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Biodiversity Net Gain Assessment: Statement of Compliance

Ickleford Mill, Herts

Site	Ickleford Mill, Hertfordshire
Project number	184025
Client name / Address	The Hill Group; The Power House, Gunpowder Mill, Powdermill Lane, Waltham Abbey, Essex, EN9 1BN

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Declaration of compliance

The information which we have provided is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.



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1. EXECUTIVE SUMMARY

In January 2026, MKA Ecology Ltd was commissioned to undertake a Biodiversity Net Gain Statement of Compliance for Ickleford Mill, Hertfordshire. This Biodiversity Net Gain Statement of Compliance has been prepared to detail how the biodiversity enhancements in the proposed scheme will lead to no net loss and an overall benefit to biodiversity.

Pre-application discussions were held with the Local Planning Authority (LPA) to review the approach. Given that the outline permission predates mandatory BNG requirements and establishes the site's baseline framework, it was agreed that the use of 2022 survey data, alongside Biodiversity Metric 3.0, provides a proportionate and appropriate basis for the Statement of Compliance. This approach ensures that the proposed enhancements can be assessed for measurable net gain, while reflecting the pre-existing planning context and demonstrating the anticipated biodiversity benefits of the scheme.

The proposed development at Ickleford Mill, involves the redevelopment of the site to deliver a medium-scale residential scheme of 55 new homes. Habitats that will be included in the proposed development include buildings, hardstanding, vegetated gardens, ornamental planting and shrubs, mixed scrub, urban trees, native and ornamental hedgerows. The existing grassland to the south of the site will be retained and enhanced.

To provide an objective assessment of the potential value of the proposed biodiversity enhancements, the Defra Biodiversity Metric 3.0 (Panks *et al.*, 2021) is applied. The measures, a proxy for biodiversity that uses habitat types and their areas, are compared before (the existing condition) and after the completion of the proposed development.

It is concluded that the proposed development will lead to a measurable 2.68% net gain in area-based habitat units and 198% net gain in linear-based habitat units, a significant overall enhancement. This is due to the low ecological value of the existing site, in tandem with retention of the line of trees and enhancement and creation of habitats of ecological value.

2. INTRODUCTION

2.1. Purpose

This Biodiversity Net Gain Assessment and Statement of Compliance is submitted for the approval of North Hertfordshire District Council to fulfil the requirement of producing a measurable net gain for the Site. The planning reference for this development is 17/01955/1.

The purpose of this assessment is to review the biodiversity value of the site, comparing this to the proposed Landscape Masterplan and calculating an overall biodiversity net change for the site. The primary method of calculating this change will follow the Defra Biodiversity Metric 3.0 (Panks *et al.*, 2021). The aim of using this method is to demonstrate whether the proposed development and Landscape Masterplan will deliver a measurable net gain in biodiversity.

The process of achieving and assessing Biodiversity Net Gain should follow the following principles and rules, as set out within *Biodiversity Net Gain, Good Practice Principles for Development* (Baker, 2019) (Table 1) and *The Biodiversity Metric 3.0: auditing and accounting for biodiversity value. User guide* (Panks *et al.*, 2021) (Table 2).

Table 1: The UK's good practice principles for biodiversity net gain (Baker, 2019)

Principle	In practice
1. Apply the mitigation hierarchy	Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.
2. Avoid losing biodiversity that cannot be offset elsewhere	Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve NNL/net gain.
3. Be inclusive and equitable	Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to net gain. Achieve net gain in partnership with stakeholders where possible.
4. Address risk	Mitigate difficulty, uncertainty and other risks to achieving net gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between losses occurring and gains being fully realised.
5. Make a measurable net gain contribution	Achieve a measurable, overall gain ¹ for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities

Principle	In practice
6. Achieve the best outcomes for biodiversity	Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when: • Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses • Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation • Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels • Enhancing existing or creating new habitat • Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity
7. Be additional	Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).
8. Create a Net Gain legacy	Ensure Net Gain generates long-term benefits by: • Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity • Planning for adaptive management and securing dedicated funding for long-term management • Designing Net Gain for biodiversity to be resilient to external factors, especially climate change • Mitigating risks from other land uses • Avoiding displacing harmful activities from one location to another and • Supporting local-level management
9. Optimise sustainability	Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.
10. Be transparent	Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

