

Biodiversity Net Gain Assessment

Site Address:

Barns at Winch Hill, Wandon End, Luton, LU2 8PA

Client:

Cube Metals Limited

Assessment Date:

21st January 2026

Project:

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

Recladding & Reroofing of barns. Change of Use from Agricultural to General Industrial (B2) & Storage/Distribution (B8). Security Fencing, Parking & Alteration to Existing Access

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
Draft	0.1	Jade Lemm BSc (Hons) DipHE, Consultant Ecologist	21/06/2026
Final	1.0	Jade Lemm BSc (Hons) DipHE, Consultant Ecologist	22/06/2026

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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**, and condition assessments in **Appendix 5**.

The Barns at Winch Hill, LU2 8PA (hereafter referred to as 'the site') is located at National Grid Reference TL 13791 21762 and has an area of approximately 0.62ha. The local soil composition is noted as slightly acid loam and clay -based soils with slightly impeded drainage and moderate to high fertility (Land IS, 2025). The bedrock geology is primarily chalk, with superficial sedimentary deposits comprising clay, silt, sand, and gravel (BGS, 2025). The site comprises two large agricultural barns, artificial sealed surfacing, several trees, and grassland areas. The site is located approximately 0.45km northeast of the London Luton Airport. Aerial imagery of the local area shows a primary arable land use, interspersed with woodland pockets and rural access roads. As such, there are extensive agricultural managed and natural unmanaged green spaces within the vicinity, including Burnt Wood (approximately 0.7km south), Sewett's Wood (approximately 1.34km southeast), and Watkin's Wood (approximately 1.61km northeast).

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

- ❖ Statutory BNG Metric – Barns at Winch Hill, LU2 8PA – V1 (Arbtech Consulting Ltd., 2026)
- ❖ Proposed Landscaping Plan – WinchHill/FP/2025/10 (Cube Metal Limited, 2025)
- ❖ Preliminary Ecological Appraisal and Roost Assessment (PEAPRA) - Barns at Winch Hill, LU2 8PA – V1 (Arbtech Consulting Ltd., 2025)

Executive Summary

- ❖ The current landscaping proposal generates a net gain of area-based habitat units (+10.23%) and a net gain of linear-based habitat units (+58.97%). 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 both area- and linear-based 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 calculations28th October 2025
	The baseline biodiversity value of the site is derived from the site as observed during the PEAPRA field survey (Arbtech Consulting Ltd., 2025). As evident in the screenshots of satellite imagery obtained from GoogleEarth dated 25th March 2020 and 31st March 2025, the site does not appear to have undergone any degradation.
	 Imagery Date: 3/25/2020 51°52'59.92" N 0°20'55.26" W elev 141 m  © 2025 Airbus Imagery Date: 3/31/2025 51°52'54.59" N 0°20'48.54" W elev 139 m
	Irreplaceable Habitat StatementNo irreplaceable habitats as listed under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024) are currently present nor were present before 30th January 2020.
Metric Version & Publication Date	Statutory Biodiversity Metric Calculation Tool first published 29th November 2023 with last updates to metric tools and user guides on 23rd July 2024.

