# FIRS FARM, CRAWLEY

## Biodiversity Net Gain Assessment

*March 2025*

Collingtonwinter
environmental

Report Control Sheet

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# 1 INTRODUCTION

## 1.1 SCOPE & PURPOSE

1.1.1. Collington Winter Environmental Ltd was commissioned by ET Planning to prepare a Biodiversity Net Gain (BNG) Assessment at Firs Farm, Copthorne Common, Crawley, RH10 3LF. This report has been prepared to inform planning permission for five residential properties with associated landscaping and access.

1.1.2. The author of this report is Andrew Taylor MSc, Ecological Project Manager and has been overseen by Olivia Collington BSc (Hons), MIEnvSc, CEnv Director at Collington Winter Environmental Ltd. Olivia is highly experienced managing schemes and has produced many ecological reports to inform planning management plans.

1.1.3. This report has been written broadly following the Biodiversity Net Gain Report and Audit Templates (CIEEM, 2023).

## 1.2. LOCATION

1.2.1. Please refer to Figure 1.1 for the site location. The site is located in Copthorne, a village in West Sussex, and is approximately 7km east of Crawley town centre.

*Figure 1.1 Site Location*

## 1.3. OBJECTIVES

1.3.1. The report has been produced to document the methods, results, and conclusions of a BNG Assessment undertaken based on the proposed development for the site to fulfil the following:

- Ensure that the mitigation hierarchy has been applied.
- Identify the baseline habitats present and provide a condition assessment.
- Identify the post development habitats on site, assess the possible target condition and provide an indication of the likely importance of those habitats.
- Calculate the overall change in biodiversity score from pre- post development.
- Provide design recommendations to maximise potential net gain achievable.
- Provide an indication of likely outcomes and indicative cost as required.

## 1.4 PLANNING CONTEXT

1.4.1 The Government 25-year Environment Plan states that government will "embed environmental net gain principle for development."

1.4.2 National policy already sets out that planning should provide Biodiversity Net Gain (BNG) where possible. National Planning Policy Framework (NPPF) Paragraphs 174(d), 179(b) and 180(d) refer to this policy requirement and the Natural Environment Planning Practice Guidance (PPG) provides further explanation on how this should be done.

1.4.3 Under the Environment Act 2021, all planning permissions granted in England (with a few exemptions) except for small sites will have to deliver at least 10% biodiversity net gain from January 2024. BNG will be required for small sites from April 2024. BNG will be measured using Defra's biodiversity metric and habitats will need to be secured for at least 30 years. Key points regarding BNG are listed below:

- Minimum 10% gain required calculated using Biodiversity Metric & approval of net gain plan.
- Habitat secured for at least 30 years via obligations/ conservation covenant.
- Habitat can be delivered on-site, off-site or via statutory biodiversity units.
- There will be a national register for net gain delivery sites.
- The mitigation hierarchy still applies of avoidance, mitigation, and compensation for biodiversity loss.
- Will also apply to Nationally Significant Infrastructure Projects (NSIPs)
- Does not apply to marine development.
- Does not change existing legal environmental and wildlife protections.

1.4.4 Developers will be required to undertake an assessment (using the nationally set BNG metric tool) of the current biodiversity value of their site both prior to and post the development proposal. In the event that the value of the site post-development is less than 10% better than it was prior to development then the developer will have an obligation to provide additional off-site BNG units to achieve the mandatory 10% net gain.

# 2 METHODS

## 2.1 EXISTING HABITAT (BASELINE)

2.1.1 A walkover of the site was undertaken by Collington Winter Environmental Ltd in July 2024. The methods were based on the standard methodology as detailed by UKHab classifications (The UK Habitat Classification Working Group, May 2023) using the UK Habitat Classification V2 guidance tool.

## 2.2 PLANNING LAYOUT (POST-DEVELOPMENT)

2.2.1 The Landscape Plan created by Devtec properties (reference: E-01-D Proposed Landscaping Plan) has provided a red line boundary as well as the habitats to be incorporated within the site.

## 2.3 STATUTORY BIODIVERSITY METRIC

2.3.1 The BNG calculation was undertaken utilising The Statutory Biodiversity Metric from DEFRA, the site's UK Habitat map and the Site Plan. The calculation was performed by a technically competent and experienced ecologist as detailed in British Standard BS8683 – Suitably qualified person –definition in BS8683:2020.

