

Biodiversity Net Gain Assessment

Lagnersh House Holiday Site

Lower Bognor Road

West Sussex

PO20 1LW

NGR: SU 90211 00879



22nd May 2026

Sylvatica Ecology Ltd

<https://se-planning.com>

<i>Limitations and Liabilities</i>	3
1.0 INTRODUCTION	4
<i>Previous Surveys</i>	4
<i>Development Proposal</i>	4
<i>Site Description and Adjacent Habitat</i>	4
2.0 METHODOLOGY	5
<i>Good Practice Principles</i>	5
<i>Habitat Mapping, Condition Assessment and Baseline Calculation Methods</i>	7
<i>Successful Habitat Creation and Condition</i>	7
<i>Competencies</i>	7
3.0 RESULTS	8
<i>Baseline Conditions</i>	8
<i>Baseline Habitat Types and Condition Assessments</i>	8
<i>Invasive and Non-Native Species</i>	11
<i>Post Development Conditions</i>	11
4.0 NET GAIN SUMMARY & CONCLUSIONS	11
5.0 LONG TERM MANAGEMENT	12
6.0 REFERENCES	14
APPENDIX A: BASELINE HABITATS	15
APPENDIX B: HABITATS POST DEVELOPMENT	16
APPENDIX C: HEADLINE RESULTS OF NET GAIN ASSESSMENT	17

Limitations and Liabilities

Sylvatica Ecology Ltd retains the copyright of this report and its contents are for the sole use of the client (s). Copy of this document may only be undertaken in connection to the development works on of the property of Lagnersh House Holiday Site, Lower Bognor Road, West Sussex, PO20 1LW, NGR: SU 90211 00879, and only once outstanding fees have been paid in full. Reproduction of the whole, or any part of the document, without written consent from Sylvatica Ecology Ltd is forbidden. It is not permitted to share this document or any part of this document on any social media platform without permission to do so from Sylvatica Ecology Ltd. is forbidden.

It should be borne in mind that the behaviour of animals can be unpredictable and may not conform to standard patterns recorded in scientific literature. Therefore, this report cannot predict with absolute certainty that animal species will occur in apparently suitable locations or habitats, or that they will not occur in locations or habitats that appear unsuitable.

In order to minimise the likelihood of adverse effects on protected animal species over time, it is accepted good practice, in accordance with Natural England (NE) (formerly English Nature) guidance for ecological surveys to be repeated should works be deferred for over 12 - 18 months from the date of initial survey.

It is the duty of the landowner, developer and operations managers to act responsibly and to comply with current environmental legislation if protected species are suspected or found prior to, or during works.

The recommendations and information contained within this report are based on the information provided on the development works prior to the surveys being carried out. Should the development proposals change then the findings and recommendations contained within would potentially require revision.

The findings within this report do not constitute legal advice. Should this be required, then a suitably qualified professional practitioner should be contacted.

Author	Signed	Contact
Richard Law BSc (Hons) MRes CEnv MCIEEM FLS		

1.0 INTRODUCTION

- 1.1 This document presents the small sites biodiversity net gain (BNG) assessment relating to land at Lagnersh House Holiday Site, Lower Bognor Road, West Sussex, PO20 1LW, NGR: SU 90211 00879. This assessment aims to quantify the predicted change in ecological value of the site following the proposed development works to be carried out at this location.
- 1.2 BNG became effective in January 2024 (April 2024 for smaller sites) following the Environmental Act 2021, which states that a target of 10% net gain in biodiversity should be achieved, with biodiversity value being maximised on site whenever possible.
- 1.3 Should any changes to the design of the development be made then the BNG score and metric would need to be updated in-line with any such changes. The measures would be carried forward for a period of 30 years after planning permission has been granted and also during the construction phase.

Previous Surveys

- 1.4 Walkover surveys were undertaken on 24th June 2024, with an update survey carried out on the 10th May 2026, in accordance with BS 42020 and CIEEM Guidelines for Baseline Ecological Assessment, with habitats classified under the UK Habitat Classification System.

Development Proposal

- 1.5 A planning application is to be made regarding the sites use for camping. An area of hard standing will be created for static caravans, as well as a gravel access path and adjacent hedgerows.

