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Biodiversity Net Gain Baseline Report

Threals Farm Cottages, Threals Lane

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Report Sign-Off Sheet

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Declaration of Competence and Compliance

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Any limitations, constraints, or uncertainties relating to this report are fully stated within the relevant sections of the main document.

By signing below, you confirm responsibility for the findings and content of this report.

Sign-Off

I confirm that this report is a true and accurate reflection of the findings and has been prepared to the best of my knowledge and in line with relevant professional standards.

Name	Position / Title	Signature	Date
RO	Principal Ecologist	[redacted]	01/09/2025

This template meets CIEEM's expectations for professional sign-off and promotes accountability, transparency, and alignment with best practice guidance for ecological reporting.

Executive Summary

The site, occupying approximately 0.17ha at Threals Cottages, West Chiltington (West Sussex), currently consists of two residential cottages, gardens, outbuildings, sealed hardstanding, and both native and non-native hedgerows with scattered mature trees. The surrounding context is a mix of residential, agricultural, and semi-natural land.

The proposed development supports a planning application and comprises the demolition of all existing buildings and outbuildings, and the construction of three new residential dwellings with associated gardens, access drives, and parking. The landscape proposals are designed to maximise on-site biodiversity enhancement in line with Biodiversity Net Gain (BNG) best practice.

A walkover survey was completed on 5 July 2025, covering UK Habitat Classification (UKHab) mapping and condition assessment for all baseline habitat parcels.

Baseline habitats comprise modified grassland (poor condition), ruderal/ephemeral areas (moderate), hardstanding/urban surfaces (very low distinctiveness), individual native trees (moderate distinctiveness), native hedgerows (good), native hedgerow with trees (moderate), and non-native ornamental hedgerow (poor). The site at baseline provides 0.663 habitat units and 0.47 hedgerow units, with zero watercourse units.

Some loss and reconfiguration of modified grassland, ruderal areas, and non-native hedgerows will occur to facilitate the new dwellings and associated infrastructure. However, all native and native-with-trees hedgerows, as well as key individual trees, will be retained and enhanced with supplementary native planting and positive management. New neutral grassland of medium distinctiveness and further native hedgerows are proposed to deliver long-term BNG.

Post-development, the statutory biodiversity metric outputs demonstrate delivery of 0.774 habitat units (+0.110 units, or +16.6% net gain) and 0.52 hedgerow units (+0.07 units, or +11.0% net gain), comfortably exceeding the 10% net gain thresholds (0.729 HU for habitats, 0.51 HeU for hedgerows) required. Watercourse units are not applicable. All metric trading rules and statutory requirements are met on-site without the use of off-site offsets or biodiversity credits.

The development's layout and mitigation adhere to the full BNG hierarchy: all significant (medium distinctiveness or above) habitats are retained or enhanced where possible; unavoidable losses are minimised and mitigated; priority is given to on-site enhancement and creation. No off-site compensation is required. The design fully complies with the four statutory BNG rules, nine metric principles, and ten industry good practice principles.

All significant habitats (medium distinctiveness and above) created or retained on-site, such as new neutral grassland, new or enhanced native hedgerows with trees, and significant individual trees, will be legally secured for a minimum of 30 years using a Section 106 agreement or conservation covenant, and managed under a Habitat Management and Monitoring Plan (HMMP). Other retained habitats will be managed according to the Landscape and Ecological Management Plan (LEMP). If any habitat cannot be legally secured for the required period, it is omitted from the net gain calculation and treated as supplementary planting.

The proposals deliver measurable net gain for both habitats and hedgerows, with all enhancements legally secured, monitored, and managed in compliance with BNG policy, best practice, and statutory requirements.

Contents

Introduction

Background and Purpose

Leith Ecology Consulting Ltd. were commissioned by White Oak Developments Ltd to complete a Baseline Biodiversity Assessment, in relation to proposed works at Threal's Cottages, West Chiltington, Pulborough, RH20 2RF, centred on approximate Ordnance Survey National Grid Reference (OS NGR) location TQ 0928016502, hereafter referred to as "the site".

This baseline assessment has been undertaken to support a Biodiversity Net Gain (BNG) calculation as required under the statutory framework introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). The assessment follows the mandatory requirement for developments to achieve a minimum 10% net gain in biodiversity value relative to the pre-development baseline.

The baseline assessment utilises the UK Habitat Classification (UKHab) system for habitat mapping and the Defra Statutory Biodiversity Metric for calculating biodiversity units. This approach ensures consistency with the national framework for BNG assessments and enables accurate comparison of pre- and post-development biodiversity values.

The assessment includes habitat condition assessments undertaken using the prescribed methodology set out in the Technical Supplement to the Biodiversity Metric, with each habitat assessed against specific criteria to determine whether it is in poor, moderate, or good condition. This condition assessment is critical for determining the baseline biodiversity value of the site and identifying opportunities for enhancement

Site description

The Site is located to the east of Threals Lane in West Chiltington, West Sussex, and covers an area of approximately 0.174 ha. The site currently comprises two adjoining residential cottages with associated outbuildings and garden areas, all of which are proposed for demolition as part of the development proposals.

The approximate boundary of the site and the immediate surrounding area are shown in Figure 1.

Figure 1 Approximate location of the red line boundary and immediate surroundings, based on Google Earth Pro imagery dated 14 May 2024 (image captured July 2025).

Proposed development

The proposed development involves the complete demolition of the existing two cottages and associated outbuildings, with the construction of three new residential dwellings and associated infrastructure.

The development will include:

- Demolition works: Removal of existing two-storey cottages and two outbuildings
- New construction: Three new residential dwellings with modern design and construction
- Access arrangements: New vehicular access from Threal's Lane with associated driveways
- Parking provision: Individual parking areas for each dwelling
- Landscaping: New soft and hard landscaping throughout the site
- Utilities: Connection to existing infrastructure and services

Design Principles

The proposed development has been designed to:

- Maximise retention of existing boundary vegetation where possible
- Provide opportunities for biodiversity enhancement through new native planting
- Incorporate sustainable drainage and surface water management
- Achieve the mandatory 10% Biodiversity Net Gain requirement

Figure 2 shows the redline boundary and proposed outline design for the proposed development which is still subject to change.