2.3.2 The Statutory Biodiversity Metric uses habitat features as a proxy measure for capturing the value and importance of nature. The metric considers the size, ecological condition, location and proximity to nearby 'connecting' features. The metric enables assessments to be made of the present and forecast future biodiversity value of a site.

## 2.4 HABITAT SCORING

2.4.1 The Statutory Biodiversity Metric supplies reference documents and user guides in which to accurately evaluate and assess the different habitats on site. The methodology for the baseline and post development calculations are demonstrated in the following sections.

### *Baseline Units*

2.4.2 To assess the quality of a habitat and therefore calculate the units scored the Statutory Biodiversity Metric utilises three scoring factors as detailed below.

### *Condition*

2.4.3 The condition of a habitat is assessed utilising the Condition Sheets provided for each habitat type. These list positive indicators for each habitat and indicate how many of these indicators need to be present to meet certain thresholds of condition. These condition sheets can be found in The Statutory Biodiversity Metric habitat condition assessment sheets with instructions tool Technical (Natural England Joint Publication, 2023).

### *Distinctiveness*

2.4.4 The distinctiveness of each habitat (area and linear) is automatically assigned by the tool, based upon national records of the occurrence and rarity of each habitat (The Statutory Biodiversity metric).

### *Strategic Significance*

2.4.5 The idea of strategic significance works at a landscape scale. It gives additional unit value to habitats that are in preferred locations for biodiversity and other environmental objectives. Strategic significance utilises published local plans and objectives to identify local priorities for targeting biodiversity and nature improvement, such Nature Recovery Areas, local biodiversity plans, National Character Area objectives and green infrastructure strategies.

### *Post Development Units*

2.4.6 Additional factors are implemented when assessing post development habitats.

- Difficulty of Creation/Enhancement
- Temporal Risk "Time to target condition".
- Spatial Risk (when offsite mitigation is necessary)

## 2.5 LIMITATIONS OF ASSESSMENT

2.5.1 Whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment. The conclusions and recommendations detailed in this report are based upon the site redline boundary and the development proposals as outlined by the client at the time of writing. Should there be any changes to the site redline boundary or development proposals at a later stage, this assessment should be reviewed to determine whether any amendments or additional survey work is required.

2.5.2 Habitat areas (predevelopment) have been measured using online mapping, and therefore will not be completely accurate.

*Table 2.1 Limitations Review*

| Limitation | Analysis |
|---|---|
| Competence of surveyor | Condition Assessment was undertaken by Andrew Taylor who holds 2 years' experience and was overseen by Olivia Collington who holds 10 years' experience. Olivia Collington BSc (Hons), MIEnvSc, CEnv, Managing Director at Collington Winter Environmental Ltd who has over 10 years professional experience in ecological consultancy and holds key experience undertaking BNG assessments and providing advice on habitat creation, management and enhancements for both developers and habitat banks. |
| Competence of ecologist completing the metric | The metric was completed by Andrew Taylor and overseen by Olivia Collington who holds 10 years' experience. |
| Age of survey data | The condition assessment was undertaken in July 2024 and is therefore less than 12 months old. There is no constraint to the age of survey data and this falls within best practice guidance. |
| Timing of survey | The survey was undertaken in July which is an optimal time of year to undertake condition assessments. |
| Departure from best practice guidance | No departure from best practice guidance. |

# 3 BASELINE CONDITIONS - HABITATS

## 3.1. STRATEGIC SIGNIFICANCE

3.1.1. The site is "*Location ecologically desirable but not in local strategy*".

## 3.2. HABITATS PRE-DEVELOPMENT

3.2.1. Table 3.1 summarises the baseline habitats and condition assessment. Please refer to the Appendix 1 for the Baseline Condition Assessment Sheets for each habitat. Please refer to the PEA report produced in conjunction for full habitat descriptions, UKHab map and photographs of the site (Reference: CW20-2011 Firs Farm PEA)