BNG Target Uplift	+10%		
National Character Area (NCA)	110 - Chilterns		
Strategic Significance	Herefordshire Council (HC), the responsible authority for drafting the Local Nature Recovery Strategy (LNRS) for North Herefordshire District Council, has yet to adopt a comprehensive LNRS. As advised by the HC, the following documents from its adopted Local Plan (including Supplementary Planning Documents, SPDs), were used to determine strategic significance: ❖ Policies Map		
	Habitat	Baseline / Post-Development	Justification
	N/A	N/A	N/A
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
Other Neutral Grassland	0.125	The north and southeast areas of the site comprise arrhenatherum neutral grassland as identified via the soils present and species composition, although the habitat parcel lacks complex species diversity. The grassland is unmanaged. Species	<i>Poor: passes 4 of 6 criteria.</i> Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance
Bramble Scrub	0.021	Bramble scrub is occasionally present throughout the site.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Ruderal/Ephemeral	0.0852	Areas to the north B1 and B2, and between B1 and B2, comprise artificial unsealed surfacing with a successional low-lying vegetative cover of approximately 50% throughout. Species include butterfly bush Buddleja davidii, ragwort Jacobaea vulgaris, great mullein Verbascum Thapsus, and common nettle Urtica dioica. Further ruderal areas are present along earth banks located at the northwest site boundaries and along the northwest elevation of B1 and northeast elevation of B2.	<i>Good: passes 3 of 3 criteria, including essential criterion C.</i> Assessed using the 'Urban' habitat type condition sheet.	Low Strategic Significance
Tall Forbs	0.258	The southern portion of the site comprises a large stand of common stinging nettle Urtica dioica.	<i>Poor: passes 1 of 3 criteria, including essential criterion C.</i> Assessed using the 'Urban' habitat type condition sheet.	Low Strategic Significance
Bare Ground	0.0201	Areas to the north of B1 and B2 comprise dug bare ground.	<i>Poor: passes 1 of 3 criteria, including essential criterion C.</i> Assessed using the 'Urban' habitat type condition sheet.	Low Strategic Significance
Artificial Unvegetated Unsealed Surface	0.0165	A small, paved section lies between B1 and B2. A paved path is located at the northwest and southwest elevations of B2.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance

Developed Land Sealed Surface	0.0737	There are two buildings on the site (B1 and B2).	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Rural Tree	Poor: 0.0041	5no. trees were considered in the baseline, 4no. of which achieved 'moderate' condition by passing 3 or 4 of 6 criteria, while the remaining 1no. achieve 'poor' condition by passing 2 of 6 criteria. See PEAPRA for more details.	Poor: passes 2 of 6 criteria 1no. small (T01)	Low Strategic Significance
	Moderate: 0.0163		Moderate: passes 3 or 4 of 6 criteria. 4no. small (T02 – T05)	Low Strategic Significance

Baseline Biodiversity Value: On-Site				
Linear-Based Habitats (B-1)				
Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Line of Trees	0.036	A line of trees comprising elder Sambucus nigra and hawthorn Crataegus monogyna is located within the east area of the site.	Moderate: passes 4 of 5 criteria. Assessed using the 'Line of trees' habitat type condition sheet.	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)	Other Neutral Grassland	0.125	The other neutral grassland will be retained.	Moderate	Low Strategic Significance
	Developed Land Sealed Surface	0.0737	The two buildings will be retained.	N/A	Low Strategic Significance
	Rural Trees	0.0122	3 x small (moderate condition) trees will be retained.	Moderate	Low Strategic Significance
Created (A-2)	Other Neutral Grassland	0.1295	Areas of species-rich other neutral grassland will be created in the conservation area.	Moderate: anticipated to pass 3 of 6 criteria. Assessed using the 'Grasslands medium, high and very high Distinctiveness' habitat type condition sheet.	Low Strategic Significance
	Developed Land Sealed Surface	0.2431	New paths and parking will be created.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Mixed Scrub	0.0179	A mixed scrub area will be created in the conservation area.	Moderate: anticipated to pass 3 of 5 criteria. Assessed using the 'Individual Trees' habitat type condition assessment sheet.	Low Strategic Significance
	Rural Trees	0.1221	30 x small (moderate) native trees will be planted.	Moderate: anticipated to pass 3 of 6 criteria. Assessed using the 'Individual Trees' habitat type condition assessment sheet.	Low Strategic Significance

Enhanced (A-3)	Mixed Scrub	0.0103	An area of bramble scrub (poor condition) in the conservation area will be enhanced to mixed scrub (moderate condition).	Moderate: anticipated to pass 3 of 5 criteria. Assessed using the 'Individual Trees' habitat type condition assessment sheet.	Low Strategic Significance
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Post-Development Biodiversity Value: On-Site					
Linear-Based Habitats					
	Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Retained (B-1)	Line of Trees	0.036	The line of trees will be retained.	Moderate	Low Strategic Significance
Created (B-2)	Native Hedgerow	0.044	New native hedgerows will be created.	Poor: anticipated to pass 2 of 8 criteria.	Low Strategic Significance