Table 2: Biodiversity net gain rules (*Panks et al.*, 2021)

Rule	In practice
1	Where the metric is used to measure change in biodiversity unit values need to be calculated prior to the intervention and post-intervention for all parcels of land/linear features affected
2	Compensation for habitat losses can be provided by creating new habitat, by restoring or enhancing existing habitats, or by accelerating successional processes. Measures to improve existing habitats must provide a significant and demonstrable uplift in distinctiveness and/or condition to record additional biodiversity units
3	'Trading down' must be avoided. Losses of habitat are to be compensated for on a "like for like" or "like for better" basis, new or restored habitats should aim to achieve a higher distinctiveness and /or condition than habitats lost.
4	Biodiversity unit values generated by biodiversity metric 3.0 are unique to this metric and cannot be compared to unit outputs from version 2.0, the original DEFRA metric or any other biodiversity metric. Furthermore, the three types of biodiversity units generated by this metric (for area, hedgerow and river habitats) are unique and cannot be summed.
5	It is not the area of habitat that determines whether the ecological equivalence or better has been achieved but the net change in biodiversity units. Risks associated with enhancing or creating habitats mean that it may be necessary to enhance or create a larger area of habitat than lost to fully compensate for impacts on biodiversity

Rule	In practice
6	Deviations from the published method of biodiversity metric 3.0 need to be ecologically justified. While the methodology is expected to be suitable in the majority of circumstances it is recognised that there may be exceptions. Any local or project-specific adaptation of the metric must be transparent and fully justified.

3. HABITATS

3.1. Present – baseline condition

In order to calculate a net change for the proposed development, the original baseline habitats assessed by Maydencroft Ltd (2022) were used. These comprised modified grassland, broadleaved woodland, individual trees, introduced shrub, ruderal/ephemeral sparsely vegetated land, buildings, hardstanding, and native hedgerow. The River Oughton also flows through the centre of the Site from a west to east direction.

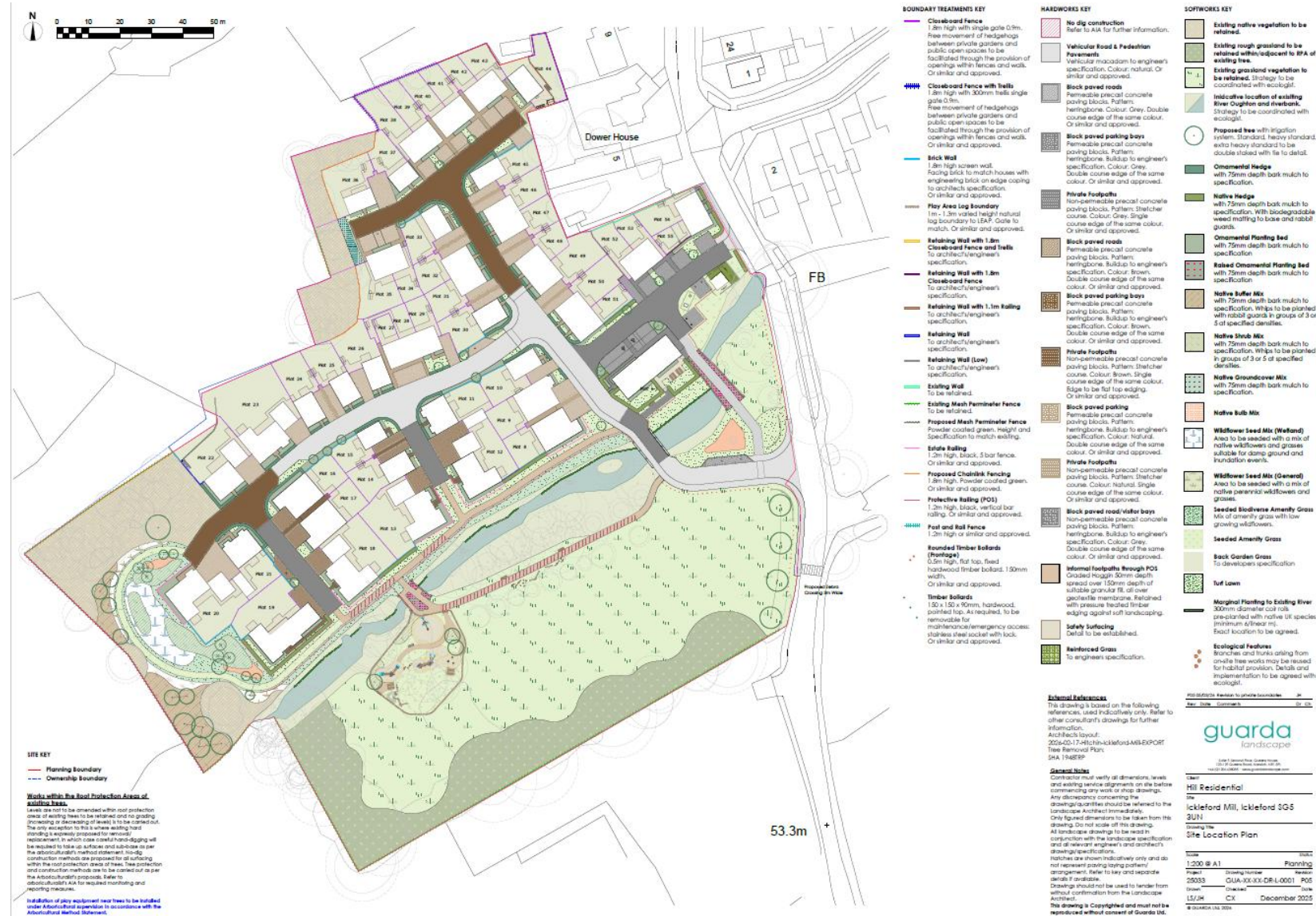
3.2. Future – proposed landscape and enhancements