*Table 3.1 Habitat Type and Condition Assessment (pre-development)*

| Habitat Type | Area (hectares) | Condition | Description |
|---|---|---|---|
| Developed Land: Sealed Surface | 0.1528 | N/A – Other | A series of buildings and associated courtyard |
| Vacant or Derelict Land | 0.0484 | Poor | Driveaway and former building, which was colonised by mosses. |
| Vegetated Garden | 0.0549 | Condition Assessment N/A | Dominated by Japanese lawn grass. It was utilised as a vegetated garden for the associated residential house |
| Modified Grassland | 0.028 | Poor | Unmanaged area of grassland dominated by creeping bent. Grassland was classified as 'poor' condition due to the presence of fewer than 6 species per m2. |
| Tall Forbs | 0.0815 | Poor | Tall forbs located to the east of the southern grassland area. Dominated by common nettle. Other species include bramble, willowherb and goat willow |
| Individual Tree | 0.0733 | Moderate | A total of two large trees located on site. |
| Individual Tree | 0.0651 | Moderate | A total of four medium trees in moderate condition located on site. |
| Individual Tree | 0.0122 | Moderate | A total of three small trees in moderate condition located on site. |
| **Habitat Type** | **Length (KM)** | **Condition** | **Description** |
| Non-Native and Ornamental Hedgerow | 0.03 | Poor | A cherry laurel dominated hedgerow was located to the south of the site |

## 3.3. RETAINED HABITATS

3.3.1. A total of six existing trees will be retained within the development. Including two large trees in moderate condition, three medium trees in moderate condition and one small tree in moderate condition.

## 3.4. LOST HABITATS

3.4.1. A total of 0.03 km of non-native and ornamental hedgerow will be retained within the development, however, due to the hedgerow being placed within a vegetated garden post development, this will be considered as lost.

3.4.2. All other habitats within the red line boundary will be lost to facilitate development.

## 3.5. PRE- DEVELOPMENT HABITAT BASELINE

3.5.1. Please refer to Table 3.3 summarising the Habitat Baseline and hedgerow baseline for the calculation, demonstrating habitats to be retained, enhance and/or lost.

*Table 3.2 Habitat Baseline*

| | **On site Baseline** | **Retained** | **Enhanced** | **Lost** |
|---|---|---|---|---|
| *Habitat (Area) Units* | *1.79* | *1.11* | *-* | *0.68* |
| | **On site Baseline** | **Retained** | **Enhanced** | **Lost** |
| *Hedgerow Units* | *0.03* | *-* | *-* | *0.03* |

# 4 HABITAT CREATION

4.1.1. Please refer to the Proposed Site Plan created by Devtec properties (reference: E-01-D Proposed Landscaping Plan) for the proposed development. It is considered the development will have a 1-year delay in starting habitat creation. Please refer to Appendix 2 for the targeted habitat condition sheets.

*Table 5.1 Habitat Creation*

| Proposed habitat | Area (hectares) | Distinctiveness | | Condition | | |
|---|---|---|---|---|---|---|
| | | Distinctiveness | Score | Condition | Score | Habitat Units Delivered |
| Developed Land: Sealed Surface | 0.3977 | V.Low | 0 | N/A - Other | 0 | 0 |
| Vegetated Garden | 0.1942 | Low | 2 | Condition Assessment N/A | 1 | 0.40 |
| Modified Grassland | 0.037 | Low | 2 | Poor | 1 | 0.08 |
| Individual Tree | 0.0448 | Medium | 4 | Poor | 1 | 0.13 |

