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# Biodiversity Net Gain Assessment

**Site Address**:

Wythenshawe Campus, Howard House, Brownley Road, Wythenshawe, Manchester, M22 9UH

**Client**:

The Manchester College

**Assessment Date**:

11th August 2025

**Project:**

This report is prepared to inform a planning application with Manchester City Council. The proposal is described as:

Proposed new brick workshop with covered external work area.

BNG assessment methodology and legislation can be found in the Arbtech Supplement: **BNG Methodology and Legislation – 2025**.

The results and recommendations contained within this report are valid for 18 months. An updated site visit and BNG assessment may be required if the report is to be used any longer than 18 months after completion.

| Version Control | | | |
|---|---|---|---|
| **Status** | **Issue** | **Name** | **Date** |
| Draft | 0.1 | Harry Brindle, BSc (Hons), Consultant Ecologist | 11/08/2025 |
| Final | 1.0 | Harry Brindle, BSc (Hons), Consultant Ecologist | 13/08/2025 |
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## Site Location and Context

A baseline habitat map is provided in **Appendix 1**, a post development habitat map in **Appendix 2**, a proposed development plan in **Appendix 3**, headline BNG results in **Appendix 4**, and condition assessments in **Appendix 5**.

The survey site is centred on National Grid Reference SJ 82803 87761 and has an area of approximately 0.092ha.

The site comprises a series of structures associated with a variety of teaching activities for the college. The site is located within the suburb of Wythenshawe, in southern Manchester. The site is located within the grounds of Manchester College, positioned in the western corner of the wider site. The site is bound by the college to the east and south, St John Fisher and Thomas More Catholic Primary School and a nursing home to the west. The wider landscape is dominated by extensive areas of built form, associated with Manchester. The underlying soil type for the site comprises slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils, while the underlying geology comprises Bollin Mudstone Member - Mudstone.

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

- Statutory BNG Metric - Wythenshawe Campus, Manchester College, M22 9UH – v1 (Arbtech Consulting Ltd., 2025)
- Proposed Plan (10Architect, 2025)
- Preliminary Ecological Appraisal (PEA) - Wythenshawe Campus, Manchester College, M22 9UH – v1 (Arbtech Consulting Ltd., 2025)

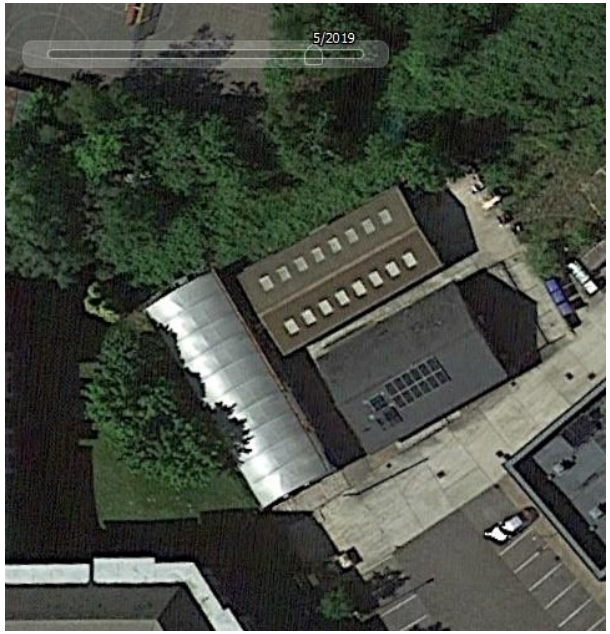
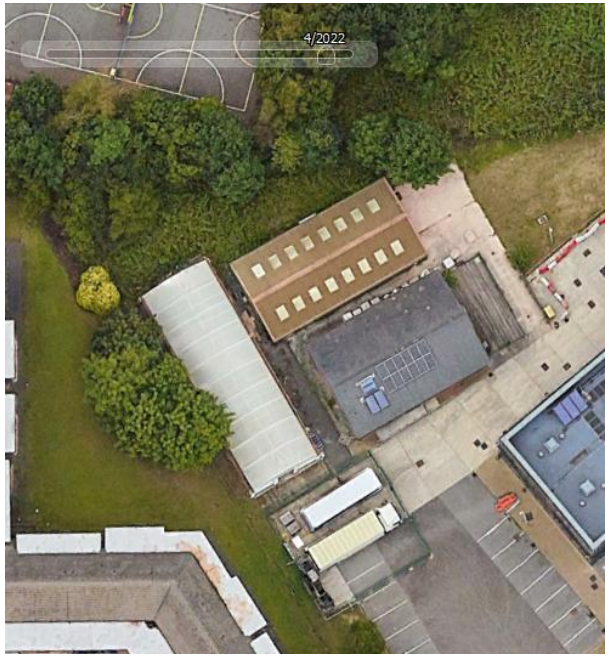
## Executive Summary

