

Technical Note

Project:	Land to the north of Whychurch Farm, Malmesbury
Title:	Updated Biodiversity Net Gain Assessment and Ecological Constraints Plan
Date:	03 February 2026
Client:	Gleeson Land
Reference:	260203_P1084_BNG Metric TN: February 2026
Prepared:	Lauren Stothert BSc MCIEEM
Approved:	Matt Jones MCIEEM CEnv MSc BSc

1 Introduction

- 1.1 This Technical Note has been prepared by EAD Ecology on behalf of Gleeson Land in relation to the proposed residential development at Land to the north of Whychurch Farm, Malmesbury (Planning reference: PL/2025/02257); hereafter referenced as 'the Site', refer to Figures 1 and 2.
- 1.2 Jessica Cracknell (Wiltshire Council Ecologist) provided a formal planning-consultation response (12/08/2025) to the Outline Planning Application submitted by Gleeson Land (Planning reference: PL/2025/02257) requesting further information. This Technical Note addresses matters raised in this response (refer to Table 1) and provides an updated Biodiversity Net Gain (BNG) assessment to reflect minor revisions to the Illustrative Masterplan and Land Use Parameter Plan for the Site (refer to Sections 2 and 3).

2 Previous Biodiversity Net Gain assessment

- 2.1 An initial BNG Assessment was undertaken using the Defra Statutory Biodiversity Metric calculation tool (Defra 2024a) with reference to supporting documents (Defra 2025a, 2025b & 2025c). The approach to the Assessment was set out in the Ecological Impact Assessment (EcIA) Report (EAD Ecology, 2025) submitted with the Outline Planning Application. The previous BNG Assessment identified a net gain of +10.51 Habitat Units (+40.38%), a net gain of +4.35 Hedgerow Units (+28.77%) and a net gain of +0.08 Watercourse Units (+15.01%).

3 Update Biodiversity Net Gain assessment

- 3.1 Following minor revisions to the Illustrative Masterplan and Land Use Parameter Plan for the Site, a revised BNG assessment has been undertaken using the Defra Statutory Biodiversity Metric calculation tool (Defra 2025a) with reference to supporting documents (Defra 2025b & 2025c), to quantify the net change in habitats, hedgerows and watercourses.

Pre-development position

- 3.2 The approach to the assessment of pre-development (baseline) position for the Site is as set out in Appendix 14 of the EcIA Report (EAD Ecology, 2025) submitted with the Outline Planning Application. Measurements of both pre-development (and post-development) habitats were undertaken with QGIS using the Biodiversity Metric QGIS Import Tool, and then incorporated into the Metric using the DEFRA Statutory Metric GIS Import Tool (Natural England, 2023). Areas for individual trees were calculated in accordance with guidance (Defra, 2025b), using the integrated Statutory Metric Tree Helper.

- 3.3 A Biodiversity Statement was detailed in Section 5.4 of the EclA Report. Details relating to relevant date, irreplaceable habitats and degradation remain unchanged. No changes have been made to the type, condition or strategic significance of the baseline habitats, hedgerows or watercourses. However, the previous assessment used a Site red line boundary which was georeferenced using a PDF plan; the updated assessment was undertaken using a CAD file version of this red line boundary for greater accuracy, which has resulted in a very minor reduction in the Site baseline values for habitats (-0.13 Habitat Units) and hedgerows (-0.66 Hedgerow Units). This is not considered to be a significant constraint or change to the assessment. There was no change to the watercourse position. The baseline habitats, hedgerows and watercourses are shown in Figure 4.