*Table 5.2 Hedgerow Creation*

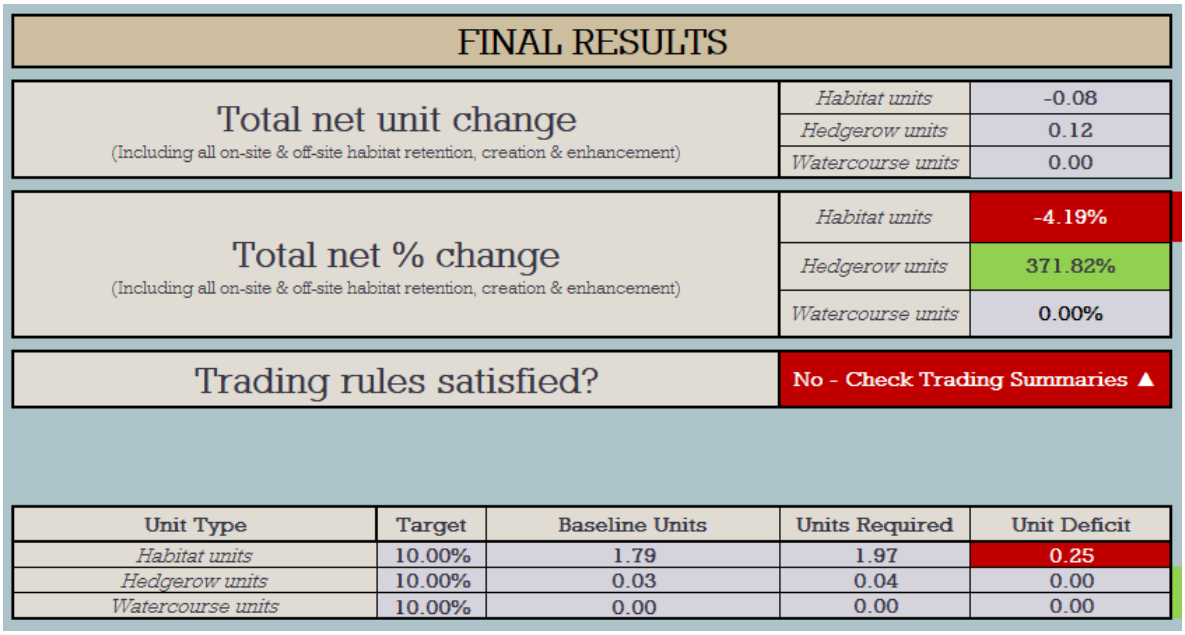
| Proposed habitat | length (KM) | Distinctiveness | | Condition | | |
|---|---|---|---|---|---|---|
| | | Distinctiveness | Score | Condition | Score | Habitat Units Delivered |
| Native Hedgerow | 0.076 | Low | 2 | Poor | 1 | 0.16 |

# 5 SUMMARY

5.1.1. This report and the DEFRA Statutory Biodiversity Metric submitted have demonstrated that the proposed habitat creation create a net loss of -0.08 habitat units equating to a net loss of biodiversity within the site of -4.19% (Figure 5.1). **The trading rules have not been satisfied due to the loss of individual trees, tall forbs and modified grassland.**

5.1.2. The report and the DEFRA Statutory Biodiversity Metric has also demonstrated that the proposed hedgerow creation will create a net gain of 0.12 hedgerow units equating to a gain of 371.82% (Figure 5.1).

*Figure 5.1 On site net %*



FINAL RESULTS

| | | |
|---|---|---|
| Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement) | *Habitat units* | -0.08 |
| | *Hedgerow units* | 0.12 |
| | *Watercourse units* | 0.00 |
| Total net % change (Including all on-site & off-site habitat retention, creation & enhancement) | *Habitat units* | -4.19% |
| | *Hedgerow units* | 371.82% |
| | *Watercourse units* | 0.00% |
| Trading rules satisfied? | | No - Check Trading Summaries ▲ |

| Unit Type | Target | Baseline Units | Units Required | Unit Deficit |
|---|---|---|---|---|
| *Habitat units* | 10.00% | 1.79 | 1.97 | 0.25 |
| *Hedgerow units* | 10.00% | 0.03 | 0.04 | 0.00 |
| *Watercourse units* | 10.00% | 0.00 | 0.00 | 0.00 |

5.1.3. Given the net loss achieved on site relating to the Habitat Units, and the lack of opportunity within the current scheme to provide sufficient habitat quality to achieve a net gain, offsetting will be required in order to meet emerging policy requirements. It is calculated that a minimum of 0.25 Habitat Units are required for the scheme to achieve the minimum 10% net gain. Consultation with a private habitat banking company or the local planning authority should be completed to discuss purchasing of offsetting units.