The current landscaping proposal generates a net gain of area-based habitat units (+12.51%). As such, the proposed development is compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2025) as a minimum biodiversity net gain of +10% was achieved for both area- and linear-based habitat units.

All trading conditions have been satisfied.

A Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP) 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.

## Introduction

| **BNG Informative** | | |
|---|---|---|
| Habitat Degradation Statement | Date reflected by BNG calculations | 4th August 2025 |
| | The baseline biodiversity value of the site is derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2025). As evident in the screenshots of satellite imagery obtained from GoogleEarth dated May 2019 and April 2022, the site does not appear to have undergone any degradation. The habitats on site, and therefore biodiversity value of the site, is not considered to have undergone degradation since 30th January 2020.     |
| Irreplaceable Habitat Statement | No irreplaceable habitats as listed under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024) are currently present nor were present before 30th January 2020. | |

<table>
<tr><td>Metric Version & Publication Date</td><td colspan="3">Statutory Biodiversity Metric Calculation Tool first published 29th November 2023 with last updates to metric tools and user guides on 3rd July 2025.</td></tr>
<tr><td>BNG Target Uplift</td><td colspan="3">+10%</td></tr>
<tr><td>National Character Area (NCA)</td><td colspan="3">55 - Manchester Conurbation</td></tr>
<tr><td rowspan="5">Strategic Significance</td><td colspan="3">Greater Manchester Combined Authority (GMCA) is the authority responsible for the Local Nature Recovery Strategy (LNRS) in the region. As of now, the LNRS remains in draft form and hasn’t been formally adopted. GMCA's BNG Guidance (February 2024) provides regional context and expectations for how Local Planning Authorities (LPAs) and applicants should manage BNG within Greater Manchester.</td></tr>
<tr><td>Habitat</td><td>Baseline / Post-Development</td><td>Justification</td></tr>
<tr><td>Urban habitats</td><td>Both</td><td rowspan="2">Low - Habitat is modified and of low ecological importance.</td></tr>
<tr><td>Bramble scrub</td><td>Both</td></tr>
<tr><td>Urban tree</td><td>Both</td><td>Moderate – Habitat provides habitat of value for various fauna including breeding birds.</td></tr>
<tr><td colspan="4">Limitations</td></tr>
<tr><td colspan="4">There were no specific limitations to the assessment.</td></tr>
</table>

## Baseline

| **Baseline Biodiversity Value: On-Site** | | | | |
|---|---|---|---|---|
| **Area-Based Habitats (A-1)** | | | | |
| **Habitat** | **Area (ha)** | **Description** | **Condition Assessment** | **Strategic Significance** |
| Developed land; sealed surface | 0.028 | There are three buildings present within the site. The buildings comprise a brick workshop (B1), a bungalow (B2) and a polytunnel (B3). All of the buildings are to be impacted by the proposals and as such, they were all subject to a detailed assessment for their value to support roosting bats, details of which are provided further in this report. | Habitat condition pre-determined as '**N/A**' as detailed within the Statutory Biodiversity Condition Assessment Supplement. | **Low** Strategic Significance |
| Developed land; sealed surface | 0.0327 | The buildings present within the site are all situated on an area of concrete, which also forms the main pedestrian access to the site, while also being utilised as an HGV storage compound. | | |
| Bare ground | 0.005 | Located within the northern section of the site is an area of bare ground that is utilised for the storage of equipment and access to the rear of B1 and B3 within the site. There is no associated vegetated and the area comprises entirely of exposed soil. | **Poor:** Passes 1 of 3 criteria, Assessed using 'Urban' Condition Assessment Supplement. | |
| Ruderal/Ephemeral | 0.009 | In the northern section of the site, there is a strip of tall forbs present, with the area dominated by rosebay willowherb (Chamaenerion angustifolium) and spear thistle (Cirsium vulgare). There are some grass species present, comprising perennial rye grass (Lolium perenne), but they are much more limited, with the dense areas of willowherb and thistle overwhelming throughout. The vegetation structure is not varied within this section, does not contain a mixture of plants that are year-round beneficial for wildlife, and there is an absence of non-native Schedule 9 species. | **Good:** Passes 3 of 3 criteria, Assessed using 'Urban' Condition Assessment Supplement. | |
| Bramble scrub | 0.018 | Within the northern section of the site is a small patch of scrub, which is entirely dominated by bramble (Rubus fruticosus). The scrub is extremely dense throughout, with the shrub layer being approximately 1m tall. There are three trees present within the area of scrub, with species including field maple (Acer campestre) and alder (Alnus glutinosa). These trees are semi-mature, being approximately 15-20m tall, with DBHs of approximately 15-20cm. | Habitat condition pre-determined as '**N/A**' as detailed within the Statutory Biodiversity Condition Assessment Supplement. | |