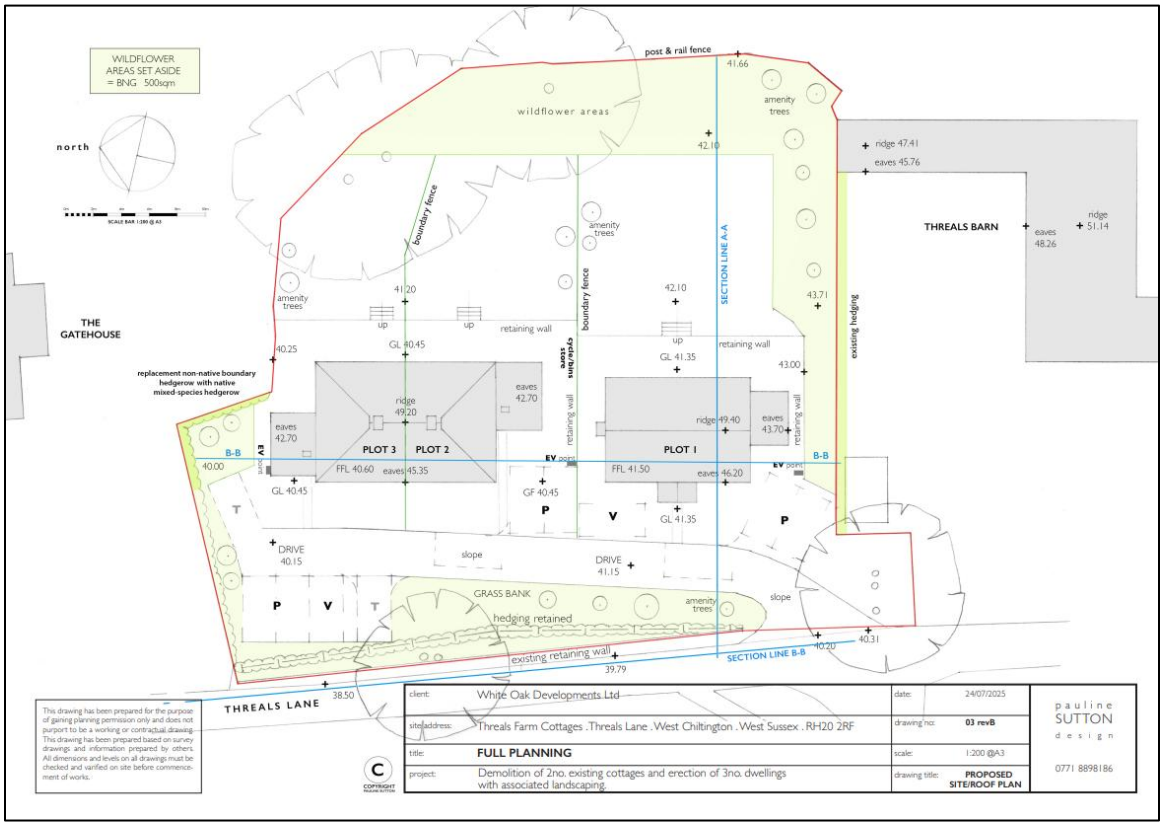

Figure 2 Proposed Development outline design.

Report Objectives

This report uses the Statutory Biodiversity Metric (SBM) and the Principles to produce an assessment report that:

- Set out the legislation and policy framework for use of the Statutory Biodiversity Metric (SBM) and delivering Biodiversity Net Gain (BNG);
- Set out the methodology and assumptions used in the application of the SBM for the site;
- Provide a summary of the results of the SBM calculations stating the total number of baseline Habitat Units (HU), Hedgerow Units (HeU) and River Units (RU) within the Site; and,
- Establishes the total number of units which will be retained, enhanced, and created under the current design of the Proposed Scheme's landscape mitigation plan;

- Determines whether the Proposed Scheme will result in a quantitative net loss, no net loss, or a net gain for biodiversity on Site.
- Provide key recommendations for the proposed development design plans and the mechanism for securing BNG, as appropriate.

Relevant Planning Policies and Legislation

The site was surveyed to assess its ecological value and to ensure the proposals were compliant with relevant planning policy and legislation. Policy guidance is provided by the National Planning Policy Framework (NPPF 2024) as well as the Horsham District Planning Framework (2015) and emerging Horsham District Local Plan 2023-2040. These policies include the following which are considered relevant to ecology, biodiversity, and nature conservation:

National Planning Policy Framework (NPPF) 2024

The NPPF was substantially revised and published on 12 December 2024, introducing significant changes to support the government's commitment to achieving net zero by 2050. The revised framework represents a major shift in planning policy under the new Labour government, with enhanced recognition of climate change as a material consideration in planning decisions.

Key amendments to the December 2024 NPPF include:

- Explicit commitment to net zero by 2050 and strengthened policies to address climate impacts including flood risk, water scarcity, and storm risks
- Enhanced biodiversity protection measurable net gains for biodiversity, with specific reference to incorporating features supporting priority or threatened species such as swifts, bats, and hedgehogs
- Strengthened natural environment policies in Chapter 15, emphasising the maintenance of biodiverse elements and positive contribution to natural capital and ecosystem services
- Greater emphasis on climate resilience and sustainability in new developments, requiring Local Development Authorities to consider climate change in development planning processes

The NPPF maintains the requirement for biodiversity net gain while strengthening policies for the protection of designated sites, priority habitats, and protected species. The framework supports the delivery of Local Nature Recovery Strategies and nature recovery networks as part of a coordinated approach to nature conservation.

Horsham District Planning Framework (2015)

- Policy 24: Environmental Protection – Ensures that development does not have an unacceptable impact on the environment.
- Policy 25: The Natural Environment and Landscape Character – Requires the conservation and enhancement of the natural environment and landscape character.
- Policy 26: Strategic Countryside Protection – Protects the countryside from inappropriate development.
- Policy 31: Green Infrastructure and Biodiversity – Promotes the retention, protection, and enhancement of biodiversity and green infrastructure.