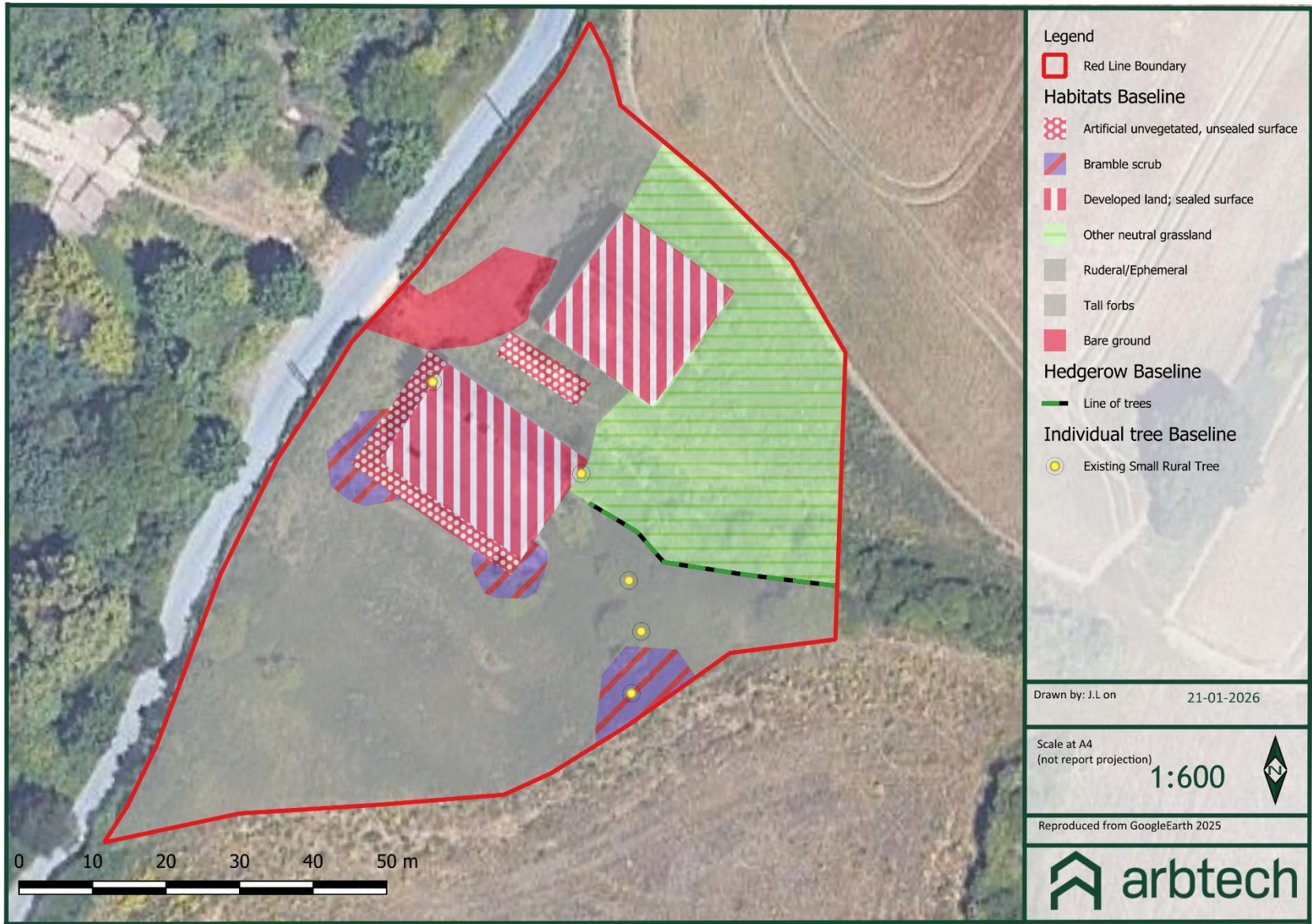
Change of Biodiversity Value

		Biodiversity Units		
		Area-Based	Linear-Based	Watercourse-Based
On-Site	Baseline	2.30 units ❖ Other Neutral Grassland (1.0 units) ❖ Bramble Scrub (0.08 units) ❖ Ruderals/Ephemerals (0.51 units) ❖ Tall Forbs (0.52 units) ❖ Artificial Unvegetated Unsealed Surface (net zero habitat) ❖ Bare Ground (0.04 units) ❖ Developed Land Sealed Surface (net zero habitat) ❖ Rural Trees – moderate condition (0.13 units) ❖ Rural Trees – poor condition (0.02 units)	0.14 units ❖ Lines of Trees (0.14 units)	N/A
	Post-Development	2.53 units ❖ Retained Other Neutral Grassland (1.0 units) ❖ Retained Developed Land Sealed Surface (net zero habitat) ❖ Retained Rural Trees – moderate condition (0.10 units) ❖ Enhanced bramble scrub -poor condition to mixed scrub -moderate condition (0.08 units) ❖ Created Other Neutral Grassland (0.87 units) ❖ Created Mixed Scrub (0.12 units) ❖ Created Developed Land Sealed Surface (net zero habitat) ❖ Created Rural Trees (0.37 units)	0.23 units ❖ Retained Line of Trees (0.14 units) ❖ Created Native Hedgerow (0.08 units)	N/A
	Overall Net Change	+0.24 units (+10.23%)	+0.08 units (+58.97%)	N/A