| | | | | |
|---|---|---|---|---|
| Urban tree | 0.0163 | In the north of the site is four scattered trees. The trees are approximately 15m tall, with a DBH of approximately 30cm. The tree has no niches for bats or invertebrates to utilise; however, it is large enough to support nesting birds. There are no signs of damage or vandalism to the trees, and the tree is not subject to a routine pruning regime. Trees are located within the bramble scrub. | **Moderate:** Passes 4 of 6 criteria. Assessed using 'Individual trees' Condition Assessment Supplement | **Moderate** Strategic Significance |

## Post-Development

| Post-Development Biodiversity Value: On-Site | | | | | |
|---|---|---|---|---|---|
| **Area-Based Habitats** | | | | | |
| | **Habitat** | **Area (ha)** | **Description** | **Condition Assessment** | **Strategic Significance** |
| **Retained (A-1)** | Ruderal/Ephemeral | 0.004 | Retained area of ruderal to the east of the site. | **Good:** Passes 3 of 3 criteria, Assessed using 'Urban' Condition Assessment Supplement. | **Low** Strategic Significance |
| | Urban tree | 0.0163 | Retained scattered trees north of the site. | **Moderate:** Passes 4 of 6 criteria. Assessed using 'Individual trees' Condition Assessment Supplement | **Moderate** Strategic Significance |
| **Created (A-2)** | Developed land; sealed surface | 0.036 | Proposed building. | Habitat condition pre-determined as '**N/A**' as detailed within the Statutory Biodiversity Condition Assessment Supplement. | **Low** Strategic Significance |
| | Developed land; sealed surface | 0.0413 | Proposed hardstanding associated to new building. | | |
| | Urban tree | 0.0163 | Two small proposed native trees planted within the eastern boundary. | **Moderate:** Passes 4 of 6 criteria. Assessed using 'Individual trees' Condition Assessment Supplement | **Moderate** Strategic Significance |
| **Enhanced (A-3)** | Mixed scrub | 0.0114 | An area of bramble scrub enhanced with planting of other native scrub species to create a mixed scrub. Older bramble plants will be retained to help achieve good condition. | **Moderate:** Passes 4 of 5 criteria. Assessed using 'Scrub' Condition Assessment Supplement | |