- Policy 37: Sustainable Construction – Encourages sustainable design and construction methods that support environmental objectives.

The HDPF requires development to create "no net loss of wider biodiversity" and provide "net gains in biodiversity where appropriate," alongside contributing to the enhancement of existing biodiversity and creating new habitats where appropriate.

Horsham District Local Plan 2023-2040

Horsham District Council is currently preparing a new Local Plan for 2023-2040, which was formally submitted to the Planning Inspectorate on 26 July 2024 for independent examination. The emerging plan includes strengthened policies requiring improvements to biodiversity by at least 10% (incorporating both on-site and off-site measures where necessary).

Key environmental policies in the emerging Local Plan include:

- Strategic Policy 17: Green Infrastructure and Biodiversity requiring conservation and enhancement of biodiversity
- Enhanced biodiversity net gain requirements with evidence supporting 12% BNG above the statutory minimum
- Water neutrality policies to prevent adverse impacts on wildlife sites and promote nature recovery and enhancement
- Embedded policies relating to biodiversity net gain to prevent adverse impacts on wildlife sites and promote nature recovery and enhancement

The Local Plan includes expectations that biodiversity net gain will be provided above minimum legal requirements and supports the delivery of new community infrastructure including schools and transport links.

Note: The Local Plan examination is currently on hold following the Inspector's concerns about soundness and legal compliance, particularly regarding housing needs and the Duty to Cooperate.

Environment Act 2021 (Biodiversity Net Gain requirement)

The Environment Act 2021 introduced a mandatory requirement for most new developments in England to deliver at least 10% Biodiversity Net Gain (BNG) compared to the pre-development baseline, as measured by the statutory biodiversity metric. This requirement became effective for major developments from 12 February 2024 and was extended to small sites from 2 April 2024.

Key BNG requirements include:

- Statutory framework: BNG is required under Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021)
- Long-term security: All BNG measures must be secured for a minimum of 30 years through legal agreements such as Section 106 obligations or conservation covenants
- Biodiversity Gain Plan: Planning applications must be supported by a Biodiversity Gain Plan demonstrating how the minimum 10% net gain will be achieved and maintained
- Delivery options: The 10% uplift can be achieved through on-site biodiversity gains, registered off-site biodiversity gains, or statutory biodiversity credit

Local Nature Recovery Strategy for West Sussex

West Sussex County Council is leading the preparation of the Local Nature Recovery Strategy (LNRS) for West Sussex as a statutory requirement under the Environment Act 2021. The LNRS will provide a spatial blueprint for nature recovery, identifying priority areas for habitat creation, restoration, and enhancement.

Key aspects of the West Sussex LNRS:

- Strategic approach: The LNRS will map existing areas of biodiversity importance and set out local priorities for nature recovery
- Partnership approach: Development involves collaboration between West Sussex County Council, district and borough councils, Natural England, and other stakeholders
- Public consultation: A consultation process was launched in 2024 to gather views from residents and organisations
- Implementation timeline: The LNRS is expected to be published following consultation, with review required between 3-10 years from first publication

Until the West Sussex LNRS is adopted, the Council's Green Infrastructure Strategy and Guide (2024) and the Wilder Horsham District Nature Recovery Network report provide interim guidance on strategic significance for BNG assessments

Methodology

Field Survey

A Preliminary Ecological Appraisal (PEA) was completed by Environmental Assessment Services Ltd., dated September 2024. The PEA report did not include a condition assessment of the habitats for the purpose of BNG and as such a follow up walkover survey was conducted on 5 July 2025, by Leith Ecology Consulting Ltd., to undertake a UKHab classification survey of the habitats across the site as well as a habitat condition assessment to inform the statutory biodiversity metric baseline. The survey was completed at the optimal time of year.

Weather conditions during the site walkover:

- Weather conditions during the site walk-over (5 July 2025, 09:30–12:15):
- Weather: broken cloud (~20% cover), dry; light westerly breeze (Beaufort 2; 4–8 mph); temperature 19–21 °C.
- Visibility: excellent (> 10 km), allowing clear identification of field characters.
- Precipitation: none throughout the survey period.

Habitats were classified using the latest UK Habitat Classification system (UKHab v2.01). This hierarchical and standardised approach supports detailed baseline habitat assessment and aligns with Biodiversity Net Gain (BNG) metric requirements.

Survey methodology included:

- Systematic mapping of all habitat types and features using GPS-enabled devices and Coreo (2025) in the field app.
- Assessment of habitat condition, structure, and species composition for each habitat parcel.
- Quadrat's were used in each habitat parcel and a DAFOR scale[1] was applied to determine the presence of each species within the quadrat.

Where access was restricted or visibility limited, this was noted, and the potential implications for survey completeness were assessed.

BNG Assessment

The statutory biodiversity metric (SBM) was used to calculate baseline biodiversity units for the site, in line with current national requirements and Horsham District Council policy.

- Habitats were mapped and classified using UKHab v2.01 to ensure compatibility with the statutory metric.
- Each habitat parcel was assigned a unique reference, and its area, distinctiveness, condition, and strategic significance were assessed according to the metric's criteria and local planning priorities.

[1] The DAFOR scale (Dominant, Abundant, Frequent, Occasional, Rare) provides a semi-quantitative estimate of vegetation presence and distribution.

- Baseline calculations were based solely on habitats present at the time of survey, prior to any development or enhancement proposals.
- The baseline unit values provide a quantifiable measure of the site's existing biodiversity value and form the reference point for future BNG assessments.

Strategic Habitat Significance

Habitats are evaluated based on their ecological value and location:

- High Strategic Significance: Areas identified within Horsham's Green Infrastructure Strategy (2024), including Biodiversity Opportunity Areas, river corridors, and designated sites. These locations are mapped as core components of the district's ecological network, providing essential habitat for wildlife, supporting ecosystem services, and forming the backbone of landscape-scale ecological connectivity.
- Medium Strategic Significance: Priority habitats mapped within the Wilder Horsham District Nature Recovery Network (NRN), which identifies biodiversity-rich zones and potential corridors for ecological connectivity. These areas play a key role in linking core habitats, facilitating species movement, and enhancing the resilience of the wider ecological network, but are not themselves designated as core sites.
- Low Strategic Significance: Habitats or features not identified as priorities within local or national nature recovery strategies, such as Nature Recovery Networks, Biodiversity Opportunity Areas, or Green Infrastructure corridors. Typically, these are isolated, fragmented, or heavily modified areas with limited species diversity or ecological function, offering little contribution to landscape-scale connectivity or ecosystem resilience, and not mapped as part of ecological corridors or buffer zones for priority habitats or protected sites.

