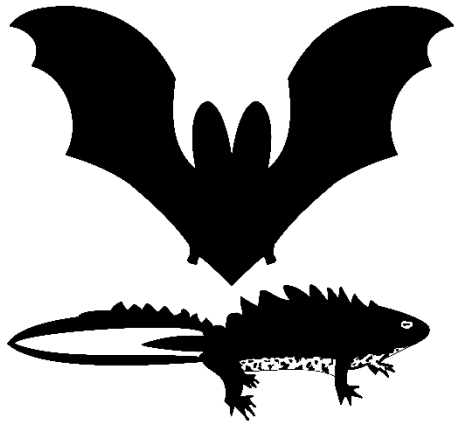




AEWC^{Ltd}

Animal Ecology & Wildlife Consultants

Biodiversity Net Gain Assessment

Merrion Farm

**Bines Green
Partridge Green
West Sussex
RH13 8EH**

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**25-085
November 2025**

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Summary

- AEWCLtd were commissioned by Batcheller Monkhouse on behalf of their client to undertake a Biodiversity Net Gain Assessment at Merrion Farm, Bines Green, West Sussex, RH13 8EH at grid reference TQ 18778 16691 to help inform the proposed development of the site.
- The estimated baseline and post-development biodiversity value of the habitats on the site is calculated using the Defra Statutory Biodiversity Metric Calculation Tool.
- The proposed development is for the construction of a milking barn. This will involve the loss of areas of ruderal/ephemeral and bare ground on the site.
- Ecological enhancements built into the development design include the planting of nine native trees along the grass verge to the west of the farmyard. In terms of the BNG metric, this is sufficient to offset the loss of the baseline habitats on the site. Trading rules have been satisfied.
- **The headline results indicate that there is an estimated net gain of 17.40% for habitat units.**
- A prescription for the planting, establishment, and long-term management of the new trees is provided in Section 7 of this report.

This report has been prepared by AEWCLimited, with all reasonable skill, care and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the 'Guidelines for Preliminary Ecological Appraisal' and 'Code of Professional Conduct' issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

1. Introduction

- 1.1 AEWCLtd were commissioned by Batcheller Monkhouse on behalf of their client to undertake a Biodiversity Net Gain Assessment at Merrion Farm, Bines Green, West Sussex to help inform the proposed development of the site.
- 1.2 The purpose of this report is to give an estimate of the BNG units that may be achieved under the current development proposals, where a BNG of +10% is not achieved suggestions for additional ecological enhancement are provided.

2. Background

- 2.1 A Protected Species Walkover Assessment was conducted by AEWCLtd at the site in November 2025, this included habitat mapping and condition assessment.
- 2.2 The proposed development site is located at Merrion Farm, Bines Green, Partridge Green, West Sussex at central grid reference TQ 18778 16691. The site is located in a rural part of West Sussex, south of the village of Partridge Green. The surrounding landscape largely comprises tree and hedge-lined agricultural land with some scattered residential properties and woodlands blocks in the wider landscape. See Figure 1.



FIGURE 1: SHOWING THE SITE LOCATION

- 2.3 The whole site including the access track is approximately 0.37ha, with the main development area being approximately 0.06ha. The main development area is within a farmyard and comprises bare ground, areas of ruderal vegetation, an unsealed hardstanding track, a verge of modified grassland, and a square of concrete supporting a silo. The full red line boundary encompasses a hardstanding access track that leads from the development area to the B2135 to the north. See Figure 2 and Photos 1 and 2.



FIGURE 2: AERIAL VIEW OF THE SITE SHOWING THE BOUNDARY (DEVELOPMENT AREA ONLY)



Photo 1: Site from the east.



Photo 2: Site from the west.

- 2.4 The proposed development involves the construction of a new milking barn measuring 24m x 12m. This will involve the removal of areas of bare ground and ruderal vegetation. It is proposed that nine new trees will be planted along the grass verge to the west. See Figure 3.