# 6 BIBLIOGRAPHY


- CIEEM (2021) Biodiversity Net Gain Report and Audit Templates.
- DEFRA (2023) The Statutory Biodiversity Metric: Auditing and Accounting for Biodiversity
- DEFRA (2023) The Statutory Biodiversity Metric: Auditing and Accounting for Biodiversity. Condition Assessment Sheets (Excel Format)

## APPENDIX 1- CONDITION ASSESSMENT SHEETS

| Condition Sheet: GRASSLAND Habitat Type (low distinctiveness) | | | |
|---|---|---|---|
| **UK Habitat Classification (UKHab) Habitat Type** | | | |
| **Grassland - Modified grassland** | | | |
| **On-site or off-site, site name and location** | Firs Farm, Crawley | **Survey date and Surveyor name** | 10/07/2024 Andrew Taylor |
| **Limitations (if applicable)** | | **Survey reference (if relating to a wider survey)** | |
| **Grid reference** | TQ 33440 39099 | **Habitat parcel reference** | |
| **Habitat Description** | | | |
| Modified Grassland | | | |
| ukhab – UK Habitat Classification | | | |

| | Condition Assessment Criteria | Criterion passed (Yes or No) | Notes (such as justification) |
|---|---|---|---|
| A | There are 6-8 vascular plant species per $m^2$ present, including at least 2 forbs (these may include those listed in Footnote 1). **Note - this criterion is essential for achieving Moderate or Good condition.**<br><br>Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per $m^2$ (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet. | n | |
| B | Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed. | y | |
| C | Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present).<br><br>Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type. | y | |
| D | Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities. | y | |
| E | Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2]. | y | |
| F | Cover of bracken *Pteridium aquilinum* is less than 20%. | y | |

| | | | |
|---|---|---|---|
| G | There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]). | y | |
| **Essential criterion achieved (Yes or No)** | | | |
| **Number of criteria passed** | | | |

| **Condition Assessment Result (out of 7 criteria)** | **Condition Assessment Score** | **Score Achieved ×/✓** |
|---|---|---|
| Passes 6 or 7 criteria including passing essential criterion A | Good (3) | |
| Passes 4 or 5 criteria including passing essential criterion A | Moderate (2) | |
| Passes 3 or fewer criteria;<br>OR<br>Passes 4 - 6 criteria (excluding criterion A) | Poor (1) | yes |

**Suggested enhancement interventions to improve condition score**

**Footnotes**

**Footnote 1** – Creeping thistle *Cirsium arvense* , spear thistle *Cirsium vulgare* , curled dock *Rumex crispus* , broad-leaved dock *Rumex obtusifolius* , common nettle *Urtica dioica* , creeping buttercup *Ranunculus repens* , greater plantain *Plantago major* , white clover *Trifolium repens* and cow parsley *Anthriscus sylvestris* .

**Footnote 2** – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.

**Footnote 3** – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.

**Footnote 4** – Wildlife and Countryside Act 1981 (as amended).

| Condition Sheet: URBAN Habitat Type | | | |
|---|---|---|---|
| **Habitat Types** | | | |
| **Sparsely vegetated land - Ruderal/Ephemeral**<br>**Sparsely vegetated land - Tall forbs**<br>**Urban - Allotments**<br>**Urban - Biodiverse green roof**<br>**Urban - Bioswale**<br>**Urban - Cemeteries and churchyards**<br>**Urban - Facade-bound green wall**<br>**Urban - Ground based green wall**<br>**Urban - Intensive green roof**<br>**Urban - Open mosaic habitats on previously developed land**<br>**Urban - Rain garden**<br>**Urban - Sustainable drainage system (SuDS)**<br>**Urban - Vacant or derelict land**<br>**Urban - Bare ground** | | | |
| **Habitat Description** | | | |
| Sparseley Vegetated Land - Tall Forbs | | | |
| See the Statutory Biodiversity Metric User Guide for green roofs and UK Habitat Classification (UKHab) for other habitats: | | | UKHab – UK Habitat Classification |
| **On-site or off-site, site name and location** | Firs Farm, Crawley | **Survey date and Surveyor name** | 10/07/2024 |
| **Limitations (if applicable)** | | **Survey reference (if relating to a wider survey)** | |
| **Grid reference** | TQ 33440 39099 | **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. | 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 | |
| Additional Criterion - must be assessed for **Open mosaic habitat on previously developed land** only: | | | |
| D | The parcel shows spatial variation and forms a mosaic of bare substrate PLUS:<br><br>- At least four early successional communities (a) to (i);<br><br>Communities: (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland, (i) pools. | | |
| Additional Criteria - must be assessed for **Bioswale and SuDS** habitat types only: | | | |
| E1 | Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife[4]. | | |
| E2 | The vegetation is comprised of plant species suited to wetland or riparian situations. | | |
| Additional Criterion - must be assessed for **Intensive green roofs** only: | | | |