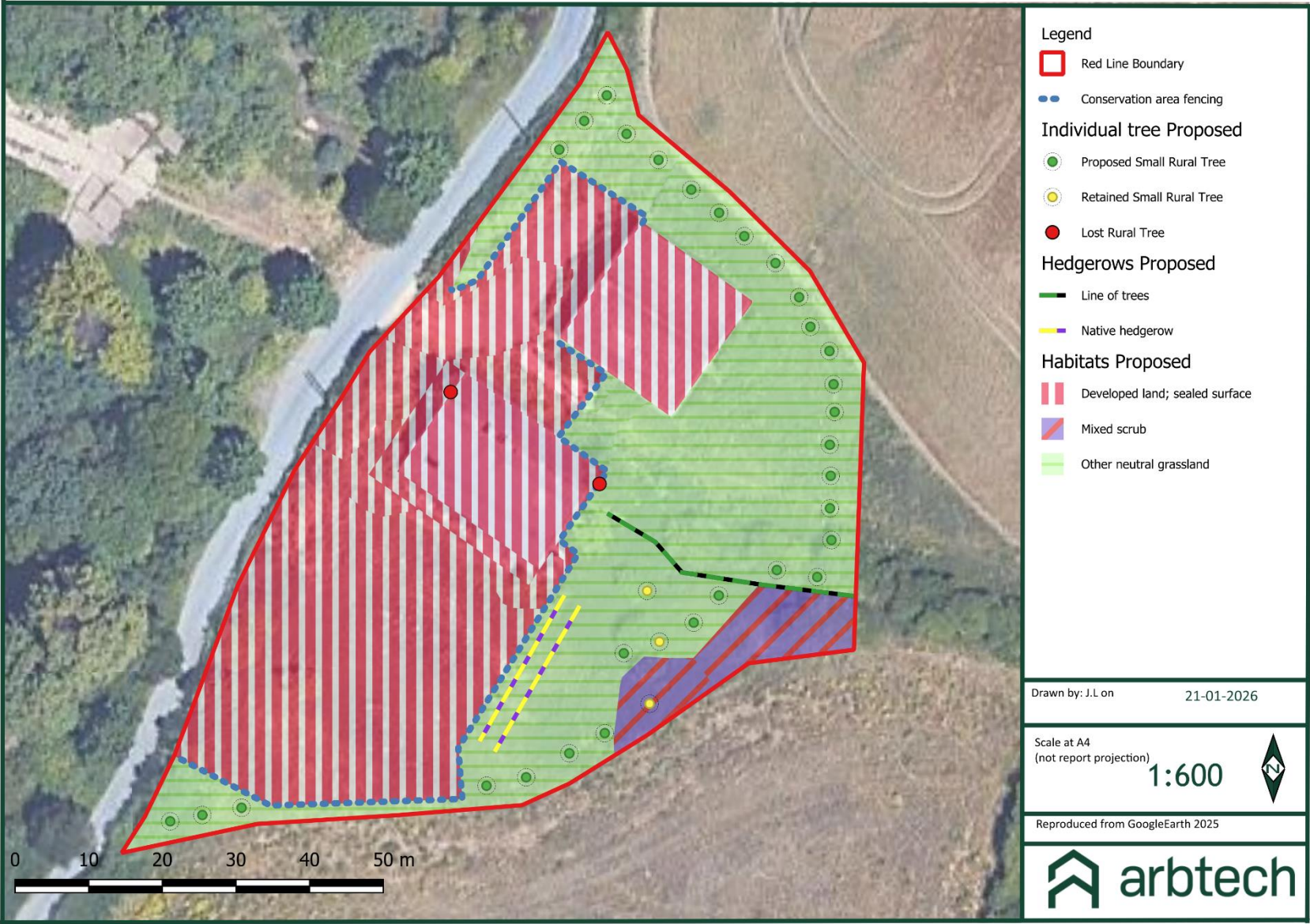
Results, Discussion, and Next Steps

BNG Informative	
Results and Next Steps	The current landscaping proposal generates a net gain of area-based habitat units (+10.23%) and a net gain of linear-based habitat units (+58.97%). 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 both area- and linear-based 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 on notable habitats (trees) have been minimised.
Minimisation	
Mitigation	Creation of a species-diverse grassland, mixed scrub and planting of thirty trees in a conservation area have been provisioned to satisfy the trading rule and meet 10% net gain.
Offset	N/A: net gain is achieved within the red line boundary.