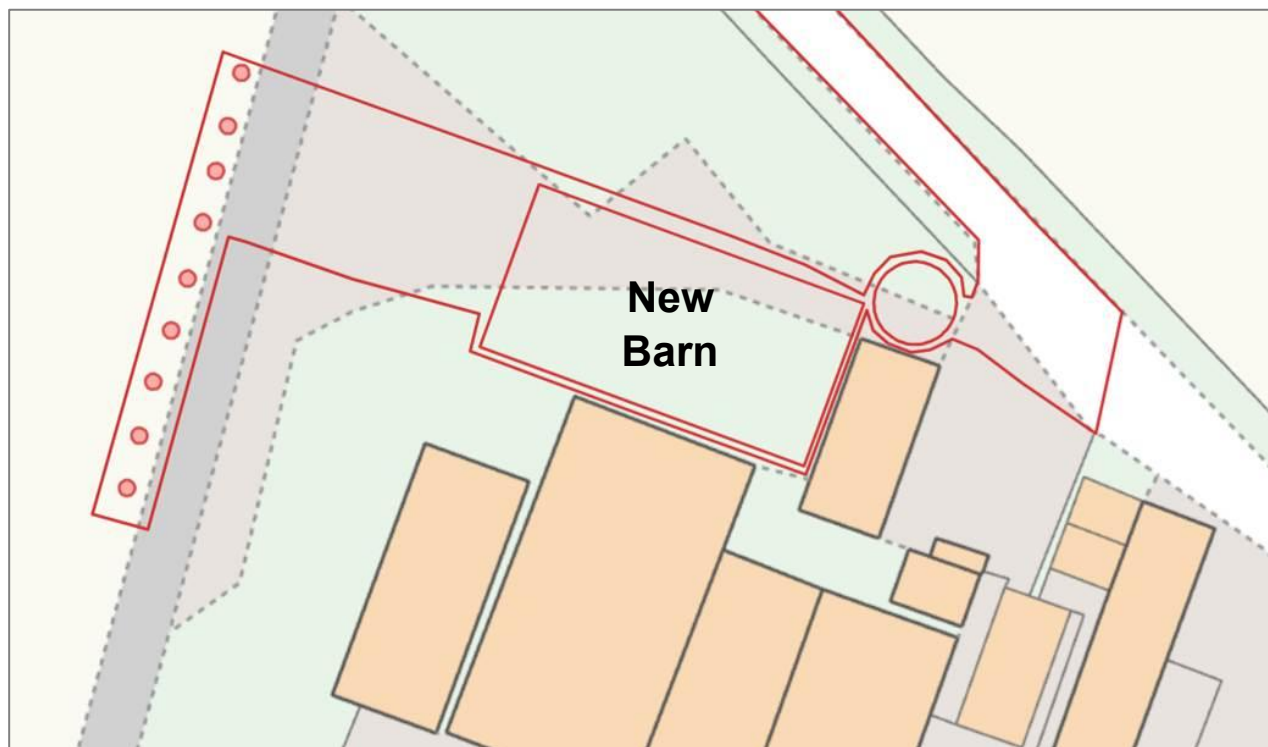


FIGURE 3: PROPOSED WORKS

3. Method and Constraints

- 3.1 The estimated baseline and post-development biodiversity value of the habitats on the site is calculated using the Defra Statutory Biodiversity Metric Calculation Tool. Habitat condition was assessed using the Statutory Biodiversity Metric – Technical Annex 1 Condition Assessment Sheets.
- 3.2 The following assumptions have been made and therefore associated constraints should be considered when looking at BNG unit values obtained:
- The potential for protected and notable species is not covered within the scope of this report;
 - Baseline habitats on-site are taken from those identified within the survey undertaken in November 2025;
 - Post-development habitats have been inferred from those given with the Proposed Site Layout as shown in Figure 3;
 - All areas and lengths are approximate;
 - Areas in hectares and length in km are both given to four decimal places, therefore rounding errors and occasional adjustments to values, to ensure consistency of total areas in baseline and post-development habitat size, are unavoidable;

- Habitat quality has been estimated in some instances (i.e. for post-development habitats); and
- The area of planted trees was estimated using small trees in the tree helper tool.

3.3 Given the above constraints the values for BNG obtained should be considered to be an **estimate** only.

3.4 Calculations may need to be adjusted in future should the BNG metrics or requirements be revised.

4. Habitat Data

4.1 The baseline and post-development habitats used for this assessment are illustrated in Figures 4 - 7.



FIGURE 4: BASELINE ON-SITE HABITATS (WHOLE SITE)



FIGURE 5: BASELINE ON-SITE HABITATS (DEVELOPMENT AREA ONLY)



FIGURE 6: POST-DEVELOPMENT ON-SITE HABITATS (WHOLE SITE)



FIGURE 7: POST-DEVELOPMENT ON-SITE HABITATS (DEVELOPMENT AREA ONLY)

5. Results

5.1 The headline results using the above habitats and calculations are given below (refer to the metric for full details).