Indicative onsite post-development position

- 3.4 In line with Statutory BNG Guidance (Defra 2025b), the assessment has been undertaken with reference to the Biodiversity Metric principles (Defra 2025b). As the application is at outline stage, the calculations were based on:
- Land Use Parameters Plan (Thrive, 2026; ref: GLEE240917 LUPP.01 Rev: D; Figure 2), with reference to the Illustrative Masterplan (Thrive, 2026: ref: GLEE240917 IMP.02 Rev: E; Figure 1).
 - Softworks plans submitted with a separate Reserved Matters Application for the 'Phase 3' development area (Planning reference: PL/2023/08687); and
- 3.5 Further assessment would be undertaken to assess detailed designs as part of the Biodiversity Gain Plan, which would be submitted to discharge the Statutory BNG Condition.
- 3.6 Determination of expected post-development onsite habitat, hedgerow and watercourse conditions are based on the relevant habitat condition criteria in the Statutory Metric (Defra 2024c). The interventions proposed to achieve the conditions specified in the Metric are detailed in Appendix 14 of the EclA Report (EAD Ecology, 2025) submitted with the Outline Planning Application. Post-development habitats are shown in Figure 5.

Strategic Significance / Delivery

- 3.7 The strategic significance of the post-development (and pre-development) habitats applied to the Metric have been assigned in accordance with the Statutory Biodiversity Metric guidance (Natural England 2025b), with reference to site-specific information. These are as set out in Appendix 14 of the EclA Report (EAD Ecology, 2025) submitted with the Outline Planning Application.

Assumptions

- 3.8 The following assumptions were made to inform the BNG assessment:
- Residential parcels were assessed as developed land; sealed surface and vegetated gardens (70:30 split; in the absence of detail).
 - The 'hatched zones' identified on the Land Use Parameter Plan were assessed as 10% woodland planting (other broadleaved woodland), 30% amenity grassland (modified grassland) and 60% wildflower grassland (other neutral grassland).
 - The 'informal open space' areas identified on the Land Use Parameter Plan assessed as 30% amenity grassland (modified grassland), 10% play area (artificial unsealed; unvegetated surface), 20% native scrub planting (mixed scrub) and 40% wildflower grassland (other neutral grassland).
 - Appropriate Site tests, such as soil analyses, would be undertaken to confirm the feasibility of proposed habitat creation/enhancement measures.

Results

- 3.9 The updated Biodiversity Net Gain Assessment has confirmed that the proposed development layout would have potential to deliver a net gain of +10.46 'Habitat Units' (+40.41%), +5.32 'Hedgerow Units' (+35.28%) and +0.08 'Watercourse Units' (+15.01%); refer to Table 1. The updated Statutory Metric has been submitted separately to Wiltshire Council alongside with this Technical Note.
- 3.10 All 'Trading rule' requirements specified in the Statutory Metric would be met for all components of the Metric. As no habitat creation onsite is required for other purposes (e.g., protected-species mitigation planting), all habitat and hedgerow units delivered from onsite post-intervention creation would contribute to an overall biodiversity net gain.

Table 1: BNG Metric Summary¹

Onsite baseline pre-development	Habitat units	25.89
	Hedgerow units	15.08
	Watercourse units	0.53
Onsite post-development (Habitat retention, creation & enhancement)	Habitat units	36.36
	Hedgerow units	20.40
	Watercourse units	0.61
Total net unit change (Habitat retention, creation & enhancement)	Habitat units	10.46
	Hedgerow units	5.32
	Watercourse units	0.08
Onsite net % change (Habitat retention, creation & enhancement)	Habitat units	40.41 %
	Hedgerow units	35.28 %
	Watercourse units	15.01 %

¹ Headline figures reflect metric outputs which include built in rounding to two decimal places.

4 References

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland – Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management.

Defra (2025a) The Statutory Biodiversity Metric Auditing and accounting for biodiversity calculation tool. Version 1.0.4; July 2025.

Defra (2025b) The Statutory Biodiversity Metric User Guide. July 2025.

Defra (2025c) The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology. January 2025.

EAD Ecology (2021) Ecological Impact Assessment; Land North of Whychurch Farm, Malmesbury. Report for Gleeson Land.

EAD Ecology (2025) Ecological Impact Assessment; Land North of Whychurch Farm, Malmesbury. Report for Gleeson Land.