The Landscape Masterplan for Ickleford Mill is presented in Figure 2. This will involve the demolition of all onsite buildings and the construction of 55 new residential dwellings with associated hardstanding and garden habitats. The area to the south of the River Oughton is designated as Green Belt and will not be developed on, instead being retained and enhanced. The landscaping plans include the following habitats: modified grassland, other neutral grassland, mixed scrub, ornamental planting, urban trees, vegetated garden, developed land; sealed surface. It is these proposed habitats that will form the basis of the calculation of 'net-change' in biodiversity using the Defra Biodiversity Metric 3.0 (see Section 4).

Figure 1: Baseline Habitats at Ickleford Mill, Herts (Maydencroft, 2022)



Figure 2. Proposed Landscape Masterplan (Guarda Landscape Ltd, 2026)



4. METHODOLOGIES

To establish whether the proposed development will contribute positively to biodiversity, the Defra Biodiversity Metric 3.0 (Panks *et al.*, 2021) is used. This method uses habitat as a proxy for biodiversity, and its primary application is to provide planners and developers with a method of establishing how much and what type of habitats should be created or enhanced in order to ensure that the impacts of a development do not result in a net loss of biodiversity. Habitats are assigned the following scores:

- Distinctiveness: A measure of the type and importance of a habitat.
- Condition: A measure of the present or predicted condition of a habitat type.
- Strategic significance: How a habitat is regarded within Local Planning Policy.

For proposed habitats, where there is an attempt to predict the habitat type following establishment, additional handicaps or risk scores are imposed representing the following factors:

- Difficulty: More difficult habitats incur a greater risk.
- Time to condition: In general, it takes longer for habitats to reach a better condition, plus certain habitats by their very nature take longer to create or restore.
- If the creation or enhancement of habitats is delayed, an additional risk score is applied. This will not apply in the present case.
- If habitats are created off-site, an additional risk score is applied. This will not apply in the present case.

Further details on how the metric is calculated is provided in the aforementioned publications, with more site-specific detail provided in Appendices 1 and 2.

