

Biodiversity Net Gain Assessment

Survey site:

Mill Barns, High Street, Whitwell, Hertfordshire, SG4 8AG

Client:

Talmi Investments Ltd

Assessment Date:

4th June 2025

Project:

This report is prepared to inform a planning application with the North Hertfordshire District Council. The proposal is described as:

Conversion and extension of barn into a dwelling.

BNG assessment methodology and legislation can be found in the Arbtech Supplement: **BNG Methodology and Legislation – 2025.**

The results and recommendations contained within this report are valid for 18 months. An updated site visit and BNG assessment may be required if the report is to be used any longer than 18 months after completion.

Version Control			
Status	Issue	Name	Date
Final	1.0	Rhiannon Jensen O’Brien BSc (Hons) MSc, Consultant Ecologist	04/06/2025
Amended	2.0	Rhiannon Jensen O’Brien BSc (Hons) MSc, Consultant Ecologist	05/08/2025

Limitations and Copyright

Legal

Arbtech Consulting Limited has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited.

Arbtech cannot be held responsible for any project management failures, delays or unforeseen costs arising from failure to read and ensure understanding of the content with in, nor is Arbtech responsible for any adverse outcomes arising from failure to account for ecological advice given at any stage throughout the project collaboration.

© This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

Site Location and Context

A baseline habitat map is provided in **Appendix 1**, a post development habitat map in **Appendix 2**, a proposed development plan in **Appendix 3**, headline BNG results in **Appendix 4**, condition assessments in **Appendix 5**, planting plan in **appendix 6**

The survey site is centred on National Grid Reference TL18772103 and has an area of approximately 0.18ha. The site comprises a barn and an area of garden with scattered trees. It is situated in the town of Whitwell, Hertfordshire. Aerial imagery shows the local landscape to have a sub-urban character, with large areas of agricultural land and several copses of woodland in the surrounding area, the river Mimram also runs to the north and east of the site.

This report should be read in conjunction with the following documents:

- ❖ Statutory BNG Metric – Mill Barns, SG4 8AG (Arbtech Consulting Ltd., 2025)
- ❖ Proposed Plan (MDP Architects Ltd., 2025)
- ❖ Preliminary Ecological Appraisal (PEA) - Mill Barns, SG4 8AG (Arbtech Consulting Ltd., 2025)

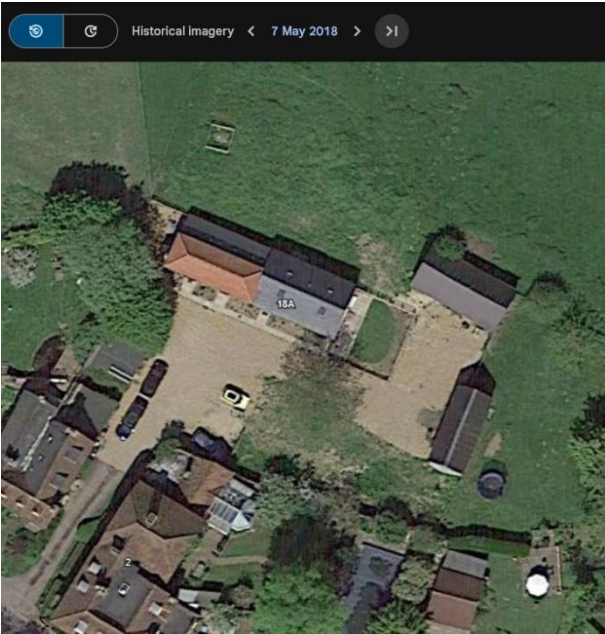
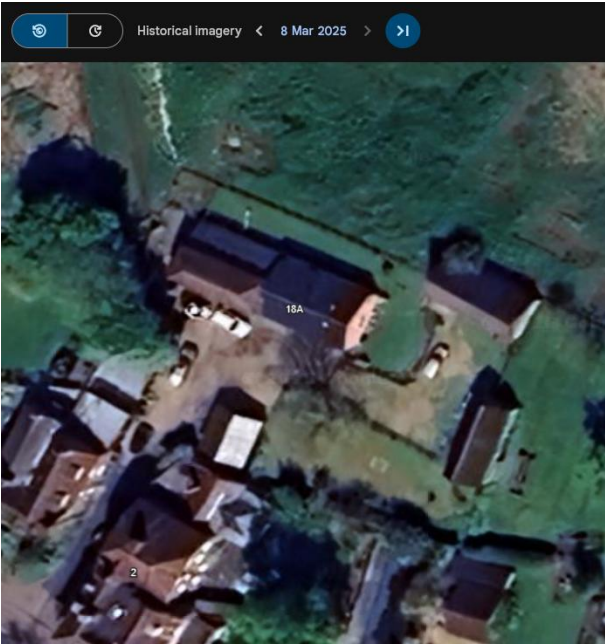
Executive Summary