To determine whether the habitats present on site were of High, Medium or Low significance these local strategy documents were reviewed as part of the desk-based assessment.

This assessment is underpinned by the SBM's calculations which have been used to quantify the baseline biodiversity value of the site.

The most recent SBM was published by Defra in August 2024, alongside a User Guide (Defra, August 2024). This assessment used the SBM published in August 2024.

The SBM calculates the biodiversity value of each parcel of habitat within the site (measured as biodiversity units). Area-based habitats are measured in ha whilst linear habitats (i.e. for hedgerows and watercourses) are measures in kilometres (km). The value of each habitat type is adjusted to site specific circumstances, taking into account distinctiveness, condition and if the habitat parcel is located in an area identified as being of strategic significance for nature, typically in a Local Nature Recovery Strategy (LNRS) Plan or similar. A score is applied to each component, which when multiplied with the habitat area produces a value that represents the number of biodiversity units associated with each habitat parcel. The sum of these scores across the whole Site represents the overall baseline or 'pre-development' value in biodiversity units.

Where trees are present, the tree size tool in the SBM is used to determine the area of tree coverage at a site. This is based on the size and condition of the tree, as shown in Table 1 Tree Size Classes and Area-Equivalents (ha).

Table 1 Tree Size Classes and Area-Equivalents (ha).

Tree Size Class	Diameter at Breast Height (cm)	SBM Area Equivalent (ha)
Small	7.5 cm < to ≤ 30 cm	0.0041
Medium	30 cm < to ≤ 60 cm	0.0163
Large	60 cm < to ≤ 90 cm	0.0366
Very Large	90 cm <	0.0765

Area-based habitats (Habitat Units (HU)), hedgerow habitats (Hedgerow Units (HeU)) and watercourse habitats (Watercourse Units (WU)) are each considered separately within the SBM. Where all three are relevant to a site, a baseline biodiversity unit value for each is calculated. These unit values cannot be combined; HU, HeU and WU are considered separately.

Within the SBM User Guide there are a number of rules and key principles which apply to BNG Assessments. Of particular relevance to this assessment is Rule 1 - Metric Trading Rules. Rule 1 is automatically applied by the SBM and sets minimum habitat creation and enhancement requirements to compensate for specific habitat losses based on the habitats type and distinctiveness.

Distinctiveness

The distinctiveness score is based on the type of habitat present, and its value based on its rarity. Distinctiveness levels are automatically assigned in the SBM Calculation Tool and range from Very Low to Very High Distinctiveness habitats. A higher distinctiveness will contribute to a higher WU baseline.

The distinctiveness of all habitats determines the required action to meet the Trading Rules. The broad rules by distinctiveness level are detailed in Table 2.

Table 2 Distinctiveness groups and trading rule requirements.

Distinctiveness Group	Trading Rule
Very High	Bespoke compensation likely to be required
High	Same habitat required =
Medium	Same broad habitat or a higher distinctiveness habitat required (≥)
Low	Same distinctiveness or better habitat required ≥
Very Low	Compensation not required

BNG Hierarchy

The delivery of BNG must be in accordance with the BNG Hierarchy. This hierarchy differs from the ecological mitigation hierarchy (CIEEM, 2024), although it is based on the same broad principles. The BNG Hierarchy steps in order of priority are:

1. Avoid adverse effects: Avoidance for habitats with medium, high or very high distinctiveness.

2. Mitigate unavoidable effects: If this cannot be avoided, then actions for mitigation is required.
3. Enhance on-site habitat: Following mitigation, the priority should be on enhancing existing on-site habitat.
4. Create new on-site habitat: If habitat cannot be enhanced and/or further measures are required to deliver a 10% net gain, new habitat should be created at the Site.
5. Secure off-site biodiversity units: If it is not feasible to deliver a 10% net gain on-site, off-site biodiversity units should be sought. This can be on land in the same land ownership, on third party land or via a habitat bank.
6. Purchase statutory biodiversity credits: As a last resort, and only if the above options have been investigated and found not to be feasible, statutory biodiversity credits should be purchased

Baseline Assumptions

Explanation for Why Habitats Assigned 'Formally Identified in Local Strategy'

Certain habitats on or adjoining the site have been assigned as ‘formally identified in local strategy’ because they directly align with priority habitats mapped in statutory or endorsed local nature recovery documents. In West Chiltington and the wider Horsham District, this refers mainly to:

- Local Nature Recovery Network (NRN) priority zones for woodland, hedgerows, species-rich grassland, and wetland.
- Sussex Biodiversity Opportunity Areas (BOAs), which are spatially defined in the Wilder Horsham District Nature Recovery Network report and are recognised as key targets for restoration or creation of Biodiversity Action Plan (BAP) habitats.
- Habitat priority lists contained in the emerging West Sussex Local Nature Recovery Strategy (LNRS), including ancient woodland, wood pasture, wet meadows, and traditional orchards.

Where habitats on site correspond to these categories, they fulfil locally- and nationally-identified objectives for habitat conservation, creation, and connectivity.

Explanation for Why Habitats Assigned ‘Location Ecologically Desirable but Not in Local Strategy’

Some habitats have been recorded as ‘location ecologically desirable but not in local strategy’ because, although not mapped as explicit local priorities, their establishment or enhancement would provide meaningful ecological benefits in the local landscape. Examples include:

- Linear habitat features or stepping-stone habitats that would increase landscape connectivity for local species, even if sited outside mapped BAP/NRN zones.
- Small-scale habitat mosaics or microhabitats supporting pollinators, invertebrates, amphibians, or bats that are not specifically targeted in the current local strategy, but would contribute to local Lawton Principles (bigger, better, more, joined up).
- Features that complement nearby protected sites, e.g., new ponds supporting amphibian dispersal or additional native hedgerows buffering ancient woodland.