4.1. Mapping habitats

Baseline habitats were mapped and calculated by Maydencroft Ltd (2022). Retained habitats were mapped and areas calculated in QGIS using a digitised and geo-referenced version of the Landscape Masterplan, provided in Figure 2. The proposed habitat areas were provided by the landscaping team (Guarda Landscape Ltd, see Section 3.2 for details of habitat types).

4.2. Assignment of habitats

Biodiversity units are the product of the area of habitat and various factors or ‘multipliers’. There are three ‘core’ multipliers that apply to both the current and proposed habitat areas and a further four that apply only to the proposed habitats. These are detailed further in Table 3 below.

Table 3: Multipliers used in the calculation of Biodiversity Net Gain

Multiplier	When applied	Description
Distinctiveness	Before and after	A measure of the type of habitat, automatically assigned within the Metric 2.0. Habitats with greater value are assigned a higher score
Condition	Before and after	The condition of the habitat. Uses the Technical Supplement (<i>Crosher et al. 2019a</i>); Higher levels of condition give rise to greater values. In some cases, no condition assessment is required and these habitats are automatically allocated a score.
Strategic significance	Before and after	Whether a habitat is important within its local context.
Time to target condition	After	Used to account for the fact that habitat creation as part of a development is rarely instant. A 'handicap' is applied, with habitats that take longer to establish resulting in a greater reduction.
Difficulty of creation/restoration	After	Habitats that are more difficult to create/restore cause a reduction in the biodiversity unit as they are associated with a greater risk of failure.
Spatial risk	After	Habitat that is created at a greater distance away from the development site carries a greater risk of removing other natural habitats.
Advanced and delayed habitat creation	After	Used to account for situations where there is a mismatch between a negative impact on biodiversity and work to create or enhance the 'post-intervention habitats'. This can either be in the form of habitat creation occurring in advance or being delayed beyond the point of baseline losses.

4.3. Hedgerows

Hedgerows, given their unique linear characteristic and their position as 'edge habitats' are treated separately, giving 'hedgerow units'. The metrics calculated for hedgerows will therefore be calculated and presented separately. Baseline hedgerow lengths were mapped and calculated by Maydencroft Ltd (2022). Proposed hedgerow lengths were provided by the landscaping team (Guarda Landscape Ltd, see Section 3.2 for details of habitat types).

4.4. Assumptions and constraints

Several assumptions are made to enable this biodiversity net gain assessment. The primary assumptions are listed below:

- Pre-application discussions were held between the applicant team and the Local Planning Authority (LPA), during which the approach to calculating Biodiversity Net Gain (BNG) was reviewed. Outline permission for the site was granted based on calculations undertaken using Biodiversity Metric 3.0 (v3.0). Given that the outline permission predates mandatory BNG requirements and establishes the baseline framework for the site, and noting that the proposed scheme is anticipated to provide an overall benefit to biodiversity, it was agreed with the LPA that the use of the 2022 baseline survey data, in conjunction with Biodiversity Metric 3.0, constitutes a proportionate and appropriate basis for the Statement of Compliance. This approach ensures that the proposed scheme can be assessed for measurable net gain in a

manner consistent with both the established baseline and current guidance, while acknowledging that non-standard methods were necessary to align with the pre-existing planning context.

- The Defra Biodiversity Metric 3.0 incorporates a “Rivers and Streams Metric” to assess linear units of riverine habitat. The river corridor has been excluded from the BNG calculation. The primary reason for this, being that the baseline assessment, undertaken by Maydencroft (2022), also excluded the river from its calculations. A quantitative assessment would require application of the Modular River Physical Biodiversity Net Gain Assessment (MoRPh Pro) survey methodology alongside an updated baseline habitat survey and submission of a new metric. This was considered to be disproportionate to the scale and nature of the proposed development, which acquired outline permission prior to BNG becoming a mandatory requirement. Ecological enhancements to the river corridor are recommended based on a qualitative assessment by the project ecologists.
- The condition assessment for the post-development habitats is an estimate, based on the Maintenance and Management Plan (Guarda Landscape, 2026). Where there is doubt in determining the condition, a conservative approach is taken.
- It is assumed that there will be no time delay in establishing the proposed habitats.
- The net change in biodiversity that is estimated is reliant on the successful restoration and/or creation of habitats and their maintenance for the foreseeable future.