Site Description and Adjacent Habitat

- 1.6 The site was located within a relatively rural location with surrounding fields comprising arable farming. There were small units of trees/ woodland scattered around the wider landscape, but these were not extensive in number or size. Bognor was 4.0km to the southeast, with Pagham 7.0km to the south. The Chichester Flood Relief Channel was 3.0km to the west, which, when previous inundation events are apparent, creates a large flood plan habitat to the west. The southern end of the site was demarcated by the main Bognor Road, with arable farmland to the east, north and west.

1.7 **Figure 1: Site Survey Location (Red Line Boundary)**



2.0 METHODOLOGY

Good Practice Principles

- 2.1 To calculate the ecological value of the pre and post development site, the Department for Environmental, Food & Rural Affairs (DEFRA) Small Sites Statutory Biodiversity Metric (4.0) was used, following best practice from DEFRA and Natural England. The completed statutory biodiversity metric is provided as a separate document and this report provides additional information on how the calculations have been undertaken.
- 2.2 Good practice guidance from the Chartered Institute for Ecology and Environmental Management (CIEEM) provides a framework that helps to improve the UK's biodiversity by contributing towards strategic principles to conserve and enhance nature while progressing with sustainable development. **Table 1** provides additional information on each of these principles and how the development has or can achieve these requirements.

2.3 **Table 1: Good Practice Principles and Discussion**

Good Practice Principle	Discussion
<i>1: Apply the Mitigation Hierarchy</i>	The habitats present within the works impact zone were grassland, species rich native hedgerow with ditch, bare ground, hard standing and a small ornamental vegetated garden. Measures have been taken to preserve and improve the habitats present.
<i>2: Avoid Losing Biodiversity that Cannot be Offset by Gains Elsewhere</i>	There were no irreplaceable habitats on site.
<i>3: Be Inclusive and Equitable</i>	Sylvatica Ecology has provided guidance on the preservation and improvement of biodiversity on site.
<i>4: Address Risks</i>	The statutory biodiversity metric also included inbuilt risk factors with contribute towards calculating overall biodiversity value.
<i>5: Make a Measurable Net Gain Contribution</i>	The design of the scheme will create an overall gain in Biodiversity and Hedgerow scores.
<i>6: Achieve the Best Outcomes for Biodiversity</i>	The landscape design will incorporate ecological enhancement measures to support local species.
<i>7: Be Additional</i>	The proposed plans will also provide enhancements that are not included within the BNG assessment such as use of bird and bat boxes.
<i>8: Create a Net Gain Legacy</i>	The site is due to make a significant gain in Biodiversity.
<i>9: Optimise Sustainability</i>	The planting of new rural trees and native species rich hedgerow will contribute to biodiversity improving over the 30-year management time frame.
<i>10: Be Transparent</i>	Advice on enhancing the ecological value of the site was provided within the preliminary ecological assessment.

Habitat Mapping, Condition Assessment and Baseline Calculation Methods

- 2.4 Habitat mapping was carried out QGIS V 3.22.14-Bailowieza for MacOS 14.1. Habitat areas were calculated using this QGIS software.
- 2.5 The tree helper within the statutory metric was used to determine the area of the trees based on their size at diameter at breast height (dbh). Trees smaller than 7.5cm dbh were not included in the calculations.
- 2.6 The site survey data used for the calculations was 10th of May 2026.

Successful Habitat Creation and Condition

- 2.7 The time that will elapse between site habitat clearance and habitat re-creation is, as yet, unknown. This time is recorded within the Statutory Biodiversity Metric as a temporal multiplier called 'delay in starting habitat', which is added to each post development habitat type, and increases 'time to target condition'. As a general pattern, the longer the time elapsed between habitat clearance and creation, the longer it takes to achieve the targeted habitat condition, which can lower the metric score.
- 2.8 Currently it is assumed that a 0-year delay has currently been used for each post-development habitat type. The target habitat conditions for the created habitats post development are normally given as moderate/ good.