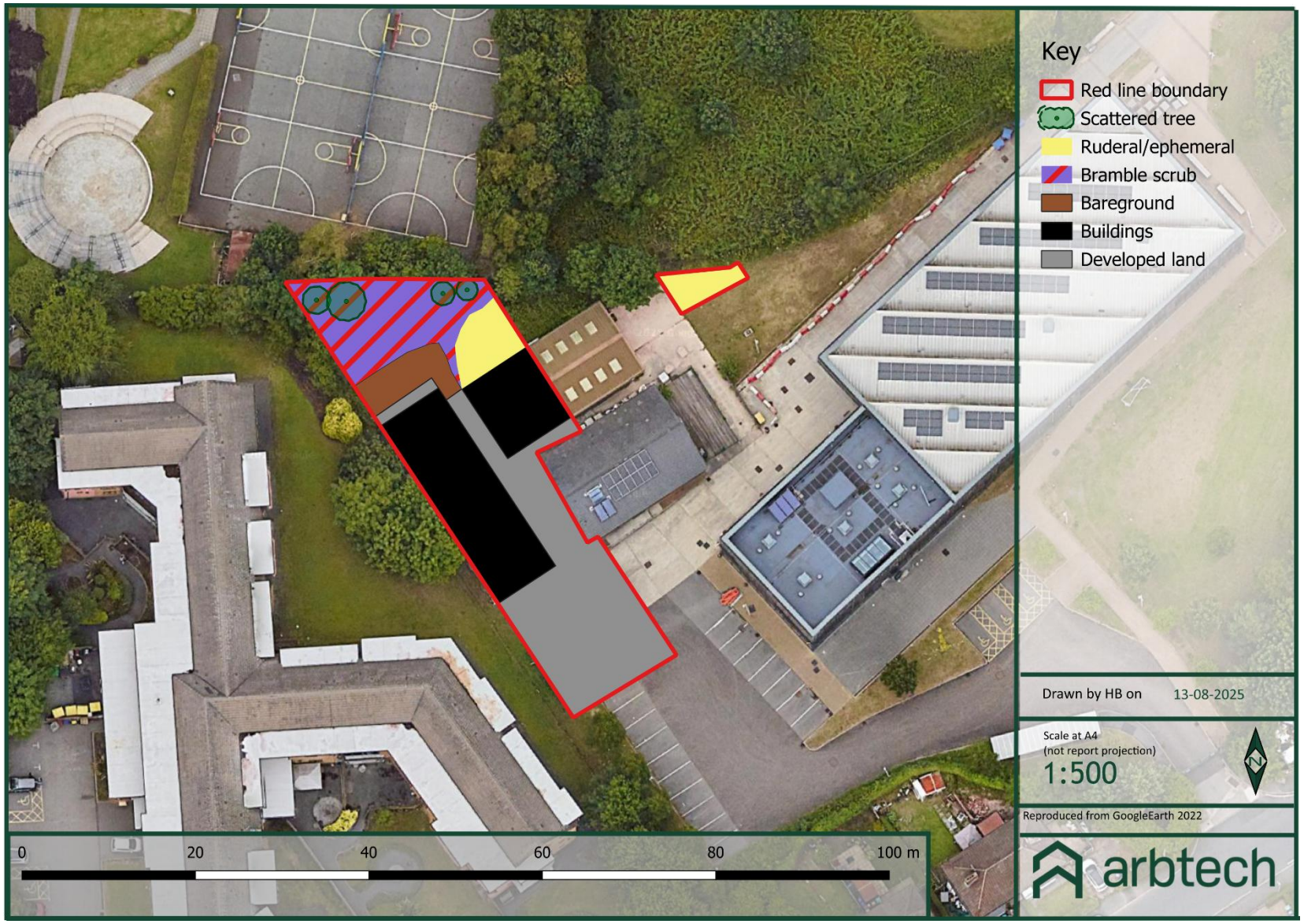
## Change of Biodiversity Value

| | | Biodiversity Units | | |
|---|---|---|---|---|
| | | **Area-Based** | **Linear-Based** | **Watercourse-Based** |
| **On-Site** | Baseline | 0.28 units | N/A | N/A |
| | Post-Development | 0.31 units | N/A | N/A |
| | Net Change | 0.03 units **(+12.51%)** | N/A | N/A |
| **Off-Site** | Baseline | N/A | N/A | N/A |
| | Post-Development | N/A | N/A | N/A |
| | Net Change | N/A | N/A | N/A |
| **Overall Net Change** | | 0.03 units **(+12.51%)** | N/A | N/A |