5. RESULTS

The overall comparison of biodiversity units is presented in Table 4 below. The calculator used to derive these figures is provided as a separate appendix (Appendix 2) to this report. With the current layout, there will be a measurable net gain in biodiversity of 2.68% with a positive net change of 0.28 biodiversity units.

Table 4: Results of biodiversity metric calculations

Habitat	Biodiversity units (current)*	Biodiversity units (proposed)*	Biodiversity net-change*	Net percentage change
Habitats	10.45	10.73	0.28	2.68%
Hedgerows	0.31	0.91	0.61	198.23%

* Habitat and hedgerow units, as appropriate

The largest number of units (6.94 units) is generated by the enhancement of the retained modified grassland, in the south of the Site, to other neutral grassland in moderate condition. The inclusion of other areas of wildflower meadow, shrub planting and individual trees provides further enhancements throughout the proposed Site.

The development is predicted to deliver significant net gains in hedgerow biodiversity units. The existing line of trees, on the northern boundary of the retained grassland, holds the majority of the current biodiversity value (0.28 units) and will be retained within the development. Furthermore, the combined total of 167m of native hedgerows throughout the Site is estimated to deliver 0.35 units. Ornamental hedgerows will also be planted throughout the Site, enhancing the ecological connectivity across the site, and resulting in an overall 198% increase in hedgerow biodiversity units at the Site.

The net gains in biodiversity that are estimated are reliant on the successful restoration and/or creation of habitats *and* their maintenance for the foreseeable future; this is particularly true of the enhanced other neutral grassland to the south of the Site.

6. CONCLUSIONS

Ickleford Mill, Hertfordshire, is being proposed for the development of 55 residential houses with associated gardens, hardstanding access and car parking. The proposals include landscaping throughout the Site with several biodiversity enhancement measures, namely large areas of retained and enhanced grassland as well as areas of mixed scrub, tree planting, and native hedgerows.

The use of the Defra Biodiversity Metric 3.0, to calculate measures of biodiversity for the existing and proposed habitats, has been applied. This approach was agreed with the Local Planning Authority during pre-application discussions, given that the outline permission predates mandatory Biodiversity Net Gain requirements and establishes the baseline framework for the Site. The metric provides a proportionate and appropriate method for demonstrating compliance and ensures that the development does not result in a net loss of biodiversity. The results confirm that the proposed development is likely to lead to a measurable net gain in biodiversity, reliant on the successful restoration and/or creation of habitats *and* their maintenance for the foreseeable future.

Other ecological features, such as bird and bat boxes, are proposed to be included within development. Whilst not considered within the current Defra metric, these features will further enhance the site for priority species and help deliver a sustainable development.

7. REFERENCES

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8. APPENDICES

Appendix 1: Assignment of biodiversity metric multipliers

The tables below detail the rationale for the condition assessments made for each habitat type using the Defra Biodiversity Metric 3.0. The majority of the baseline habitats were taken from the original baseline assessment (Maydencroft, 2022), for which detailed condition assessment data are not available. Three trees were cited as not yet in metric within the Maydencroft habitat map. These have been added retrospectively to the metric from the Preliminary ecological appraisal undertaken by MKA Ecology Ltd (2026)

Baseline habitats

Habitat	Condition score	Rationale for condition assessment
Urban – urban tree (0.7577 ha)	Moderate	Maydencroft (2022) Baseline habitats
Modified grassland (1.2 ha)	Poor	Maydencroft (2022) Baseline habitats
Sparsely vegetated land – Ruderal/ephemeral (0.25 ha)	Poor	Maydencroft (2022) Baseline habitats
Other woodland; broadleaved (0.064 ha)	Moderate	Maydencroft (2022) Baseline habitats
Urban – Developed land; sealed surface (2.06 ha)	N/A - Other	No condition assessment required - allocated score of 0
Urban – Introduced shrub (0.0135)	Poor	No condition assessment required - allocated score of 1