| | | | |
|---|---|---|---|
| F | The roof has a minimum of 50% native and non-native wildflowers.<br>70% of the roof area is soil and vegetation (including water features). | | |
| Additional Criterion - must be assessed for **Biodiverse green roofs** only: | | | |
| G | The roof has a varied depth of 80 – 150 mm; at least 50% is at 150 mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers.<br><br>**Note – to achieve Good condition some additional habitat, such as sand piles, stones, logs etc. are present.** | | |
| **Essential criteria relevant for habitat type achieved (Yes or No)** | | | yes |
| **Number of criteria passed** | | | 1 |
| **Condition Assessment Result** | **Condition Assessment Score** | **Score Achieved ×/✓** | |
| Results for habitats requiring assessment of **3 core criteria** only **(all listed urban habitats except Open mosaic habitat on previously developed land, Bioswale, SuDS and Green roofs)**: | | | |
| • Passes all 3 core criteria;<br>AND<br>• Meets the requirements for Good condition within criterion C. | Good (3) | | |
| • Passes 2 of 3 core criteria;<br>OR<br>• Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C. | Moderate (2) | | |
| • Passes 0 or 1 of 3 core criteria. | Poor (1) | yes | |
| Results for **Green roofs** and **Open mosaic habitat on previously developed land**<br>(requiring assessment of **4 criteria** only - core criteria plus additional criterion specified for habitat type): | | | |
| • Passes all 3 core criteria;<br>AND<br>• Meets the requirements for Good condition within criterion C;<br>AND<br>• Passes additional criterion relevant to specific habitat type (D, F or G). | Good (3) | | |
| • Passes 2 or 3 of 4 criteria;<br>OR<br>• Passes 4 of 4 criteria but does not meet the requirements for Good condition within criterion C. | Moderate (2) | | |
| • Passes 0 or 1 of 4 criteria. | Poor (1) | | |
| Results for **Bioswale or SuDS** (requiring assessment of **5 criteria** - core criteria plus additional criteria specified for habitat type): | | | |
| • Passes all 3 core criteria;<br>AND<br>• Meets the requirements for Good condition within criterion C;<br>AND<br>• Passes all additional criteria relevant to specific habitat type (Group E) | Good (3) | | |
| • Passes 3 or 4 of 5 criteria;<br>OR<br>• Passes 5 of 5 criteria but does not meet the requirements for Good condition within criterion C. | Moderate (2) | | |
| • Passes 2 or fewer of 5 criteria. | Poor (1) | | |
| **Suggested enhancement interventions to improve condition score** | | | |
| | | | |
| **Footnotes** | | | |

| Condition Sheet: URBAN Habitat Type |
|---|
| **Habitat Types** |
| **Sparsely vegetated land - Ruderal/Ephemeral**<br>**Sparsely vegetated land - Tall forbs**<br>**Urban - Allotments**<br>**Urban - Biodiverse green roof**<br>**Urban - Bioswale**<br>**Urban - Cemeteries and churchyards**<br>**Urban - Facade-bound green wall**<br>**Urban - Ground based green wall**<br>**Urban - Intensive green roof**<br>**Urban - Open mosaic habitats on previously developed land**<br>**Urban - Rain garden**<br>**Urban - Sustainable drainage system (SuDS)**<br>**Urban - Vacant or derelict land**<br>**Urban - Bare ground** |
| **Habitat Description** |
| Vacant or derelict land |

| See the Statutory Biodiversity Metric User Guide for green roofs and UK Habitat Classification (UKHab) for other habitats: | | | UKHab – UK Habitat Classification |
|---|---|---|---|
| **On-site or off-site, site name and location** | Firs Farm, Crawley | **Survey date and Surveyor name** | 10/07/2024 |
| **Limitations (if applicable)** | | **Survey reference (if relating to a wider survey)** | |
| **Grid reference** | TQ 33440 39099 | **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. | 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 | |
| Additional Criterion - must be assessed for **Open mosaic habitat on previously developed land** only: | | | |
| D | The parcel shows spatial variation and forms a mosaic of bare substrate PLUS:<br><br>- At least four early successional communities (a) to (i);<br><br>Communities: (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland, (i) pools. | | |
| Additional Criteria - must be assessed for **Bioswale and SuDS** habitat types only: | | | |
| E1 | Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife[4]. | | |
| E2 | The vegetation is comprised of plant species suited to wetland or riparian situations. | | |
| Additional Criterion - must be assessed for **Intensive green roofs** only: | | | |