The current landscaping proposal generates a net gain of area-based habitat units (+12.68%). As such, the proposed development is compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024) as a minimum biodiversity net gain of +10% was achieved for area habitat units.

All trading conditions have been satisfied.

A Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP) must be produced for the site. This should include recommendations for the implementation, management and monitoring of the site for at least 30 years to ensure that biodiversity net gain is delivered.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	29 th April 2025
	The baseline biodiversity value of the site is derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2025). As evident in the screenshots of satellite imagery obtained from GoogleEarth dated 7 th May 2018 and 8 th March 2025, the site does not appear to have undergone any degradation. The habitats on site, and therefore biodiversity value of the site, is not considered to have undergone degradation since 30th January 2020.	
	 	
Irreplaceable Habitat Statement	No irreplaceable habitats as listed under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024) are currently present nor were present before 30 th January 2020.	

Metric Version & Publication Date	Statutory Biodiversity Metric Calculation Tool first published 29 th November 2023 with last updates to metric tools and user guides on 23 rd July 2024.
BNG Target Uplift	+10%
National Character Area (NCA)	110 - Chilterns
Strategic Significance	Hertfordshire County Council (SCC), the responsible authority for drafting the Local Nature Recovery Strategy (LNRS) has yet to adopt a comprehensive LNRS. The following documents from its adopted Local Plan (including Supplementary Planning Documents, SPDs), were used to determine strategic significance: ❖ Policies Map ❖ Hertfordshire BAP (https://www.northherts.gov.uk/sites/default/files/ORD4%20Hertfordshire%20Biodiversity%20Action%20Plan.pdf) ❖ UK BAP (https://jncc.gov.uk/our-work/uk-bap-priority-habitats/)
Limitations	
There were no specific limitations to the assessment.	

Baseline

Baseline Biodiversity Value: On-Site				
Area-Based Habitats (A-1)				
Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Artificial unvegetated, unsealed surface	0.029	A gravel driveway is located to the east.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Developed land; sealed surface	0.006	There is 1 building on-site.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance

Vegetated Garden	0.078	Areas surrounding the building comprise vegetated gardens from the surrounding dwellings. The garden areas comprises a managed lawn to approximately 5cm, with species including frequent perennial rye grass, daisy occasional false oat grass, ribwort plantain, nettle, doves foot cranesbill, rare white dead nettle, yarrow, bramble and green alkanet.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Urban trees	0.0204	There are two scattered trees comprising a medium sized ash and a small sized pear tree located within the boundary.	Good: passes 5 of 6 criteria. 1no. small 1no. medium	Low Strategic Significance

Post-Development Biodiversity Value: Off-Site

Area-Based Habitats (D-1)

Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Modified grassland Off-Site Ref '1'	0.0244	An area of managed grassland within ownership.	Poor: fails essential criteria	Low Strategic Significance

Post-Development

Post-Development Biodiversity Value: On-Site

Area-Based Habitats

	Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Retained (A-1)	Artificial unvegetated, unsealed surface	0.029	Existing driveway retained	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Developed land; sealed surface	0.006	Existing building retained	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance

	Vegetated Garden	0.068	Areas of garden partially retained, some areas lost to building/parking extension	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Urban trees	0.0204	Both trees retained	Good: passes 5 of 6 criteria. 1no. small 1no. medium	Low Strategic Significance
Created (A-2)	Artificial unvegetated, unsealed surface	0.006	Created additional driveway	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Developed land; sealed surface	0.004	Building extended	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance

Post-Development Biodiversity Value: Off-Site

Area-Based Habitats

	Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Created (D-2)	Rural trees Off-Site Ref '1'	0.0244	Planting of 6 trees comprising silver birch and chestnut were completed by the client in 2024. The trees were planted in a paddock within ownership to the north of the site which is not part of a residential garden. This was confirmed by a planting plan provided. Trees have been assumed at poor condition and a temporal risk multiplier of 1 year added. The trees are not known to have been planted for another application or net gain assessment.	Poor: assumed to pass 1 criteria Assessed using the 'individual trees' habitat type condition sheet.	Low Strategic Significance

Change of Biodiversity Value

		Biodiversity Units		
		Area-Based	Linear-Based	Watercourse-Based
On-Site	Baseline	0.40 ❖ Vegetated garden (0.16) ❖ Urban trees (0.24)	N/A	N/A
	Post-Development	0.38 ❖ Retained vegetated garden (0.14) ❖ Retained urban trees (0.24)		
	Net change	-0.02 (-4.99%)		
Off-Site	Baseline	0.05 ❖ Modified grassland (0.05)		
	Post development	0.07 ❖ Planting of 6 trees (silver birch and chestnut) in 2024.		
	Net change	+0.07		
Overall Net Change		+0.05 (+12.68%)		

Results, Discussion, and Next Steps

BNG Informative	
Results and Next Steps	The current landscaping proposal generates a net gain of area-based habitat units (+12.68%). As such, the proposed development is compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024) as a minimum biodiversity net gain of +10% was achieved for area habitat units. All trading conditions have been satisfied. A Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP) must be produced for the site. This should include recommendations for the implementation, management and monitoring of the site for at least 30 years to ensure that biodiversity net gain is delivered.
BNG Mitigation Hierarchy	
Avoidance	Impacts to trees onsite have been avoided in full.
Minimisation	Vegetated garden has been partially retained
Mitigation	The planting of trees has been used to mitigate impacts from the development.
Offset	