Baseline hedgerows

Habitat	Condition score	Rationale for condition assessment
Line of trees (0.063 km)	Moderate	Maydencroft (2022) Baseline habitats
Native Hedgerow (0.013 km)	Poor	Maydencroft (2022) Baseline habitats

Proposed habitats

Habitat	Condition score	Rationale for condition assessment
Other neutral grassland (enhanced rough grassland) (1.018 ha)	Moderate	Likely to pass four of five condition criteria (Defra Biodiversity Metric 3.0). Likely to fail sward height criteria due to the mowing regime (Guarda Landscaping Ltd, 2026).
Developed land, sealed surface (0.807 ha)	N/A – other	No condition assessment required – allocated a score of 0
Developed land, sealed surface	N/A - other	No condition assessment required – allocated a score of 0

Habitat	Condition score	Rationale for condition assessment
(0.382 ha)		
Vegetated garden (0.473 ha)	Poor	No condition assessment required – allocated a score of 1
Ground-level planters (ornamental planting) (0.0672 ha)	Poor	No condition assessment required – allocated a score of 1
Urban tree (0.0063 ha)	Poor	Fourteen small trees, likely to pass two of six criteria (Guarda Landscaping Ltd, 2026).
Urban tree (0.014 ha)	Moderate	Thirty-one small trees, likely to pass three or four criteria (Guarda Landscaping Ltd, 2026).
Urban tree (0.0041 ha)	Moderate	One medium tree, to be planted as semi-mature, likely to pass three or four criteria.
Modified grassland (turf general lawn) (0.199 ha)	Poor	Likely to pass up to three of seven criteria, failing criteria 1 (6-8 species per m2), 2 (varied sward height), 4 (physical damage) and 5 (cover of bare ground). This is due to the turf type, mowing regime, and habitat location detailed in Guarda Landscaping Ltd (2026).
Modified grassland (amenity grass) (0.0815 ha)	Poor	Likely to pass up to three of seven criteria, failing criteria 1 (6-8 species per m2), 2 (varied sward height), 4 (physical damage) and 5 (cover of bare ground). This is due to the turf type, mowing regime, and habitat location detailed in Guarda Landscaping Ltd (2026).
Modified grassland (biodiverse amenity grass) (0.074 ha)	Moderate	Likely to pass up to four or five of seven criteria but fail criteria 2 (varied sward height), and 4 (physical damage). This is due to the seed mix, mowing regime, and habitat location detailed in Guarda Landscaping Ltd (2026).
Other neutral grassland (wildflower general mix EM2) (0.0142 ha)	Moderate	Likely to pass three or four of five criteria, failing criteria 2 (varied sward height), and 4 (cover of bare ground).
Other neutral grassland (wildflower wetland mix EM8) (0.0314 ha)	Moderate	Likely to pass three or four of five criteria, failing criteria 2 (varied sward height), and 4 (cover of bare ground).
Mixed scrub (native buffer) (0.0457)	Moderate	Likely to pass three or four of five criteria, failing criteria 2 (age range) and criteria 5 (clearings, glades or rides present). This is due to the proposed management, and planting regime detailed in Guarda Landscaping Ltd (2026).
Mixed scrub (native shrubs) (0.0299)	Moderate	Likely to pass three or four of five criteria, failing criteria 2 (age range) and criteria 5 (clearings, glades or rides present). This is due to the proposed management, and planting regime detailed in Guarda Landscaping Ltd (2026).
Modified grassland (native ground cover) (0.004 ha)	Poor	Likely to pass up to three of seven criteria, failing criteria 1 (6-8 species per m2), 2 (varied sward height), 4 (physical damage) and 5 (cover of bare ground). This is due to the turf type, mowing regime, and habitat location detailed in Guarda Landscaping Ltd (2026).

Proposed hedgerows

Habitat	Condition score	Rationale for condition assessment
Hedge ornamental non-native (0.264 km)	Poor	May fail a total of more than 4 attributes and both attributes in more than one functional group (conservative estimate)

Habitat	Condition score	Rationale for condition assessment
Native hedgerow (0.167 km)	Poor	May fail a total of more than 4 attributes and both attributes in more than one functional group (conservative estimate)

Appendix 2: Biodiversity net gain calculator

As attachment.



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