UKHab Ltd (2023) UK Habitat Classification Version 2.0 (at <https://www.ukhab.org>).

Wiltshire Council and Natural England (2015) Bat Special Areas of Conservation (SAC) Planning Guidance for Wiltshire. September 2015.

Table 1: Responses to Wiltshire Council formal planning-consultation response (12/08/2025) Further Information requests

Wiltshire Council Further Information request	Response
Ecological Parameters Plan (EPP)	
<i>“Submitted Ecological Constraints and Opportunities Plan must be amended to include wildlife corridors and buffers surrounding protected and retained habitats.”</i>	An updated Ecological Constraints and Opportunities Plan (ECOP; refer to Figure 3) has been prepared to align with the Illustrative Masterplan (Thrive, 2026: ref: GLEE240917 IMP.02 Rev: E). This shows ‘Ecological Corridors’ and provides detail of distances from retained habitats to the development footprint.
<i>“Whilst the hedgerows are largely retained dark buffers are not specified (m) on the plans or reports therefore the application does not demonstrate that they will be adequately buffered from the development to ensure functionality will be maintained. To ensure ecological functionality for foraging and commuting bats is retained it is expected that an undeveloped continuous dark corridor measuring at least 10m wide is provided along key bat habitat.”</i>	The development layout has been designed such that hedgerows within the Site will be buffered and enhanced as far as possible. As illustrated on the ECOP (Figure 3), the majority of hedgerows will have buffers of at least 5m from the development footprint, with many of the Site boundary hedgerows having undeveloped continuous corridors of significantly in excess of 10m. As set out in Paragraph 4.2.9 of the EclA Report (EAD Ecology, 2025), <i>the detailed lighting design for the development would ensure that lighting impacts on bats were minimised. The design would seek to follow BCT/ILP guidance (2018) recommendations to prevent light spill onto new and retained habitats. Lighting would be designed to direct light away from Site boundaries and new and retained hedgerows. Lighting along roads and footpaths, where required, would be kept to the minimum required for security and public health and safety, and avoided as far as possible within the public open space.</i> Paragraph 4.2.11 goes on to state that <i>the final lighting design would be reviewed by a suitably qualified ecologist and would be subject to approval by Wiltshire Council, for example through an appropriate Planning Condition.</i>
<i>“The EPP must include:</i> <i>2. Specify the minimum distance from each feature to the footprint of development e.g. to curtilage of properties, car parks, roads.</i> <i>3. Specify the buffer distance from light sensitive ecological features where the increase in lux levels will be zero or, if lux contours have been modelled, show contour lines for 1, 0.5 or 0.1 lux depending on the sensitivity of ecological features</i>	Response to point 2: The updated ECOP (Figure 3) provides detail of distances from retained habitats to the development footprint. Response to point 3: The provision of minimum 10m width buffers (in excess of 20m in many locations) along the western and southern boundary hedgerows (refer to Figure 3) would provide north-south and east-west corridors through the Site where it can be assumed that the increase in light levels would be minimal. As set out above, the final lighting design, which would include lux contour plans, would be reviewed by a suitably qualified ecologist and would be subject to approval by Wiltshire Council, for example through an appropriate Planning Condition. Given that the Planning Application is Outline at this stage, and the location of the site outside of any core areas or consultation zones for SACs that are designated for bat populations (Wiltshire Council & Natural England 2015), this is considered to be sufficient.