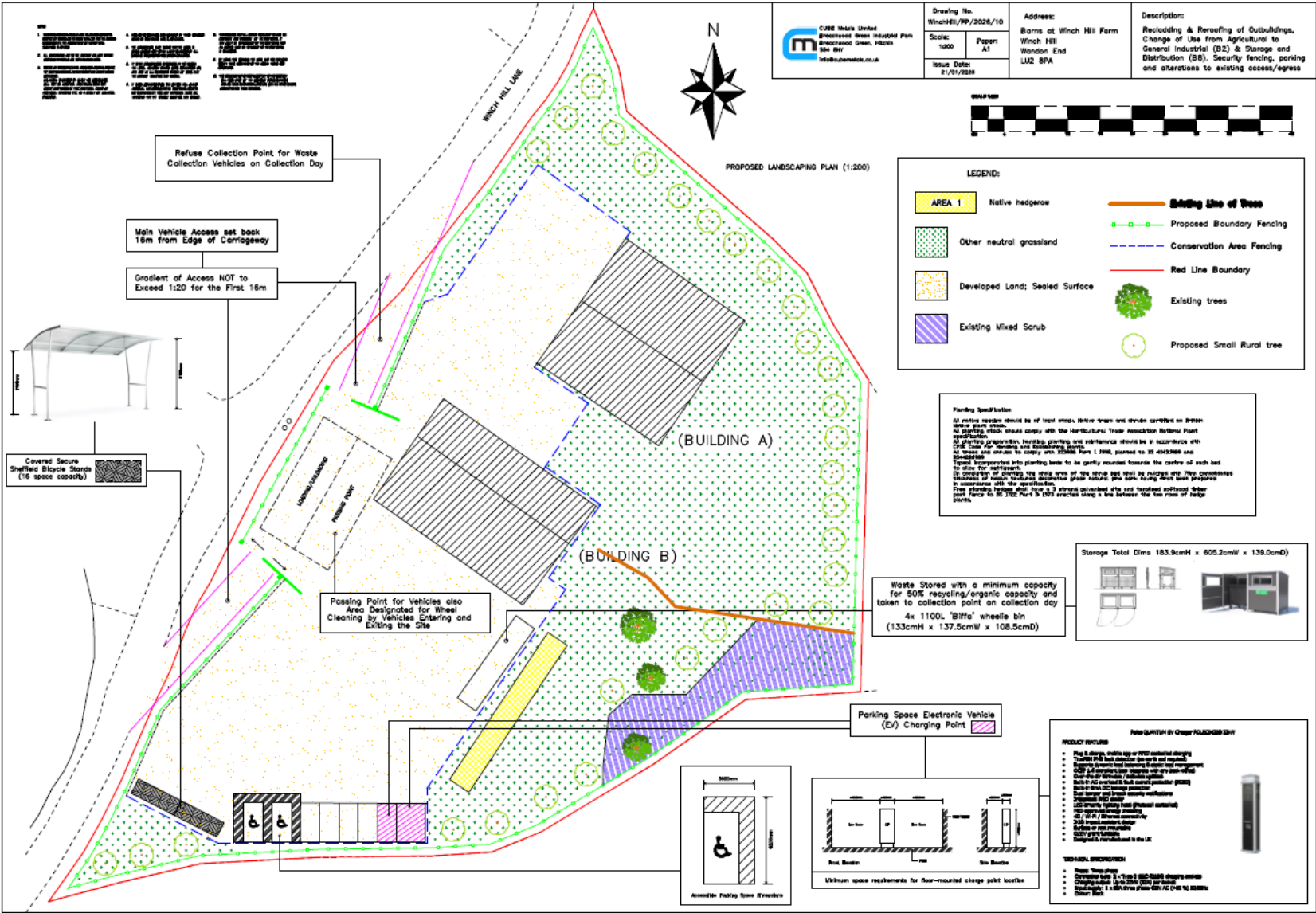
Appendix 1: Baseline Habitat Plan



Appendix 2: Post-Development Habitat Plan



Appendix 3: Proposed Development Plan



Appendix 4: Headline BNG Results

Barns at Winch Hill, Wandon End, Luton		Return to results menu	
Headline Results			
Scroll down for final results ▲			
On-site baseline	Habitat units	2.30	
	Hedgerow units	0.14	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	2.53	
	Hedgerow units	0.23	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	0.24	10.23%
	Hedgerow units	0.08	58.97%
	Watercourse units	0.00	0.00%
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.24	
	Hedgerow units	0.08	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
FINAL RESULTS			
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.24	
	Hedgerow units	0.08	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	10.23%	
	Hedgerow units	58.97%	
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		

Appendix 5a: Baseline Habitat Condition Assessment Sheets

Rural Trees; assessed using 'Individual Trees' habitat type condition sheet:

Condition Assessment Criteria		Condition Achieved (Y/N)				
		T01 S	T02 S	T03 S	T04 S	T05 S
A	The tree is a native species (or more than 70% within the block are native species).	N	Y	Y	Y	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Y	Y	Y	Y
C	The tree is mature (or more than 50% within the block are mature).	N	N	N	N	N
D	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	N	Y	Y	Y	N
E	Natural Ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N	N	N	N

F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y	Y	Y
Number of criteria passed		2	4	4	4	3

Condition Assessment Result	Condition Assessment Score	Score Achieved ✓
Passes 5 or 6 of 6 criteria	Good (3)	
Passes 3 or 4 of 6 criteria	Moderate (2)	✓
Passes 0, 1 or 2 of 6 criteria	Poor (1)	✓

Neutral Grassland; assessed using 'Grasslands Medium/High/Very High Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/Justification
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relative to the specific habitat type. Note – this criterion is essential for achieving moderate or good condition for non-acid grassland types only.	Y	Species indicative of habitat type.
B	Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	Varied sward height between 5cm and 60cm.
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.	N	No bare ground present.
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	No bracken or scrub.
E	Combined cover of species indicative of sub-optimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.	Y	Physical damage <5%.
Number of criteria passed			4