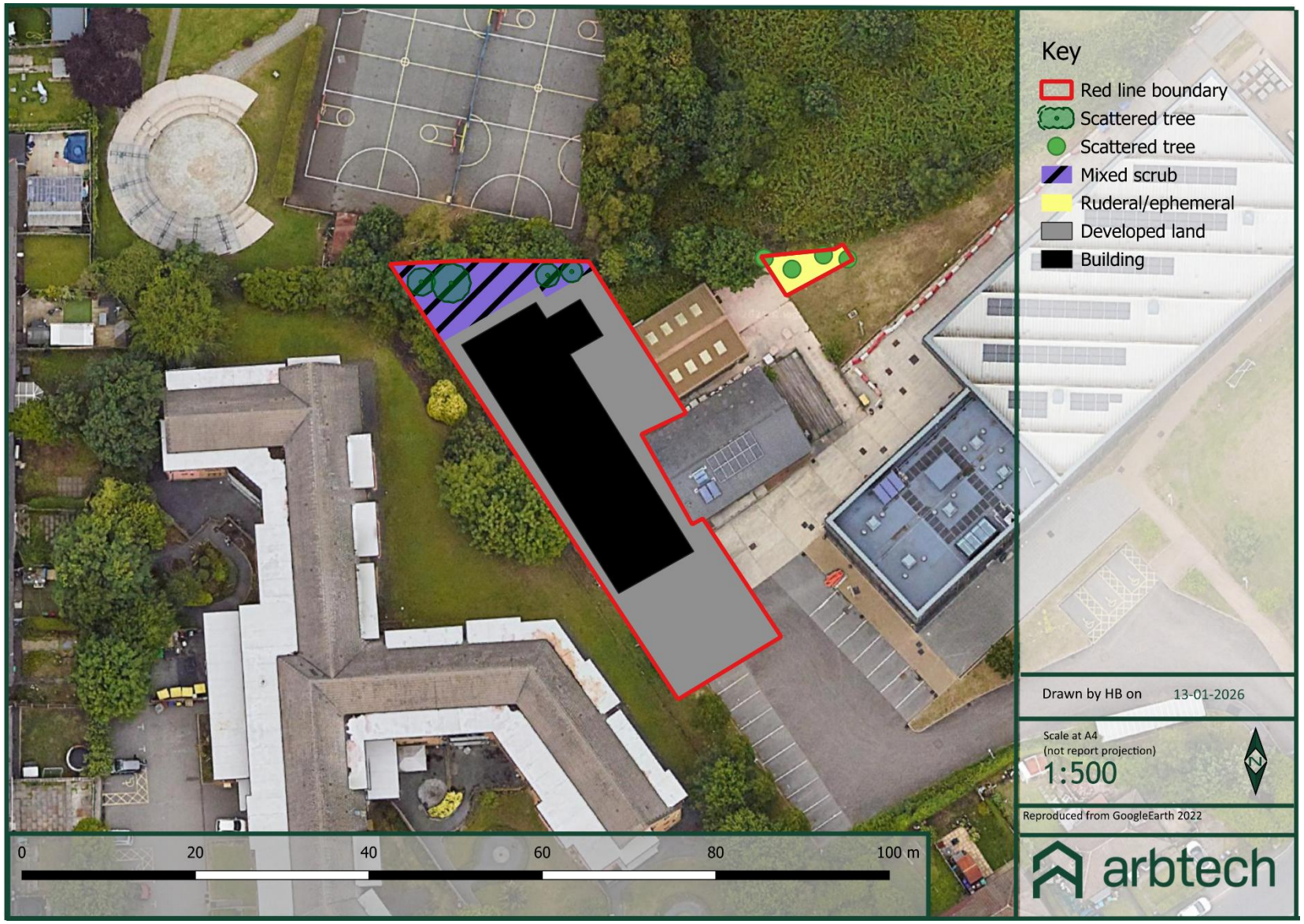
## Results, Discussion, and Next Steps

| **BNG Informative** | |
|---|---|
| Results and Next Steps | The current landscaping proposal generates a net gain of area-based habitat units (+12.51%). As such, the proposed development is compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2025) as a minimum biodiversity net gain of +10% was achieved for both area- and linear-based habitat units.<br><br>All trading conditions have been satisfied.<br><br>A Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP) 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. |

## Appendix 1: Baseline Habitat Plan



## Appendix 2: Post-Development Habitat Plan



## Appendix 3: Proposed Development Plan



## Appendix 4: 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) | *Area habitat units* | 0.03 |
| | *Hedgerow units* | 0.00 |
| | *Watercourse units* | 0.00 |
| **Total net % change** (Including all on-site & off-site habitat retention, creation & enhancement) | *Area habitat units* | 12.51% |
| | *Hedgerow units* | 0.00% |
| | *Watercourse units* | 0.00% |
| **Trading rules satisfied?** | | Yes ✓ |

| Unit Type | Target | Baseline Units | Units Required | Unit Deficit |
|---|---|---|---|---|
| *Area habitat units* | 10.00% | 0.28 | 0.31 | 0.00 |
| *Hedgerow units* | 10.00% | 0.00 | 0.00 | 0.00 |
| *Watercourse units* | 10.00% | 0.00 | 0.00 | 0.00 |