Table 1: Headline estimated BNG values

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	0.03
	<i>Hedgerow units</i>	0.00
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	17.40%
	<i>Hedgerow units</i>	0.00%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

6. Conclusions & Recommendations

- 6.1 The development involves the loss of areas of ruderal/ephemeral and bare ground on the site.
- 6.2 Ecological enhancements built into the development design include the planting of nine native trees along the grass verge to the west of the farmyard. In terms of the BNG metric, this is sufficient to offset the loss of the baseline habitats on the site. Trading rules have been satisfied.
- 6.3 **The headline results indicate that there is an estimated net gain of 17.40% for habitat units.**

7. Habitat Creation and Management

Planting and Establishing Trees

- 7.1 Correct planting and aftercare are crucial to the long-term survival of the nine new trees. The new trees must be UK native species.
- 7.2 Bare-rooted trees should be planted between November and March, with the roots kept cool and moist before planting. Container trees can be planted throughout the year, but if planted in the summer they will need a lot more watering. Planting should not be carried out during periods of frost.
- 7.3 Prior to planting, vegetation must be cleared in a one-metre circle where the tree will be planted. Competition for water and nutrients can severely affect trees, particularly when young. This circle around the tree should therefore be kept clear of grass and weeds for at least three years after planting, through weed-suppressant matting, application of a thick mulch or regular weeding.
- 7.4 Where the soil structure is good, maidens can be notch-planted. For larger trees, and where soil structure needs to be improved, a hole of sufficient size to accommodate the roots without bending them is required.
- 7.5 Trees should be staked with a short stake of no more than 30cm above ground level. This will allow the tree to flex and strengthen the trunk and roots. When planting, the final soil level must be no higher than the root collar. The tree should be watered regularly and thoroughly for the first few weeks and during any dry spells for the next year.
- 7.6 Tree guards will be required to protect trees from wild animals, which eat the leaves and bark, and rub against the tree. Guards should be checked regularly as the trees grow and adjusted if they are causing the tree any damage.
- 7.7 Once trees are established, the sward can be allowed to grow up to the trunk and there should be no need to apply fertilisers. Guards should be maintained for at least 10 years.

- 7.8 Should the trees fail at any point in the next 30 years, they must be replaced.

BNG targets will be met providing the nine trees persist and are not subject to human activities that impact on their health, such as herbicide or aggressive pruning.

8. Wildlife Enhancements

Bats and Birds

- 8.1 To enhance the site for bats and birds known to be present within the local area it is recommended that one bat box and one bird box be installed within the ownership boundary. Boxes could be installed on existing trees, existing buildings, or integrated into the new barn.
- 8.2 Ideally bat boxes would be woodcrete or similar hard-wearing material (rather than the less durable wooden boxes) and should be installed at least 3m above the ground (where safe installation is possible), sheltered from strong winds and exposed to the sun for part of the day (usually south or south-west facing).
- 8.3 Example tree-mounted bat boxes are shown below: Schwegler 1FF bat box (below left, suitable for pipistrelle bats *Pipistrellus sp.*), and a Schwegler 2F bat box (below right, suitable for long-eared bats *Plecotus sp.*), or similar bat boxes.



- 8.4 Example integrated bat boxes are shown below: Integrate Eco Bat Box (below left), Habibat Bat box - Plain for rendering (below centre) and a Schwegler 1WI Summer and Winter bat box (below right) or similar bat boxes.



- 8.5 Tree-hung bird boxes should comprise a mix of traditional '32mm round-holed' (below left: which are suitable for tits, sparrows, redstarts and nuthatches) and open-fronted boxes (below right: these are suitable for pied wagtails, robins and wrens) and also ideally be woodcrete or similar hard wearing material (rather than the less durable traditional wooden boxes). Boxes should be installed with an aluminium nail or screw to prevent tree damage between 2m and 4m above ground for round-holed and low down, below 2m, well hidden in vegetation for open-fronted boxes and (unless shaded by buildings or trees) be facing north or east.



- 8.6 Integrated bird boxes should comprise swift bricks which are suitable for a range of species (below left), these should be installed at a minimum of 4m above the ground, north or east facing and with open flight access, or sparrow terraces (below centre) which should be installed in line with vegetation such as trees or hedge lines to allow the birds the use of jumping off points and be installed a minimum of 3m above the ground on a north or east elevation. Where suitable overhanging eaves are present house martin cups (below right) may also be suitable.



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