Condition Assessment Result	Condition Assessment Score	Score Achieved ✓
Acid grassland types (result out of 5 criteria)		
Passes 5	Good (3)	
Passes 3 - 4 criteria	Moderate (2)	✓
Passes 2 or fewer criteria	Poor (1)	

Ruderals/Ephemerals; assessed using the 'Urban' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/Justification
Core Criteria - must be assessed for all urban habitat types :			
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	Y	Varied range of plant species present with no dominate (>80%) species noted
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Y	Varied range of plant species present with no dominate (>80%) species noted
C	Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note – to achieve good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	None observed.
Essential criteria relevant for habitat type achieved (Yes or No)			Y
Number of criteria passed			3
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Results for habitats requiring assessment of 3 core criteria only:			
Passes all 3 core criteria AND		Good (3)	✓

Meets the requirements for good condition within criterion C		
Passes 2 of 3 core criteria OR Passes 3 of 3 core criteria but does not meet the requirements for good condition within criterion C	Moderate (2)	
Passes 0 or 1 of 3 core criteria	Poor (1)	

Tall Forbs; assessed using the 'Urban' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/Justification
Core Criteria - must be assessed for all urban habitat types :			
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	N	Common nettle is present only.
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	N	Common nettle is present only.
C	Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note – to achieve good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	None observed.
Essential criteria relevant for habitat type achieved (Yes or No)			Y
Number of criteria passed			1
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Results for habitats requiring assessment of 3 core criteria only:			
Passes all 3 core criteria AND		Good (3)	

Meets the requirements for good condition within criterion C		
Passes 2 of 3 core criteria OR Passes 3 of 3 core criteria but does not meet the requirements for good condition within criterion C	Moderate (2)	
Passes 0 or 1 of 3 core criteria	Poor (1)	✓

Bare Ground; assessed using the 'Urban' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/Justification
Core Criteria - must be assessed for all urban habitat types :			
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	N	No vegetation.
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	N	No vegetation.
C	Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note – to achieve good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	None observed.
Essential criteria relevant for habitat type achieved (Yes or No)			Y
Number of criteria passed			1
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Results for habitats requiring assessment of 3 core criteria only:			

Passes all 3 core criteria AND Meets the requirements for good condition within criterion C	Good (3)	
Passes 2 of 3 core criteria OR Passes 3 of 3 core criteria but does not meet the requirements for good condition within criterion C	Moderate (2)	
Passes 0 or 1 of 3 core criteria	Poor (1)	✓

Line of Trees; assessed using 'Line of Trees' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/Justification
A	At least 70% of trees are native species.	Y	Native species only.
B	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5m wide.	Y	Continuous canopy cover.
C	One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	N	No veteran trees or ecological niches.
D	There is an undisturbed naturally-vegetated strip of at least 6m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice.	Y	Undisturbed naturally-vegetated strips on either side of the line of trees.
E	At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Y	No visible diseases noted.
Number of criteria passed			4
Condition Assessment Result (out of 5 criteria)		Condition Assessment Score	Score Achieved ✓

Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	X	
Passes 2 or fewer criteria	Poor (1)		

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

Proposed Rural Trees; assessed using 'Individual Trees' habitat type condition sheet:

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
A	The tree is a native species (or more than 70% within the block are native species).	Y	Native trees.
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	The trees are individual trees and thus automatically pass this criterion.
C	The tree is mature (or more than 50% within the block are mature).	N	No mature trees.
D	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	N	Trees will be managed.
E	Natural Ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	No ecological niches.
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	More than 20% of the tree canopy area has vegetation underneath.
Number of criteria passed			3
Condition Assessment Result		Condition Assessment Score	
Passes 5 or 6 of 6 criteria		Good (3)	
Passes 3 or 4 of 6 criteria		Moderate (2)	
Passes 0, 1 or 2 of 6 criteria		Poor (1)	