This assignment is typically justified where the habitat would fill a recognised ecological gap, improve patch connectivity, or address local ecological network fragmentation, as highlighted in the Wilder Horsham District Nature Recovery Network

Explanation for Why Habitats Assigned 'Area/Compensation Not in Local Strategy/No Local Strategy'

Where a habitat type is designated as 'area/compensation not in local strategy/no local strategy', this applies when:

- The habitat either falls outside all mapped priority zones or categories within the adopted or draft Local Nature Recovery Strategy for West Sussex and the Horsham District NRN.
- There is currently no specific local strategy, spatial plan, or mapped aspiration for the creation or restoration of that habitat in this area of Horsham District.
- The compensation area (potential offsetting site) is located well beyond the boundaries of mapped opportunity areas, meaning its biodiversity value is not locally strategic even if it delivers net gain units.

This category is particularly relevant for habitat creation schemes driven by statutory requirements but sited on land with minimal or no local ecological significance, or where the local authority's published strategies remain incomplete.

Explanation for Why Some Habitats Have Been Assigned Based on Reflective Rather Than Direct Comparison

Reflective assignment occurs where baseline or compensation habitats do not have a precise match in local strategy documents, but their role, structure, or value can be reasonably inferred based on analogous habitat type or its ecological function. Examples in West Chiltington include:

- Modified or degraded habitats (such as improved grassland with scattered trees) judged to be ecologically analogous to a locally-prioritised habitat (e.g., wood pasture) based on structure and wildlife support, even if not formally labelled as such in mapping.
- Urban or garden features viewed reflectively through their value for foraging, commuting, or stepping stone use by local species of conservation concern.
- Habitats with emerging or transitional ecological value – such as recently naturalised areas – that are not captured in official datasets but are considered in line with current local priorities after site-based evidence and consultation.

Reflective assignments are applied cautiously and justified by ecological reasoning, referencing both local landscape context and objectives set out by the Wilder Horsham District and Sussex Nature Recovery initiatives.

For this report, no reflective comparisons were required as access was possible to assess all habitats on site.

Quality Assurance

All survey work and data analysis were subject to internal quality assurance procedures, including review by a senior ecologist. The methodology was designed to meet or exceed the requirements of CIEEM, DEFRA, Natural England, and Horsham District Council.

Limitations

This BNG baseline assessment is based solely on a single site visit, with habitat mapping undertaken according to the UKHab framework. The scope of the assessment was limited to establishing baseline habitat types and their extent, as required for statutory BNG calculations. No detailed surveys or evaluations of wider ecological receptors, such as protected species, bird assemblages were included within this assessment.

Findings represent habitat conditions observed at the time of survey. Species that are seasonal, cryptic, mobile, or only readily detectable at other times of year may not have been recorded, as the survey approach did not include targeted effort for flora outside the remit of habitat classification for BNG purposes.

The baseline survey followed established best practice for UKHab mapping, but does not comprehensively assess ecological processes, species-specific requirements, or the presence of protected or notable species. As such, the results should not be interpreted as a definitive ecological evaluation for planning, licensing, or mitigation outside BNG requirements.

Every care has been taken to ensure the accuracy and consistency of habitat mapping and placement. Habitat boundaries were delineated using on-site observations, GPS, recent aerial imagery, Ordnance Survey base maps, and available planning documentation. Some minor discrepancies may occur due to scale limitations, the resolution of mapping data, or small georeferencing variations across sources.

The habitats mapped and discussed in this report are considered accurate as of the survey date and constitute the best available BNG baseline for the site since the adoption of statutory BNG requirements, in line with the relevant BNG User Guide. However, integrating various mapping datasets and field data can lead to unavoidable minor inconsistencies.

In summary, this report presents a robust but provisional BNG baseline based exclusively on UKHab habitat data. Further surveys would be needed to inform any evaluation or management of wider ecology receptors and species-specific conservation requirements. If circumstances or planning requirements change, additional ecological assessments may be required prior to development.

Data validity

Unless otherwise stated, this Biodiversity Net Gain (BNG) baseline report will remain valid for a period of 24 months from the date of the last survey. After this period, update surveys or further ecological assessment may be required to ensure compliance with current guidance and site conditions. This validity period is in accordance with CIEEM’s advice note: On the Lifespan of Ecological Reports and Surveys (2019).

Beyond the 24-month window, it is recommended that the baseline is reviewed to determine whether significant changes to habitats or relevant environmental factors have occurred, and whether updated BNG calculations or additional surveys are necessary to support planning or management decisions.

Baseline Conditions

Baseline Habitat Units

The baseline value of the site was calculated using the latest DEFRA SBM, with results finalised on 23 July 2025. The current on-site baseline value is **0.663 habitat units** across all mapped areas. The baseline includes a mosaic of very low to medium distinctiveness habitats, all in poor or moderate condition and with low strategic significance. No irreplaceable habitats are present within the baseline assessment

Whilst BNG is underpinned by UKHab (UK Habitat Classification, 2023), some habitat types in UKHab are not directly replicated in the SBM. Table 3 below details the UKHab habitat types recorded during the baseline habitat survey and the BNG habitat they equate to in the SBM.

The SBM habitat types listed below in Table 3 will be discussed from this point forward in this report.

Table 3 UKHab to SBM Habitat Translation.

UKHab Habitat Type	SBM Habitat Type
Urban - Developed land; sealed surface	Urban - Developed land; sealed surface
Sparsely vegetated land - Ruderal/Ephemeral	Sparsely vegetated land - Ruderal/Ephemeral
Grassland - Modified grassland	Grassland - Modified grassland
Grassland - Other neutral grassland	Grassland - Other neutral grassland
Individual trees - Urban tree	Individual trees - Urban tree
Urban - Artificial unvegetated, unsealed surface	Urban - Artificial unvegetated, unsealed surface
Urban - Unvegetated garden	Urban - Unvegetated garden
Urban - Developed land; sealed surface	Urban - Developed land; sealed surface

For this site and the SBM, there is no difference between the UKHab and SBM habitat type entries.