Competencies

- 2.9 The survey work and reporting has been led by Richard Law BSc MRes CEnv MCIEEM FLS. Richard has been undertaking ecological survey work within the last 18 years on many different locations throughout the United Kingdom, for a variety of protected species, including bats (Class 2 2015-12576), reptiles, amphibians including great crested newt (*Triturus cristatus*) (Class 1 2016-20290) and terrestrial mammals including dormice (*Muscardinus avellanarius*) (Class 1 2015-13188) and birds including barn owl (*Tyto alba*) licence (CL29/00236). Richard is also qualified in track and sign and trailing *via* an international system of assessment (www.trackercertification.com).

3.0 RESULTS

- 3.1 This section presents the findings of the biodiversity net gain calculation, the units present onsite prior to development (baseline), the units present post development and the total biodiversity net gain change in units as a percentage calculation.

Baseline Conditions

3.2 **Table 2: Onsite Baseline Conditions**

Onsite Baseline	Habitat Units	3.69
	Hedgerow Units	16.70

- 3.3 The size and condition of habitats present onsite at the time of the survey gives a total of 3.69 habitat units and 16.70 hedgerow units.
- 3.4 Pagham Harbour Special Protection Area (SPA) and Ramsar Site lies approximately 3.8 km to the south-west of the site, between Bognor Regis and Chichester on the West Sussex coast. The site comprises a small harbour and associated coastal and intertidal habitats that support an abundance of wildlife. The SPA is designated for four qualifying features: overwintering dark-bellied brent goose *Branta bernicla bernicla*, overwintering ruff *Calidris pugnax*, breeding common tern *Sterna hirundo* and breeding little tern *Sternula albifrons*. The Ramsar designation reflects the international importance of the intertidal mudflats, saltmarsh, lagoon and coastal grazing marsh for waterfowl and waders. There were not any nationally designated statutory sites within 2.0km of the search area.

Baseline Habitat Types and Condition Assessments

- 3.5 **Native Species Rich Hedgerow with Bank or Ditch (0.928km length):** The site boundary to the west, north and east was entirely demarcated by a native species rich hedgerow, with some semi-mature ash (*Fraxinus excelsior*), pedunculate oak (*Quercus robur*) and goat willow (*Salix caprea*) trees present within the hedge and a ditch present along the eastern boundary of the site. The hedge species present comprised: hawthorn (*Crataegus monogyna*), field maple (*Acer campestre*), hazel (*Corylus avellana*), elder (*Sambucus nigra*), bramble (*Rubus fruticosus*) and blackthorn (*Prunus spinosa*). Herbaceous ground flora was present within the foot of the hedgerow, the species comprising: nettle (*Urtica dioica*), creeping buttercup (*Ranunculus repens*), Yorkshire fog (*Holcus lanatus*), hogweed (*Heracleum sphondylium*), white clover (*Trifolium repens*) and creeping thistle (*Cirsium arvense*). The hedge was approximately 1.75m in height and 3.0m wide. The total length of this feature was approximately 0.928km.

- 3.6 **Criterion 1 — Canopy continuity:** The hedge canopy is continuous, with gaps comprising no more than 10% of total length and no single canopy gap greater than 5m. The hedge entirely demarcates the western, northern and eastern site boundaries with no significant breaks observed during the walkover. PASS.
- 3.7 **Criterion 2 — Undisturbed perennial herbaceous strip:** A perennial herbaceous strip of ≥1m width is present for ≥90% of the total hedgerow length. A continuous strip of nettle, creeping buttercup, Yorkshire fog, hogweed, white clover and creeping thistle was recorded at the foot of the hedge throughout. PASS.
- 3.8 **Criterion 3 — Height:** Average height ≥1m (≥2m where trees are present in the hedgerow). Measured average hedge height is 1.75m, with the semi-mature ash, pedunculate oak and goat willow standards rising from within the hedge line well exceeding 2m at canopy level. PASS.
- 3.9 **Criterion 4 — Width:** Average width ≥1.5m at the widest point. Measured width is 3.0m. PASS.
- 3.10 **Criterion 5 — Native woody composition:** ≥90% native woody cover (≤10% non-native). Recorded woody composition is 100% native (hawthorn, field maple, hazel, elder, bramble and blackthorn within the hedge, with ash, pedunculate oak and goat willow as standards). PASS.
- 3.11 **Criterion 6 — Invasive non-native species:** Free of invasive non-native species (Schedule 9 Wildlife and Countryside Act 1981 as amended). No invasive non-native species recorded within the hedge or in the associated ground flora. PASS.
- 3.12 **Criterion 7 — Damaged or dead woody growth:** No more than 10% of the canopy comprising damaged or dead woody growth (from pests, disease, wind or management). No significant damage, dieback or ash dieback symptoms recorded during the walkover; only minor and routine senescence. PASS.
- 3.13 **Result:** The hedgerow passes all 7 of the 7 condition criteria. The hedgerow condition is therefore assessed as GOOD under the Statutory Biodiversity Metric. The seven-species woody composition, the retained mature standard trees, the intact perennial herbaceous strip at the foot of the hedge and the associated ditch on the eastern boundary together place this hedgerow at the higher end of the Good category and as a Habitat of Principal Importance for the purposes of Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.
- 3.14 **Modified Grassland (1.6389ha):** The majority of the survey area consisted of a single monoculture grass species comprising of perennial rye grass (*Lolium perenne*) and with very