Table 1: Responses to Wiltshire Council formal planning-consultation response (12/08/2025) Further Information requests

Wiltshire Council Further Information request	Response
4. <i>Identify where new habitats will be created on site, include minimum area in hectares or length in metres and habitat type</i> 5. <i>Identify areas where habitat enhancement will be undertaken, include minimum area in hectares or length in metres and habitat type, e.g. defunct hedgerow to be grubbed up and replanted."</i>	Response to points 4 & 5: No detailed planting plans have been provided with the Outline Planning Application. The BNG assessment provides details of the areas and widths of new habitats to be created onsite on the basis of the Land Use Parameters Plan (Thrive, 2026; ref: GLEE240917 LUPP.01 Rev: D; Figure 2), with reference to the Illustrative Masterplan (Thrive, 2026: ref: GLEE240917 IMP.02 Rev: E; Figure 1) and Softworks plans submitted with a separate Reserved Matters Application for the 'Phase 3' development area (Planning reference: PL/2023/08687). The assumptions made to inform the BNG assessment are set out in Paragraph 3.8 and are shown on the Biodiversity Net Gain Assessment: Post-intervention Plan (refer to Figure 5); these demonstrate that the proposed development layout would have potential to deliver a net gain. Further assessment would be undertaken to assess detailed designs as part of the Biodiversity Gain Plan, which would be submitted to discharge the Statutory BNG Condition, at which stage final areas/lengths of new habitats can be determined.
Enhancements and Mitigation	
<i>Enhancement measures suggested in ecological impact assessment to be shown on site drawings/plans including bat and bird box locations.</i>	As requested, the updated ECOP (refer to Figure 3) now shows the illustrative locations of bat and bird boxes; these locations will be confirmed once detailed plans and house types are produced at the Reserved Matters stage. As set out in Paragraph 4.1.11 of the EcIA Report (EAD Ecology, 2025), Schwegler Type 1A swift boxes (or similar approved) would be incorporated into new buildings within the Site, at a minimum ratio of one box per dwelling, equating to a minimum of 149 boxes. Boxes would be integrated into the walls of new buildings at a minimum height of 4m; the precise locations of boxes would be detailed in the Construction Ecological Management Plan (CECoMP), which could be secured via a planning condition. As set out in Paragraph 4.1.16 of the EcIA Report (EAD Ecology, 2025), 1FR Schwegler bat tubes (or similar approved) would be incorporated into new buildings within the Site, at a minimum ratio of one per two dwellings, equating to a minimum of 75 tubes. Boxes would be integrated into the building walls at a minimum height of 3m, close to eaves, avoiding north facing elevations with limited fenestration and in proximity to green infrastructure. The number, specifications and exact locations would be included the CECoMP.

Figure 1: Illustrative Masterplan



Romsey T: 01794 367703
Portishead T: 01275 407000
London T: 01794 367703

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Rev	Description
A	Issued for planning
B	Boundary updated
C	Layout updated
D	Addition of 3m shared cycleway through site
E	Addition of acoustic fence to eastern boundary

Date	Au	Ch
24.02.25	NJ/TM	NJ
04.03.25	LC	NJ
20.11.25	LC	TM
16.01.26	TM	RP
28.01.26	TM	RP

Project Land north of Whychurch Farm and west of Crudwell Road
Drawing Illustrative Masterplan

Client	Gleeson Strategic Land	Date	31.01.25
Job no.	GLEE240917	Rev.	E
Dwg no.	IMP.02	Scale	1:1250@A2
Author	NJ/TM	Checked	NJ
Status	PLANNING	Office	Portishead
Client ref.	-		



Figure 2: Land Use Parameter Plan



Site Boundary (12.48 Ha)

Ownership Line

Site Access

Developable Area

Play Space

Informal open space (including amenity green space, natural and semi-natural green space, existing tree planting, allotments, drainage and attenuation, tree and structure planting, ecological enhancements, drainage infrastructure, play spaces and natural play, to be resolved in Reserved Matters application).

Hatched zone area to include between 5% and 10% cover of woodland planting, to be fragmented and located to aid mitigation of the visual impact to the grade II listed Whychurch Farmhouse and Outbuilding. (Woodland shown based on current illustrative masterplan, to be resolved in Reserved Matters application).

Woodland planting to comprise native species mix including transplants, feathered, and advanced nursery stock (up to 3.5m high) on a 1.5m staggered grid.