Table 4 provides an overview of the Statutory BNG metric for habitat units.

Table 4 Baseline Habitat Units Summary, including the urban features.

Broad Habitat	Habitat Type	Distinctiveness	Condition	Strategic Significance	Total Area (ha)	Habitat Units
Urban	Developed land; sealed surface	Very Low	N/A	Area/compensation not in local strategy	0.041	0.000
Sparsely vegetated	Ruderal/Ephemeral	Low	Moderate	Area/compensation not in local strategy	0.053	0.210
Grassland	Modified grassland	Low	Poor	Area/compensation not in local strategy	0.079	0.158
Individual trees	Urban tree	Medium	Mixed*	Area/compensation not in local strategy	0.041	0.295

Broad Habitat	Habitat Type	Distinctiveness	Condition	Strategic Significance	Total Area (ha)	Habitat Units
Totals					**0.214***	**0.663**

*Total area includes trees which increase the boundary area in the overall total.

- No watercourses or wetland habitats are present at baseline.
- Non-native and ornamental hedgerows are assessed separately in the statutory BNG metric (see Hedgerows section).

A baseline habitat map is provided in Appendix 1. Condition assessments are provided in Appendix 2. The SBM is provided in Appendix 5 which is separate from this report.

To meet the mandatory 10% BNG uplift, the site must deliver a minimum of 0.729 habitat units post-development (rounded to three decimals), equating to a net gain target of 0.066 units above baseline.

Baseline Hedgerow Units

The baseline assessment for hedgerows on the site recorded a total of 0.077 km (77 metres) of hedgerows, 0.020 km of non-native ornamental hedgerow and 0.058 km of native hedgerows, these hedgerows we deemed to be between very low and medium distinctiveness under the DEFRA SBM. These hedgerows comprise the boundary features to the north, south and west of the site. The combined total delivers 0.47 hedgerow units at baseline. This is detailed in Table 5.

Table 5 Baseline Hedgerow Types and Units.

Habitat Type	Length (km)	Distinctiveness	Condition	Strategic Significance	Total Hedgerow Units (HeU)
Native hedgerow	0.027	Low	Good	Location ecologically desirable but not in local strategy	0.18
Non-native and ornamental hedgerow	0.020	Very Low	Poor	Area/compensation not in local strategy	0.02
Native hedgerow with trees	0.031	Medium	Moderate	Location ecologically desirable but not in local strategy	0.27
Total Hedgerow Units (HeU)					**0.47**

To achieve BNG compliance, an increase to 0.51 hedgerow units (a minimum 10% uplift) would be required. The SBM trading summary confirms that the project triggers a unit shortfall for hedgerows, and compensatory measures will need to address this deficit to meet statutory requirements.

Post-development

The Site covers a total area of 0.174 ha (excluding individual trees).

The Site has a baseline of 0.663 habitat units.

To achieve a 10% net gain, the development must generate 0.729 habitat units

Post-development, a total of 0.774 habitat units will be delivered on site, representing a net gain of 0.1104 units (+16.6%) above baseline, thus exceeding the statutory 10% net gain requirement. This is shown in Table 6.

Table 6 Created On-Site Habitat Units Post-Development

Broad Habitat	Area (ha)	Distinctiveness	Condition	Strategic Significance	Total Habitat Units
Urban	0.049	Very Low	N/A	Area/compensation not in local strategy	0.000
Grassland	0.05	Medium	Good	Area/compensation not in local strategy	0.420
Urban	0.075	Very Low	N/A	Area/compensation not in local strategy	0.000
Individual trees	0.024	Medium	Moderate	Area/compensation not in local strategy	0.353
Total Habitat Units					**0.774**

Table 7 provides a summary of the post development hedgerow units that can be achieved on site.

Table 7 Post-development Hedgerow Types, Lengths, and Units

Hedgerow Type	Length (km)	Distinctiveness	Condition	Strategic Significance	Total Hedgerow Units (HeU)
Native hedgerow (retained)	0.0268	Low	Good	Location ecologically desirable but not in local strategy	0.18
Native hedgerow with trees	0.0308	Medium	Moderate	Location ecologically desirable but not in local strategy	0.27
Non-native and ornamental hedge	0	Very Low	Poor	Area/compensation not in local strategy	0
Native hedgerow (created)	0.0201	Low	Moderate	Location ecologically desirable but not in local strategy	0.07
Total Hedgerow Units					0.52

Total Hedgerow Units (HeU): 0.52

- All figures are from the post-development scenario; lengths are given in kilometers.
- "Created" indicates new native hedgerow proposed as part of the development scheme.

- The non-native ornamental hedgerow is lost and therefore not present post-development.
- The native hedgerow and native hedgerow with trees shown are retained, maintaining their baseline units.

This total represents a net gain from the baseline value of 0.47 HeU, achieving the required increase under the BNG framework. The delivery of new (created) native hedgerow further enhances site value post-development, with all trading rules and strategic requirements satisfied according to the metric outputs.

Summary

Overview

A baseline BNG assessment for the site was undertaken using the SBM. The results summarise the current baseline value for site habitats and the predicted outcomes of the proposed development, compared against the legal requirement for a minimum 10% net gain in biodiversity units. All assessment is based on on-site area-based habitats and hedgerow features; no watercourses or irreplaceable habitats were present at baseline.

Statutory Biodiversity Metric Outcome

Area-based habitats

The Site currently has a baseline biodiversity value of 0.663 habitat units (HU).

Hedgerow habitats

The Site currently has a baseline biodiversity value of 0.47 hedgerow units (HeU).

Biodiversity Metric Results Summary

A summary of the Statutory Biodiversity Metric scores, as derived from the completed metric for the current post-development proposals, is provided below:

- On-site post-development habitat units: 0.774 HU
- On-site post-development hedgerow units: 0.52 HeU
- Net change (habitat units): +0.110 HU (+16.6%)
- Net change (hedgerow units): +0.047 HeU (+11.0%)

A summary of the SBM score based on current proposals is displayed in Plate 1 and the requirements of the trading rules are shown in Plate 2.

