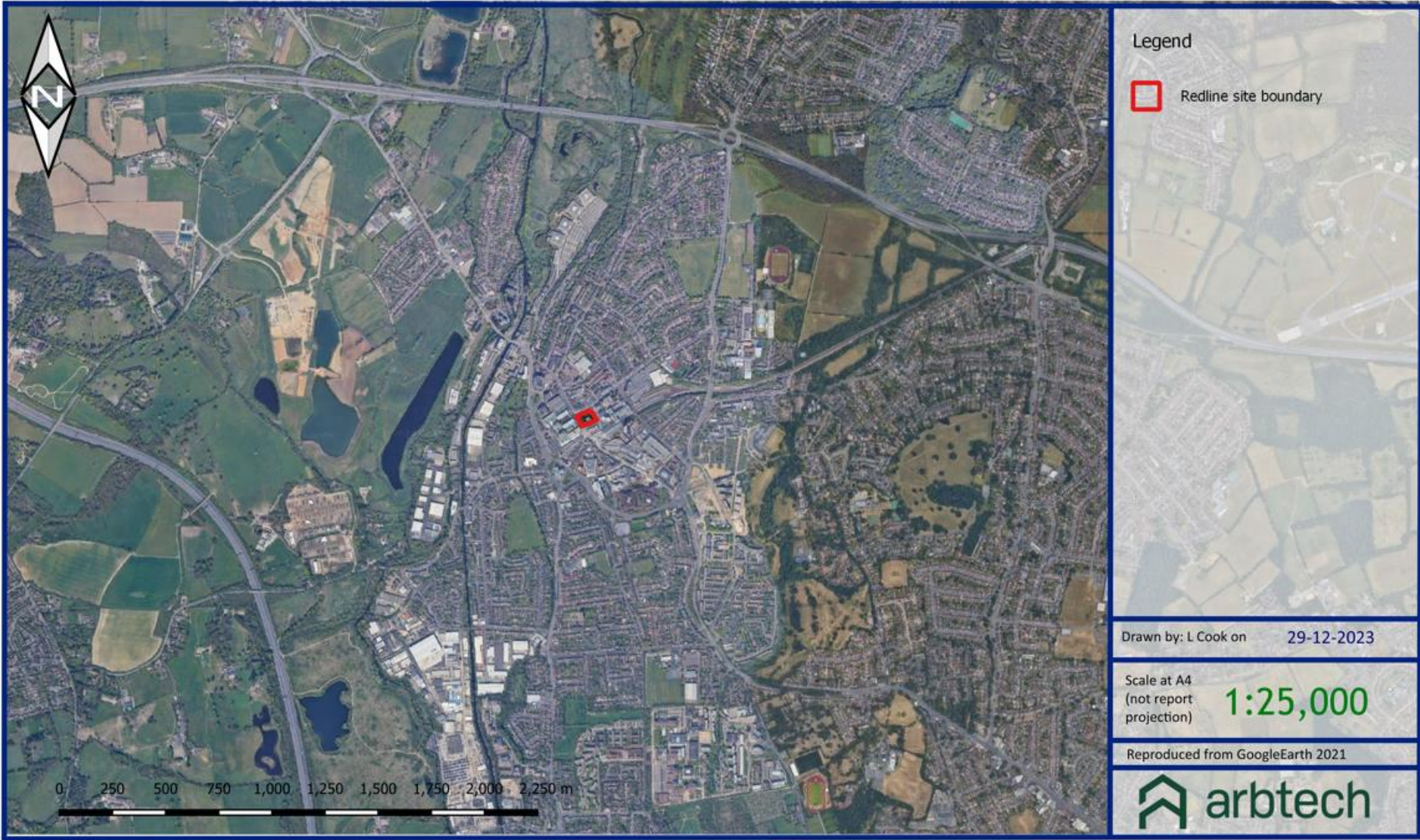
Appendix 1: Proposed Development Plan

Design Development - Ground Floor Organisation

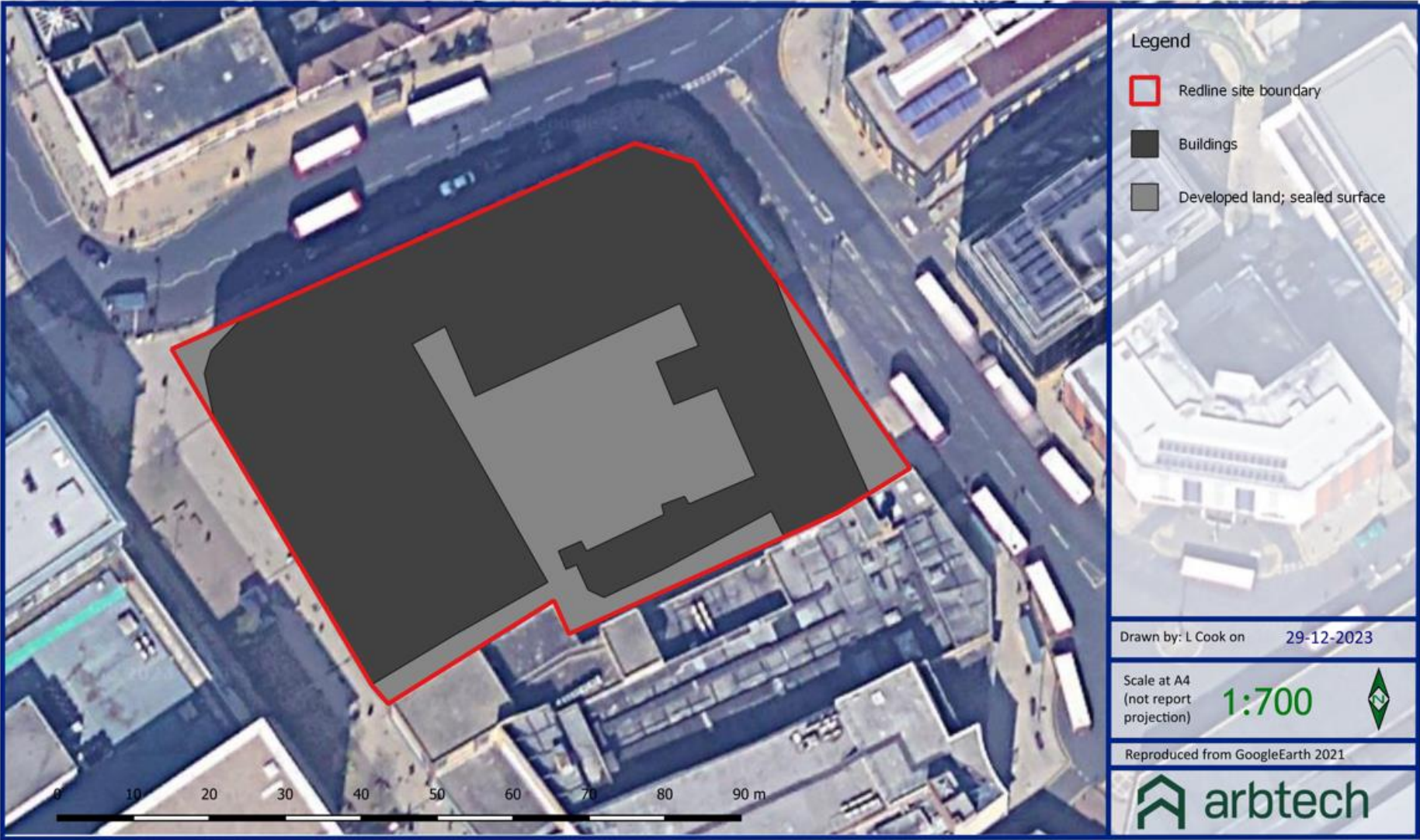
Follow-up Option Plan - Level 00



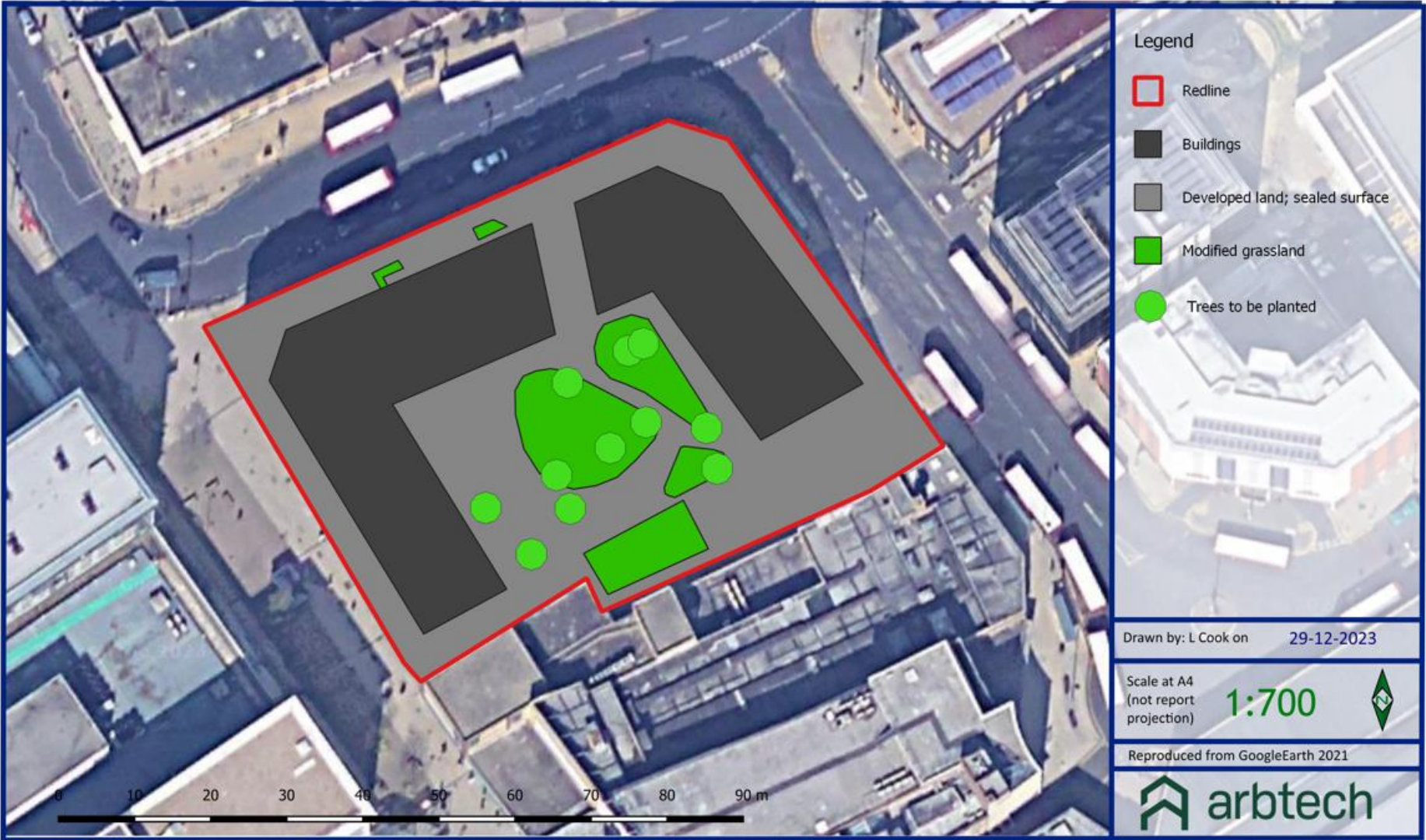
Appendix 2: Site Location Plan



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 <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	0.21			
	Hedgerow units	0.00			
	Watercourse units	0.00			
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	N/A	0 baseline units - % cannot be calculated		
	Hedgerow units	0.00%			
	Watercourse units	0.00%			
Trading rules satisfied?	Yes ✓				
Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	0.00	0.00	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	0.00	0.00	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