Primary Access Route

Existing Public Right of Way

Informal Footpath Entrance/Exit

Hedgerow Planting

Copse Planting

Retained Vegetation

N/11/04126/OUT
Consented development

Typology	Required m²	Delivered m²
Play	852	978
Open Space	8730	64723
Open Space - (Excluding Attenuation, Orchard and Allotments)	N/A	52793

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Rev	Description	Date	Au	Ch
A	Issued For Planning	24.02.25	LC	NJ
B	Boundary Updated	04.03.25	LC	NJ
C	Updated to Suit Latest Layout	23.01.26	LC	TM
D	Updated Following Ecologist Comments	28.01.26	LC	TM

Project Land north of Whychurch Farm and west of Crudwell Road
Drawing Land Use Parameter Plan

Client	Gleeson Land	Date	11.02.25
Job no.	GLEE240917	Rev.	D
Dwg no.	LUPP01	Scale	1:1250@A2
Author	LC	Checked	NJ
Status	PLANNING	Office	Portishead
Client ref.	-		

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Figure 3: Ecological Constraints and Opportunities Plan



Key

- Site boundary
- Woodland planting open space (10% woodland planting, 30% amenity grassland, 60% wildflower grassland)
- New species-rich native hedgerow
- Native hedgerow retained
- Ecological Corridors
- Schwegler Type 1A swift boxes (or similar approved) 149 total
- 1FR Schwegler bat tubes (or similar approved) 75 total
- Badger outlier sett - active

All bat and bird box locations shown are illustrative; locations will be confirmed once detailed plans and house types are produced.

Retained Habitat Buffer Details

- A 10m minimum buffer from retained habitat to development footprint
- B 5m minimum buffer from retained habitat to development footprint
- C 2m minimum buffer from retained habitat to development footprint

ead ecology www.eadecology.co.uk	Gleeson Land		
	Land North of Whychurch Farm, Malmesbury		
	Ecological Constraints and Opportunities Plan		
	03/02/2026	Created by: EH	Scale at A3 1:2,500

**Figure 4: Biodiversity Net Gain Assessment:
Baseline Plan**



Key

- Site boundary
- Individual Trees
 - Existing Large Rural Tree
- Individual tree Condition
 - Good
- Hedgerows
 - Native hedgerow
 - Species-rich native hedgerow
 - Species-rich native hedgerow - associated with bank or ditch
- Watercourses
 - Ditches
- Baseline Habitats
 - Developed land; sealed surface
 - Modified grassland
 - Other woodland; broadleaved
 - Vegetated garden
 - Bare ground
- Habitat condition
 - Moderate
 - Poor
 - N/A - Other
 - Condition Assessment N/A

**Figure 5: Biodiversity Net Gain Assessment:
Post-intervention Plan**



Key

- Site boundary
- Individual Trees
 - Proposed Small Urban Tree
 - Retained Large Rural Tree
- Individual tree Condition
 - Moderate
 - Good
- Hedgerows
 - Native hedgerow
 - Native hedgerow with trees
 - Species-rich native hedgerow
 - Species-rich native hedgerow - associated with bank or ditch
- Watercourses
 - Ditches
- Proposed Habitats
 - Allotments
 - Artificial unvegetated, unsealed surface
 - Bioswale
 - Informal Public Open Space (30% amenity grassland, 10% play area, 20% native scrub planting, 40% wildflower grassland)
 - Residential areas (70:30 split) (Developed land; sealed surface: vegetated gardens)
 - Developed land; sealed surface
 - Introduced shrub
 - Woodland planting open space (10% woodland planting, 30% amenity grassland, 60% wildflower grassland)
 - Mixed scrub
 - Modified grassland
 - Other neutral grassland
 - Other woodland; broadleaved
 - Sustainable drainage system
 - Traditional orchards
 - Vegetated garden
- Habitat condition
 - Moderate
 - Poor
 - N/A - Other
 - Condition Assessment N/A