Plate 1: Headline Results from the Statutory Biodiversity Metric based on the current proposals.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.11
	Hedgerow units	0.05
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	16.64%
	Hedgerow units	11.52%
	Watercourse units	0.00%
Trading rules satisfied?		Yes ✓

Plate 2: Units required by trading rules to meet BNG targets

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	0.66	0.73	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	0.47	0.51	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

Table 8 outlines how the Proposed Development at the site adheres to the BNG hierarchy.

Table 8 How the post development plans for the site adhere to the BNG Hierarchy

BNG Hierarchy	Evidence
Avoid adverse effects	The design fully avoids direct impacts to habitats of medium, high, or very high distinctiveness. All existing native and native-with-trees hedgerows (the highest-distinctiveness, non-arboreal habitats on site) are retained in situ as part of the post-development scheme; no irreplaceable or high distinctiveness habitats are present or affected. Area-based habitats on site are all low or very low distinctiveness, and unavoidable losses are limited to modified grassland or sealed surface. Impacts to mature trees are avoided through careful site layout.
Mitigate unavoidable effects	Unavoidable losses are limited to small areas of modified grassland and existing hardstanding required for safe access and development footprint. Hedgerow losses are restricted to non-native ornamental hedgerow of very low distinctiveness. Site design and construction methods ensure losses are minimised and retained habitats are protected during works (e.g., buffer zones for trees/hedgerows, best-practice pollution control, and root protection areas).
Enhance on-site habitat	Existing retained hedgerows and trees will be subject to new native planting and positive management, improving their ecological condition and connectivity. Good practice management will be adopted for retained features, with detailed management secured through a future BNG Management Plan.
Create new on-site habitat	To achieve and exceed the 10% BNG target, new habitats are created on site, including an area of neutral grassland of medium distinctiveness and newly planted native hedgerow. New native standard trees are introduced within green space, and created habitats are designed for improved species diversity and long-term ecological function.
Secure off-site biodiversity units	The scheme delivers a net gain of 16.6% in area-based habitat units and 11.0% in hedgerow units entirely through on-site retention, enhancement, and creation. No off-site units or statutory credits are required to meet the BNG target; all legal trading rules are satisfied, and no off-site interventions are proposed or necessary.

Recommendations

Biodiversity Metric Rules and Principles

The Proposed Development has fully accounted for the four statutory BNG key rules and nine BNG metric principles, as set out in Appendix **3**. The scheme design and assessment process ensure that:

- The mitigation hierarchy**,** avoid, mitigate, compensate**,** is correctly applied.
- All trading rules for habitat distinctiveness and baseline type are satisfied, such that losses of any medium, high, or very high distinctiveness habitats are offset by appropriate replacements or enhancements.
- Habitat condition, distinctiveness, and strategic significance have been properly classified and evidenced, following the BNG Metric User Guide methodology.
- Net gain calculations are robust, auditable, and based on the prescribed metric v4.1.

As long as the recommended interventions are implemented as set out in this report, all BNG Metric Rules and Principles will be complied with for the Project's net gain assessment

Project Compliance with Industry Principles

The Proposed Development has incorporated the ten core industry principles for Biodiversity Net Gain, as outlined in Appendix **4**. These include:

- Adherence to the mitigation hierarchy
- Delivering measurable net gain
- Achieving the required duration (minimum 30 years)
- Stakeholder engagement in design and management
- Transparency and accountability in reporting and monitoring
- Securing legacy and resilience of biodiversity enhancements

Subject to the recommended interventions being carried out as described, the **proposed development** will comply with all relevant industry BNG principles now considered standard good practice**.**

Implementation, Management and Monitoring

Gain Plan: Implementation, Management, and Monitoring

The implementation of BNG at the site will be secured and delivered in accordance with a statutory Biodiversity Gain Plan (Gain Plan), as required under the Environment Act 2021 and current Defra and Natural England guidance.

The Gain Plan will:

- Specify the spatial and temporal delivery of all habitat creation, enhancement, and retention required to meet the net gain outcomes evidenced in the approved SBM calculation.
- Include detailed design information (drawings and planting schedules) sufficient to support legal agreements, tendering, and practical delivery, ensuring all new and enhanced habitat parcels are clearly mapped and described.

- Set out clear management proposals for each habitat type, including establishment, aftercare, and routine management prescriptions, in line with target condition scores and metric assumptions.
- Provide a timetable for implementation, including dependencies on construction phases, optimal planting/establishment windows, and target dates for the commencement and achievement of required habitat conditions.
- Assign responsibility for each activity to named parties, for example, the developer, specialist contractors, offset provider(s), or management company.
- Incorporate a construction handover checklist to ensure all habitat works are completed, signed off, and recorded before practical completion and occupation.

The Gain Plan will be supported by a legally binding Habitat Management and Monitoring Plan (HMMP) covering the statutory minimum period of 30 years. The HMMP will:

- Describe the long-term management and monitoring arrangements to maintain delivered habitats in their intended condition, as specified in the metric.
- Detail methods for periodic monitoring and reporting, including assessment against condition criteria, required remedial actions, and triggers for adaptive management.
- Specify the frequency and format of monitoring reports, which must be submitted to the Local Planning Authority and any nominated responsible bodies to demonstrate continuing compliance throughout the secured management period.
- Include provisions for contingency and corrective actions should monitoring indicate a risk of not achieving or maintaining required BNG outcomes.

If BNG measures are delivered or managed through existing instruments such as a Landscape and Ecological Management Plan (LEMP) or Construction Environmental Management Plan (CEMP), the Gain Plan and HMMP will reference these documents, summarising where and how BNG-specific targets, mechanisms, and legal assurances are secured.

No off-site units or statutory biodiversity credits are required for this development. All BNG obligations are met through on-site retention, creation, and enhancement, as evidenced by the Biodiversity Metric outputs and trading rules compliance.