occasional sheep sorrel (*Rumex acetosella*) and white clover. This area of habitat was subject to regular management to keep this short and suitable for caravan and tent pitches.

- 3.15 The were smaller sections at the southern aspect of the site survey area, all of which were well managed, cut very short and with a very low species diversity as that found in the larger area of grassland.
- 3.16 **Criterion 1 — Sward structural variation:** The sward shows variation in height, with at least one third of the area supporting structural diversity in the form of tussocks, scrubby patches or uncut/ungrazed areas. The sward is kept uniformly short by regular cutting for caravan and tent pitches across the entire 1.6389ha, with no tussocks, ungrazed margins or scrubby patches present. FAIL.
- 3.17 **Criterion 2 — Native forb diversity:** At least five native forb species are present per square metre. Only two forb species were recorded across the survey area (sheep sorrel and white clover), both at very low frequency. The threshold of five forbs per square metre is not met. FAIL.
- 3.18 **Criterion 3 — Negative indicators:** No more than 5% cover of bare ground and no abundant cover of agriculturally-improved grass species. The sward is dominated by perennial rye grass — a diagnostic 'agricultural improver' species — across effectively 100% of the habitat area, well in excess of the negative-indicator threshold. FAIL.
- 3.19 **Result:** The grassland passes none of the three condition criteria for Modified Grassland under the Statutory Biodiversity Metric. The grassland is therefore assessed as being in POOR condition. The low species richness, lack of structural variation in the sward, and dominance of perennial rye grass together reflect a highly modified, amenity-managed sward typical of caravan and campsite pitches and offering very limited intrinsic biodiversity value.
- 3.20 **Ruderal Habitat (0.0784ha):** There was some areas of ruderal habitat present within the site survey area, mainly concentrated close to the more permanent structures. There was a large central area of ruderal habitat that was growing on a mound of earth, and there were smaller areas present around the periphery of the southern area of the site. The species present comprised a mixture of bracken (*Pteridium aquilinum*), nettle, rosebay willow herb (*Chamaenerion angustifolium*), spear thistle (*C. vulgare*), hog weed and sheep sorrel.
- 3.21 **Buildings (0.0261ha):** There were a number of buildings present on site. These comprised of a mixture of static caravans with associated ancillary buildings that were in use as toilet, cleaning and utility units. There was a small stable unit present, situated centrally close to the eastern boundary, which was constructed out of single layered wooden cladding within bitumen felt

roofing. The ancillary buildings were all single layered and constructed from wooden cladding, which did not present any cavities, gaps and cracks. The static caravans were all prefabricated in construction and were all in very good condition.

- 3.22 **Gravel Driveway (0.1244ha), Play Area (0.0067ha) and Hard Standing (0.0143ha):** There were areas of concrete hard-standing present, where the static caravans were located. The main entrance and access to the wider site was provide by a gravel driveway and there was a small soft play area situated centrally within the large area of modified grassland. These were all of negligible ecological value.

- 3.23 **Ornamental Planting (Vegetated Garden) (0.0050ha):** There was some planting of garden plant species for ornamental purposes present within the site boundary. The species comprised of a mixture of non-native species available at garden centres. Some planting of cherry laurel (*Prunus laurocerasus*) was apparent.