| | | | |
|---|---|---|---|
| F | The roof has a minimum of 50% native and non-native wildflowers.<br>70% of the roof area is soil and vegetation (including water features). | | |
| Additional Criterion - must be assessed for **Biodiverse green roofs** only: | | | |
| G | The roof has a varied depth of 80 – 150 mm; at least 50% is at 150 mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers.<br><br>**Note – to achieve Good condition some additional habitat, such as sand piles, stones, logs etc. are present.** | | |
| **Essential criteria relevant for habitat type achieved (Yes or No)** | | | yes |
| **Number of criteria passed** | | | 1 |
| **Condition Assessment Result** | **Condition Assessment Score** | **Score Achieved ×/✓** | |
| Results for habitats requiring assessment of **3 core criteria** only **(all listed urban habitats except Open mosaic habitat on previously developed land, Bioswale, SuDS and Green roofs)**: | | | |
| • Passes all 3 core criteria;<br>AND<br>• Meets the requirements for Good condition within criterion C. | Good (3) | | |
| • Passes 2 of 3 core criteria;<br>OR<br>• Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C. | Moderate (2) | | |
| • Passes 0 or 1 of 3 core criteria. | Poor (1) | yes | |
| Results for **Green roofs** and **Open mosaic habitat on previously developed land**<br>(requiring assessment of **4 criteria** only - core criteria plus additional criterion specified for habitat type): | | | |
| • Passes all 3 core criteria;<br>AND<br>• Meets the requirements for Good condition within criterion C;<br>AND<br>• Passes additional criterion relevant to specific habitat type (D, F or G). | Good (3) | | |
| • Passes 2 or 3 of 4 criteria;<br>OR<br>• Passes 4 of 4 criteria but does not meet the requirements for Good condition within criterion C. | Moderate (2) | | |
| • Passes 0 or 1 of 4 criteria. | Poor (1) | | |
| Results for **Bioswale or SuDS** (requiring assessment of **5 criteria** - core criteria plus additional criteria specified for habitat type): | | | |
| • Passes all 3 core criteria;<br>AND<br>• Meets the requirements for Good condition within criterion C;<br>AND<br>• Passes all additional criteria relevant to specific habitat type (Group E) | Good (3) | | |
| • Passes 3 or 4 of 5 criteria;<br>OR<br>• Passes 5 of 5 criteria but does not meet the requirements for Good condition within criterion C. | Moderate (2) | | |
| • Passes 2 or fewer of 5 criteria. | Poor (1) | | |
| **Suggested enhancement interventions to improve condition score** | | | |
| | | | |
| **Footnotes** | | | |

**Condition Sheet: INDIVIDUAL TREES Habitat Type**

**Habitat Types**

**Individual trees – Urban trees**
**Individual trees – Rural trees**
Complete a condition sheet for each tree or block of trees.

***Please see the separate Line of trees condition sheet for a line of rural trees. You should only use the Line of trees condition assessment and record that habitat type in rural locations.***

**Habitat Description**

Individual Trees - Urban tree - Large

**Individual trees (description applied to the urban or rural environment):**
Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.

**Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):**
Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.

| | | | |
|---|---|---|---|
| **On-site or off-site, site name and location** | Firs Farm, Crawley | **Survey date and Surveyor name** | 10/07/2024 Andrew Taylor |
| **Limitations (if applicable)** | | **Survey reference (if relating to a wider survey)** | |
| **Grid reference** | TQ 33440 39099 | **Habitat parcel reference** | |

| | **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]. | Yes | |
| 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. | No | |
| | **Number of criteria passed** | 4 | |

| **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. | | |

**Suggested enhancement interventions to improve condition score[2]**

**Condition Sheet: INDIVIDUAL TREES Habitat Type**

**Habitat Types**

**Individual trees – Urban trees**
**Individual trees – Rural trees**
Complete a condition sheet for each tree or block of trees.