Draft Habitat Management and Monitoring Plan Information

Habitat Target Conditions and Management Requirements

The post-development habitats identified in the metric calculations must achieve and maintain specific condition targets to deliver the calculated biodiversity units. The following provides the target conditions and management prescriptions for each habitat type:

New Neutral Grassland (0.05 ha - Target Condition: Good)

Target Condition Criteria (Good Condition):

- Sward with ≥9 species per m² averaged across the area
- Vegetation dominated by grasses and wildflowers native to the local area
- Less than 5% cover of undesirable species (including weeds, non-native species)
- Sward height varied with areas of short (2-10cm) and medium (10-40cm) height grassland
- Less than 5% bare ground

Management Prescription:

- Initial establishment: Native seed mix appropriate to local soil conditions, sown autumn 2025 or spring 2026
- Annual hay cut in late summer/early autumn, with cuttings removed
- No application of fertilizers, herbicides, or pesticides
- Grazing management or additional cuts as required to maintain sward diversity and prevent scrub encroachment
- Periodic overseeding with native species if species diversity falls below target

Native Hedgerow - New (0.0201 km - Target Condition: Moderate)

Target Condition Criteria (Moderate Condition):

- At least 4 native woody species on average per 30m length
- Dense, continuous hedge structure with minimal gaps (<10% of total length)
- Average height between 1.5-4m with managed sides
- Native species comprise >80% of total woody species present

Management Prescription:

- Plant native hedgerow species appropriate to local area (hawthorn, blackthorn, field maple, etc.)
- Establish 3-year aftercare period with watering, weeding, and replacement of failed plants
- Management cutting on 2-3 year rotation, avoiding bird nesting season (March-August)
- Maintain hedge height between 2-3m with regular trimming of sides
- Gap-up planting as required to maintain continuity

Retained Native Hedgerows (Good/Moderate Condition Maintained)

Management for Condition Maintenance:

- Continue current management regime that maintains good condition
- Appropriate cutting regime on rotation (not annually)
- Protection during construction through root protection areas and fencing
- Enhancement through supplementary native planting where gaps exist

Individual Trees - New (Target Condition: Moderate)

Target Condition Criteria (Moderate Condition):

- Native species or at least 70% native species in mixed planting
- Little evidence of adverse impact from human activities
- Natural ecological niches present (cavities, loose bark as trees mature)
- More than 20% of tree canopy oversailing vegetation beneath

Management Prescription:

- Plant native standard trees (5 trees minimum as specified)
- Establish with appropriate stakes, guards, and 3-year aftercare
- Allow natural development of canopy structure with minimal intervention
- Monitor for health issues and replace failed specimens during establishment period
- Maintain understorey vegetation beneath canopy

Monitoring Requirements

Monitoring Schedule:

- Year 1-3 (Establishment): Annual monitoring in late spring/early summer
- Year 4-10: Biennial monitoring
- Year 11-30: Every 5 years or as required by planning condition

Monitoring Methods:

- Condition assessments using statutory biodiversity metric condition assessment sheets.
- Photographic monitoring from fixed points
- Quantitative vegetation surveys (quadrat sampling for grassland)
- Tree health assessments and size measurements
- Hedgerow species counts and structure assessment.

Reporting:

- Annual monitoring reports to Horsham District Council for first 5 years
- Thereafter as specified in planning conditions
- Reports to include assessment against target conditions and remedial actions required

Feasibility and Design Integration

These target conditions and management prescriptions are:

- Achievable given the site's soil conditions, aspect, and local climate
- Embedded in design decisions with appropriate locations identified for each habitat type
- Standard best practice requiring no additional surveys beyond baseline assessment
- Deliverable within normal construction and landscaping timescales

The management prescriptions are designed to achieve and maintain the condition scores assumed in the biodiversity metric calculations (Good = 3, Moderate = 2) that underpin the net gain calculations of +16.6% habitat units and +11.0% hedgerow units.

Legal Security

All habitats contributing to BNG calculations will be secured through Section 106 agreement or conservation covenant for minimum 30-year period as required by law, with management responsibilities clearly defined and enforceable.

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Appendix 1 – Habitat Map – UKHab/BNG

Appendix 2 – Baseline Habitat Condition Assessments

Please note, this will be supplied as a separate standalone .xls file.

Appendix 3 - BNG Metric Principles

Rule number and Details (Statutory Biodiversity Metric)	
Rule 1	The trading rules of this biodiversity metric must be followed.
Rule 2	Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit.
Rule 3	To accurately apply the biodiversity metric formula, you must use the biodiversity metric calculation tool or small sites biodiversity metric tool (SSM) for small sites. The tools remove the need for a user to manually calculate the change in biodiversity value. The tool will summarise the results of the calculation and inform a user whether the biodiversity net gain objective has been met.
Rule 4	In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority.

Principle Number	Principle detail
Principle 1	The metric assessment should be completed by a competent person.
Principle 2	The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands.
Principle 3	This biodiversity metric should be used in accordance with established good practice guidance and professional codes.
Principle 4	This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.
Principle 5	Biodiversity units are a proxy for biodiversity and should be treated as relative values.
Principle 6	This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.
Principle 7	Habitat interventions need to be realistic and deliverable within a relevant project timeframe.
Principle 8	Created and enhanced habitats should be, where practical and reasonable, local to any impact and deliver strategically important outcomes for nature conservation.

Principle 9	This biodiversity metric does not enforce a minimum habitat size ratio for compensation of losses. Proposals should aim to: ensure that proposed or retained habitat parcels are of sufficient size for ecological function maintain habitat extent - supporting more, bigger, better and more joined up ecological networks

Appendix 4- Industry Principles

Principle Number	Principle detail
Principle 1	Apply the mitigation hierarchy*.
Principle 2	Avoid losing biodiversity that cannot be offset elsewhere.
Principle 3	Be inclusive and equitable.
Principle 4	Address risk.
Principle 5	Make a measurable net gain contribution.
Principle 6	Achieve the best outcomes for biodiversity.
Principle 7	Be additional.
Principle 8	Create a net gain legacy.
Principle 9	Optimise sustainability.
Principle 10	Be transparent.

*The BNG hierarchy has been published since the Good Practice Principles were published. The BNG hierarchy specifically relates to BNG and should be prioritised over the mitigation hierarchy.

Appendix 5 – Statutory Biodiversity Metric

Please note, this will be supplied as a separate standalone .xls file.