Invasive and Non-Native Species

- 3.24 Cherry laurel was present within the ornamental planting areas. There was not any evidence of invasive species observed within the site boundary but stands of invasive plant species could potentially be obscured within the area of ruderal vegetation.

Post Development Conditions

- 3.25 **Table 3: Onsite Post Development Conditions**

Post Development	Habitat Units	4.70
	Hedgerow Units	20.46

- 3.26 The post development habitat units is 4.70, with post development hedgerow units now at 20.96. Planting of six native species medium sized trees and the installation of 0.48km of native species hedgerow will further add to the increased biodiversity value of the site, post development.

4.0 NET GAIN SUMMARY & CONCLUSIONS

- 4.1 At the post development stage taking into account the retained and newly created habitat, it is anticipated that there will be 7.93 habitat units and 20.46 hedgerow units following implementation of the scheme. **Table 4** below is a summary of the change in habitat and hedgerow units present on site. Full headline results are also shown in **Appendix C**.

4.2 **Table 4: Total Net Unit Change and Percentage Change**

Total Net % Change	Habitat Units	1.01 (+27.34%)
	Hedgerow Units	3.76 (+ 22.49%)

- 4.3 The post development habitat creation within the design of the scheme has resulted in a gain of 1.01 habitat units which give a biodiversity net gain of 27.34% and a gain of 3.76 hedgerow units.

5.0 LONG TERM MANAGEMENT

- 5.1 A Habitat Management and Monitoring Plan (HMMP) will be prepared and secured by planning condition or Section 106 agreement to ensure the long-term viability of the retained and created habitats over the statutory 30-year management period. The succinct requirements for each habitat type are set out below; full detail (target conditions, monitoring frequency and remedial action triggers) will be presented in the HMMP.
- 5.2 Retained native species-rich hedgerow with ditch (0.928km). The hedge will be maintained at its current height of approximately 1.75m and width of 3.0m through rotational trimming on a three-year cycle, with no more than one third of the total length trimmed in any single year. Trimming will be carried out between September and the end of February to avoid the bird nesting season. Existing standard trees (ash, pedunculate oak, goat willow) will be retained and inspected at five-yearly intervals; any losses will be replaced with locally-sourced native standards. The 1m undisturbed herbaceous strip at the base of the hedge will be maintained free of cultivation, herbicide and fertiliser inputs. The associated ditch on the eastern boundary will be kept clear of obstructions by hand and any siltation managed on a five-year cycle.
- 5.3 New native species-rich hedgerow planting (0.48km). New hedge planting will use a Schedule 3 native species mix (hawthorn, blackthorn, hazel, field maple, dog rose, elder, with occasional holly), planted at 5 whips per metre in a double-staggered row in the dormant season (November to March). Whips will be protected with biodegradable spirals or guards and mulched. Aftercare will include watering through the first two growing seasons, replacement of any losses in the first five years to maintain the 5 whips/m density, and annual checks for damage. Once established, the new hedge will be managed on the same rotational trimming

regime as the retained hedgerow (5.2 above) and with the same undisturbed herbaceous strip at the base.

- 5.4 New native standard tree planting (six trees). Trees will be planted as feathered standards (8–10cm girth) in the dormant season, double-staked and tied with rubber tree ties, with mulch mats applied. Watering and weed control will be carried out through the first three growing seasons. Tree ties will be checked and adjusted annually. Any losses will be replaced on a like-for-like basis within the next available planting season for a minimum period of five years.
- 5.5 Retained modified grassland and ornamental planting. The retained amenity grassland will continue to be cut for the operational caravan and tent pitch use; opportunities to introduce 'wild corners' and reduced-cut margins of at least 1m along the hedge bases will be incorporated to provide structural diversity and forb enrichment. Ornamental planting will be progressively replaced with native or wildlife-friendly species during routine renewal. Any cherry laurel within the existing ornamental planting will be removed and disposed of in accordance with Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).
- 5.6 Invasive species. The site will be monitored annually for the arrival of invasive non-native species, with particular attention paid to the area of ruderal vegetation where stands could potentially be obscured. Any invasive species identified will be controlled in accordance with current best practice and disposed of as controlled waste where required.
- 5.7 Monitoring and reporting. Habitat condition will be re-assessed against the Statutory Biodiversity Metric condition criteria in years 1, 2, 3, 5, 10, 15, 20, 25 and 30 following implementation. A short annual management note will be kept by the landowner; formal condition monitoring reports will be submitted to the Local Planning Authority at the monitoring years listed above. Where habitats are not on trajectory to meet the target condition, remedial action (e.g. additional planting, adjusted cutting regime, scrub control) will be implemented within the next available growing season.