# Appendix 5a: Baseline Habitat Condition Assessment Sheets

Ruderal/Ephemeral

| **Condition Sheet: URBAN Habitat Type** | | | |
|---|---|---|---|
| **Limitations (if applicable)** | | **Survey reference (if relating to a wider survey)** | |
| **Grid reference** | | **Habitat parcel reference** | |
| **Condition Assessment Criteria** | | **Criterion passed (Yes or No)** | **Notes (such as justification)** |
| Core Criteria - must be assessed for **all urban habitat types**: | | | |
| A | Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area. | yes | |
| B | The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year. | yes | |
| C | Invasive non-native plant species (listed on Schedule 9 of WCA[1]) and others which are to the detriment of native wildlife (using professional judgement)[2] cover less than 5% of the total vegetated area[3].<br><br>**Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).** | yes | |

Bare ground

| Condition Assessment Criteria | | Criterion passed (Yes or No) | Notes (such as justification) |
|---|---|---|---|
| Core Criteria - must be assessed for **all urban habitat types**: | | | |
| A | Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area. | no | |
| B | The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year. | no | |
| C | Invasive non-native plant species (listed on Schedule 9 of WCA[1]) and others which are to the detriment of native wildlife (using professional judgement)[2] cover less than 5% of the total vegetated area[3].<br><br>**Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).** | yes | |

**Condition Sheet: INDIVIDUAL TREES Habitat Type**

| | Condition Assessment Criteria | Criterion passed (Yes or No) | Notes (such as justification) |
|---|---|---|---|
| A | The tree is a native species (or at least 70% within the block are native species). | yes | |
| 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). | yes | |
| C | The tree is mature (or more than 50% within the block are mature)[1]. | no | |
| D | There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height. | yes | |
| E | Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark. | no | |
| F | More than 20% of the tree canopy area is oversailing vegetation beneath. | yes | |
| | **Number of criteria passed** | | |

| Condition Assessment Result (out of 6 criteria) | Condition Assessment Score | Score Achieved ×/✓ |
|---|---|---|
| Passes 5 or 6 criteria | Good (3) | |
| Passes 3 or 4 criteria | Moderate (2) | yes |
| Passes 2 or fewer criteria | Poor (1) | |

Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.

# Appendix 5b: Post-Development Habitat Condition Assessment Sheets

**Condition Sheet: SCRUB Habitat Type**

| | Condition Assessment Criteria | Criterion passed (Yes or No) | Notes (such as justification) |
|---|---|---|---|
| A | The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range).[1]<br>- At least 80% of scrub is native,<br>- There are at least three native woody species[2],<br>- No single species comprises more than 75% of the cover (except hazel *Corylus avellana*, common juniper *Juniperus communis*, sea buckthorn *Hippophae rhamnoides* (only in its restricted native range), or box *Buxus sempervirens*, which can be up to 100% cover). | yes | |
| B | Seedlings, saplings, young shrubs and mature (or ancient or veteran[3]) shrubs are all present. | yes | |
| C | There is an absence of invasive non-native plant species[4] (as listed on Schedule 9 of WCA[5]) and species indicative of suboptimal condition[6] make up less than 5% of ground cover. | yes | |
| D | The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat. | yes | |
| E | There are clearings, glades or rides present within the scrub, providing sheltered edges. | No | |
| | | Number of criteria passed | |

| Condition Assessment Result (out of 5 criteria) | Condition Assessment Score | Score Achieved ×/✓ |
|---|---|---|
| Passes 5 criteria | Good (3) | |
| Passes 3 or 4 criteria | Moderate (2) | Yes |
| Passes 2 or fewer criteria | Poor (1) | |

**Condition Sheet: INDIVIDUAL TREES Habitat Type**

| Condition Assessment Criteria | | Criterion passed (Yes or No) | Notes (such as justification) |
|---|---|---|---|
| A | The tree is a native species (or at least 70% within the block are native species). | yes | |
| 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). | yes | |
| C | The tree is mature (or more than 50% within the block are mature)[1]. | no | |
| D | There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height. | yes | |
| E | Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark. | no | |
| F | More than 20% of the tree canopy area is oversailing vegetation beneath. | yes | |
| | **Number of criteria passed** | | |

| Condition Assessment Result (out of 6 criteria) | Condition Assessment Score | Score Achieved ×/✓ |
|---|---|---|
| Passes 5 or 6 criteria | Good (3) | |
| Passes 3 or 4 criteria | Moderate (2) | yes |
| Passes 2 or fewer criteria | Poor (1) | |

Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.