***Please see the separate Line of trees condition sheet for a line of rural trees. You should only use the Line of trees condition assessment and record that habitat type in rural locations.***

**Habitat Description**

Individual Trees - Urban tree - Medium

**Individual trees (description applied to the urban or rural environment):**
Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.

**Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):**
Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.

| | | | |
|---|---|---|---|
| **On-site or off-site, site name and location** | Firs Farm, Crawley | **Survey date and Surveyor name** | 10/07/2024 Andrew Taylor |
| **Limitations (if applicable)** | | **Survey reference (if relating to a wider survey)** | |
| **Grid reference** | TQ 33440 39099 | **Habitat parcel reference** | |

| | **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** | 4 | |

| **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. | | |

**Suggested enhancement interventions to improve condition score[2]**

**Condition Sheet: INDIVIDUAL TREES Habitat Type**

**Habitat Types**

**Individual trees – Urban trees**
**Individual trees – Rural trees**
Complete a condition sheet for each tree or block of trees.

***Please see the separate Line of trees condition sheet for a line of rural trees. You should only use the Line of trees condition assessment and record that habitat type in rural locations.***

**Habitat Description**

Individual Trees - Urban tree - Small

**Individual trees (description applied to the urban or rural environment):**
Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.

**Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):**
Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.

| | | | |
|---|---|---|---|
| **On-site or off-site, site name and location** | Firs Farm, Crawley | **Survey date and Surveyor name** | 10/07/2024 Andrew Taylor |
| **Limitations (if applicable)** | | **Survey reference (if relating to a wider survey)** | |
| **Grid reference** | TQ 33440 39099 | **Habitat parcel reference** | |

| | **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** | 4 | |

| **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. | | |

**Suggested enhancement interventions to improve condition score[2]**

## APPENDIX 2- POST DEVELOPMENT TARGET HABITAT CONDITIONS

| **Habitat Type: Modified Grassland** | | **Target Condition: Poor** |
|---|---|---|
| **Condition Assessment Criteria** | | **Targeted** |
| A | There are 6-8 vascular plant species per $m^2$ present, including at least 2 forbs. **Note - this criterion is essential for achieving Moderate or Good condition.**<br>Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per $m^2$, please review the full UKHab description to assess whether the grassland should be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high or very high distinctiveness, please use the relevant condition sheet. | No |
| B | Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed. | No |
| C | Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present).<br>Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type. | Yes |
| D | Physical damage is evident in less than 5% of total grassland area Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities. | No |
| E | Cover of bare ground between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens.) | Yes |
| F | Cover of bracken *Pteridium aquilinum* less than 20%. | Yes |
| G | There is an absence of invasive non-native species (as listed on Schedule 9 of WCA). | Yes |

| Habitat Type: Individual Trees | | Target Condition: Poor |
|---|---|---|
| Condition Assessment Criteria | | Targeted? |
| A | The tree is a native species (or more than 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). | 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. | No |

| Habitat Type: Native Hedgerow | | | | Target Condition: Poor |
|---|---|---|---|---|
| Hedgerow favourable condition attributes | | | | |
| Attributes and functional groupings (A, B, C, D and E) | | Criteria - the minimum requirements for 'favourable condition' | Criteria description | Criterion targeted? (Yes or No) |
| Core groups - applicable to all hedgerow types | | | | |
| 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.<br><br>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).<br><br>A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height). | No |
| 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.<br><br>Outgrowths (such as blackthorn Prunus spinosa suckers) are only included in the width estimate when they are >0.5 m in height.<br><br>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). | No |

| | | | | |
|---|---|---|---|---|
| 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.<br><br>Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook). | No |
| B2. | Gap - hedge canopy continuity | Gaps make up <10% of total length; and<br>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).<br><br>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). | Yes |
| C1. | Undisturbed ground and perennial vegetation | >1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length:<br>· Measured from outer edge of hedgerow; and<br>· 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.<br><br>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.<br><br>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. | No |
| 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 Urtica spp., cleavers Galium aparine and docks Rumex spp. Their presence, either singly or together, does not exceed the 20% cover threshold. | No |
| 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 WCA3) 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 website4, as well as the BSBI website5 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 website7. | Yes |
| 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.<br><br>This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting). | Yes |

| | | | | |
|---|---|---|---|---|
| E1. | Tree class | There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient8), 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/A |
| 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/A |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