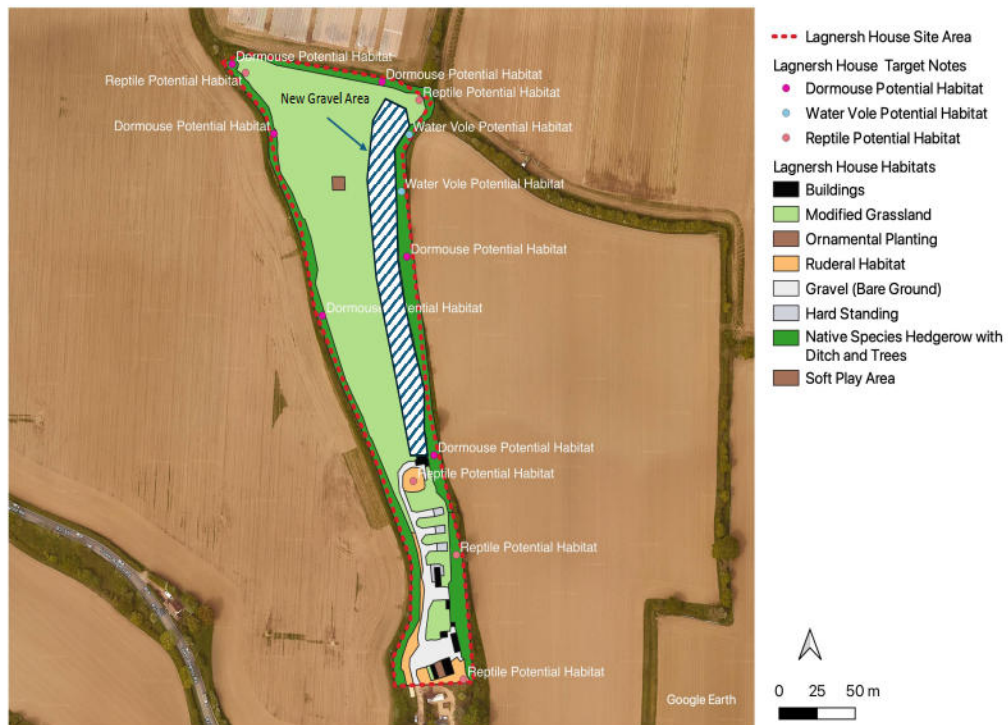
6.0 REFERENCES

CIEEM (2016) Biodiversity Net Gain – Good Practice Principles for Development

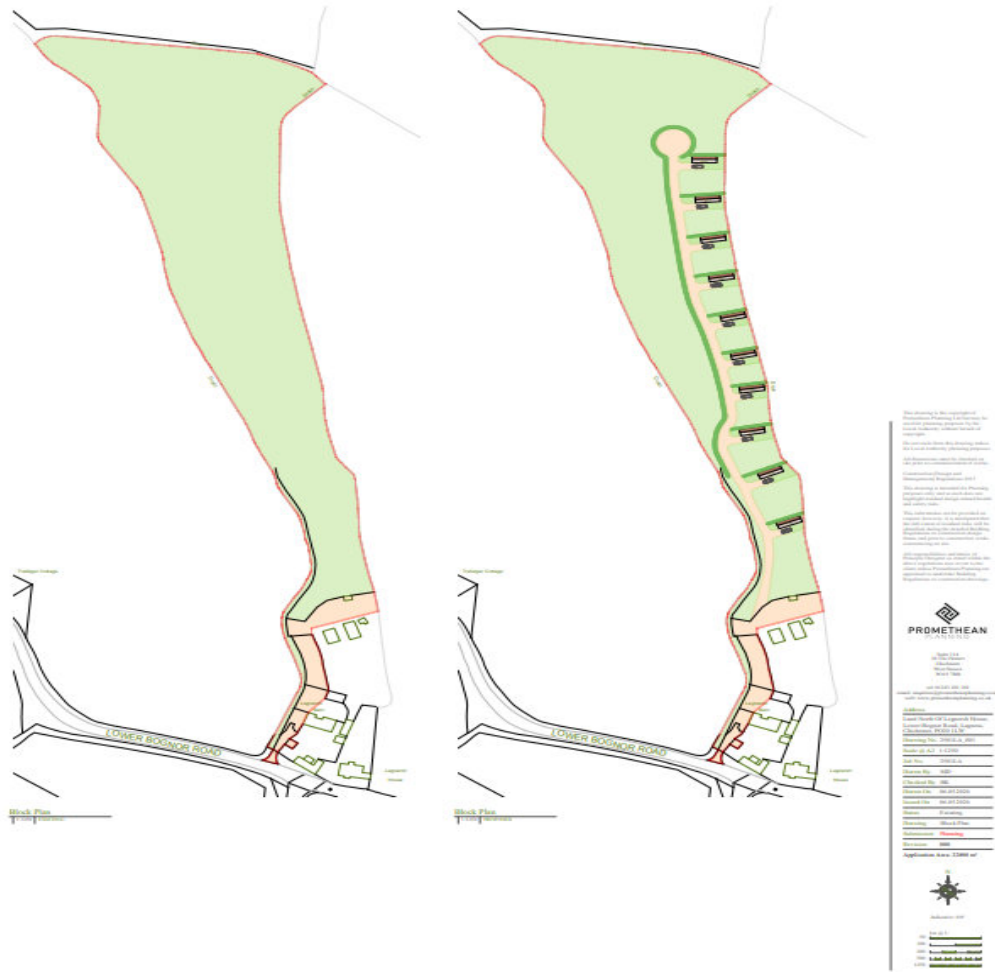
DEFRA (2023) Statutory Biodiversity Metric Draft User Guide

Natural England (2023) The Statutory Biodiversity Metric and Small Sites Metric – QGIS Template and QGIS Import Tool User

APPENDIX A: BASELINE HABITATS



APPENDIX B: HABITATS POST DEVELOPMENT



APPENDIX C: HEADLINE RESULTS OF NET GAIN ASSESSMENT

Lagnersh House Holiday Park

Headline Results

Scroll down for final results ↴

Return to results menu

On-site baseline		Area habitat units	3.69	
		Hedgerow units	16.70	
		Watercourse units	0.00	
On-site post-intervention		Area habitat units	4.70	
(including habitat retention, creation & enhancement)		Hedgerow units	20.46	
		Watercourse units	0.00	
On-site net change		Area habitat units	1.01	27.34%
(units & percentage)		Hedgerow units	3.76	22.49%
		Watercourse units	0.00	0.00%
Off-site baseline		Area habitat units	0.00	
		Hedgerow units	0.00	
		Watercourse units	0.00	
Off-site post-intervention		Area habitat units	0.00	
(including habitat retention, creation & enhancement)		Hedgerow units	0.00	
		Watercourse units	0.00	
Off-site net change		Area habitat units	0.00	0.00%
(units & percentage)		Hedgerow units	0.00	0.00%
		Watercourse units	0.00	0.00%
Combined net unit change		Area habitat units	1.01	
(including all on-site & off-site habitat retention, creation & enhancement)		Hedgerow units	3.76	
		Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions		Area habitat units	0.00	
		Hedgerow units	0.00	
		Watercourse units	0.00	
FINAL RESULTS				
Total net unit change		Area habitat units	1.01	
(including all on-site & off-site habitat retention, creation & enhancement)		Hedgerow units	3.76	
		Watercourse units	0.00	
Total net % change		Area habitat units	27.34%	
(including all on-site & off-site habitat retention, creation & enhancement)		Hedgerow units	22.49%	
		Watercourse units	0.00%	
Trading rules satisfied?		Yes ✓		
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	3.69	4.06	0.00
Hedgerow units	10.00%	16.70	18.37	0.00
Watercourse units	10.00%	0.00	0.00	0.00
No additional area habitat units required to meet target ✓				
No additional hedgerow units required to meet target ✓				
No additional watercourse units required to meet target ✓				