Proposed Other Neutral Grassland; assessed using 'Grasslands Medium/High/Very High Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/Justification
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relative to the specific habitat type.	Y	Species composition of proposed seed mixes closely resembles definition of g3c 'other neutral grassland'.
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	Varied sward height of such specifications anticipated.
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.	N	Cover of bare ground anticipated to exceed 5%.
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	Management anticipated to control bracken cover, if present.
E	Combined cover of species indicative of sub-optimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.	N	Physical damage anticipated to exceed 5% of total area. No invasives anticipated.
Number of criteria passed		3	
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Acid grassland types (result out of 5 criteria)			
Passes 5 criteria		Good (3)	
Passes 3 or 4 criteria		Moderate (2)	✓
Passes 2 or fewer criteria		Poor (1)	

Proposed mixed scrub (created and enhanced); assessed using 'Scrub' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/Justification
A	The scrub is a good representation of the habitat type it has been identified as, based on its UKHab description (where in its natural range). The appearance and composition of the vegetation closely matches the characteristics of the specific scrub type. At least 80% of scrub is native, and there are at least three native woody species, with no single species comprising more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i> , which can be up to 100% cover).	Y	The proposed species closely matches the characteristics of the specific scrub type (mixed scrub), with at least 80% native scrubs, three native woody species, and no dominant species.

B	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	N	No mix of age classes.
C	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA) and species indicative of sub-optimal condition make up less than 5% of ground cover.	Y	Management anticipated to remove non-native invasive species.
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Y	Management anticipated to maintain a well-developed edge. Adjacent habitat proposed to be other neutral grassland.
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	N	No openings, glades or rides proposed.
Number of criteria passed			3
Condition Assessment Result (out of 5 criteria)		Condition Assessment Score	Score Achieved ✓
Passes 5 criteria		Good (3)	
Passes 3 or 4 criteria		Moderate (2)	✓
Passes 2 or fewer criteria		Poor (1)	

Proposed Hedgerow; assessed using 'Hedgerow' habitat type condition sheet:

Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, & D)	Criteria (the minimum requirements for 'favourable condition'	Description	Criterion passed (Yes or No)	Notes/Justification
A1. Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	N	Hedgerow averages 1m in height.

		A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).		
A2. Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (e.g. blackthorn suckers) are only included in the width estimate when they >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	N	Hedgerow averages 1m in width.
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical ‘gappiness’ of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	N	Gap between ground and base of canopy is >0.5m for more than 10% of length.
B2. Gap – hedge canopy continuity	Gaps make up <10% of total length and No canopy gaps >5 m	This is the horizontal ‘gappiness’ of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall ‘gappiness’, but are not subject to the >5 m criterion (as this is the typical size of a gate).	Y	No canopy gaps.

C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - measured from outer edge of hedgerow, and - is present on one side of the hedge (at least)	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedge. Undisturbed ground should be present for at least 90% of the hedgerow length, greater than 1m in width and must be present along at least one side of the hedge. This criterion recognises the value of the hedge base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	N	Hedgerow will be managed.
C2.	Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	The indicator species used are nettles (<i>Urtica</i> spp.), cleavers (<i>Galium aparine</i>) and docks (<i>Rumex</i> spp.). Their presence, either singly or together, should not exceed the 20% cover threshold.	Y	No nutrient enrichment.
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and recently introduced species	Recently introduced species refer to plant that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives.	Y	No invasives observed.
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes.	N	Hedgerow will be managed.

	damage caused by human activities	This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).		
Condition categories for hedgerows without trees				
Category	Maximum number of attributes that can fail to meet 'favourable condition' criteria in Table TS1-2	Weighting (score)		
Good	No more than 2 failures in total AND No more than 1 failure in any functional group	3		
Moderate	No more than 4 failures in total AND <u>Does not fail both attributes in more than one functional group</u> (e.g., fails attributes A1, A2, B1, and C2 = moderate condition)	2		
Poor	Fails a total of more than 4 attributes OR <u>Fails both attributes in more than one</u>	1		

	functional group (e.g. fails attributes A1, A2, B1, and B2 = poor condition)		
Score achieved:	Poor		