Appendix 1: Baseline Habitat Plan
Onsite



Offsite



Appendix 2: Post-Development Habitat Plan

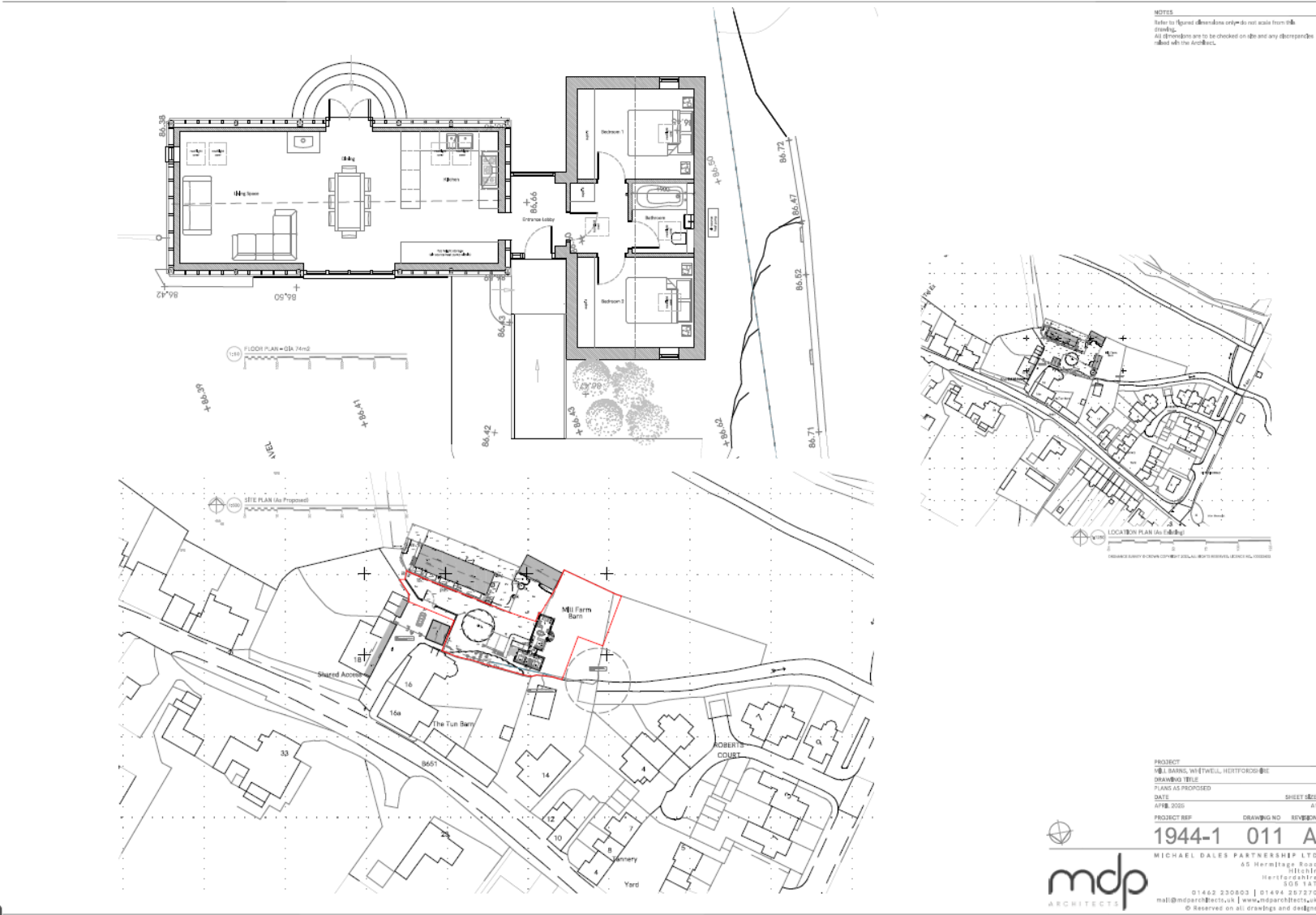
Onsite



Offsite



Appendix 3: Proposed Development Plan



Appendix 4: Headline BNG Results

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	0.05
	<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>Habitat units</i>	12.68%
	<i>Hedgerow units</i>	0.00%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
<i>Habitat units</i>	10.00%	0.40	0.44	0.00
<i>Hedgerow units</i>	10.00%	0.00	0.00	0.00
<i>Watercourse units</i>	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 ✓

Appendix 5a: Baseline Habitat Condition Assessment Sheets

Habitat	Criteria	Score
Individual trees	a) the trees are a native species. b) These are individual trees and as such passes this criterion. c) The trees are mature. d) There is no evidence of adverse impact of tree health by human activities. e) Natural ecological niches (e.g. deadwood, cavities, ivy, loose bark) are absent. f) >20% of the tree canopy is oversailing vegetation beneath.	good – passes 5 criteria
Modified grassland	a) There are less than 6 species per m2 b) Sward height is not varied c) There is less than 20% scrub d) There is less than 5% damage e) Bare ground is between 1-10%. f) There is no bracken. g) No invasive plant species are present.	Poor - fails essential criteria

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

Habitat	Criteria	Score
Individual trees (retained)	a) the trees are a native species. b) These are individual trees and as such passes this criterion. c) The trees are mature. d) There is no evidence of adverse impact of tree health by human activities. e) Natural ecological niches (e.g. deadwood, cavities, ivy, loose bark) are absent. f) >20% of the tree canopy is oversailing vegetation beneath.	good – passes 5 criteria
Individual trees (created)	a) the trees are a native species. b) These are individual trees and as such passes this criterion. c) The trees are not mature. d) There may be an impact of tree health by human activities. e) Natural ecological niches (e.g. deadwood, cavities, ivy, loose bark) are absent. f) >20% of the tree canopy may have oversailing vegetation beneath.	Poor – passes 2 criteria

Appendix 6: Planting plan

