

Biodiversity Net Gain Assessment

Site Address:

5 Pretoria Road, Ludgershall, Andover, Wiltshire SP11 9PB

Client:

Mr G Lee

Assessment Date:

6th October 2025

Project:

This report is prepared to inform a planning application with Wiltshire Council. The proposal is described as:

Construction of two residential dwellings with associated driveway and garden.

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	Zenobia – Jay Hatch BSc (Hons), Consultant Ecologist	6 th October 2025

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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 site is located at National Grid Reference SU 27881 50462 and has an area of c. 0.05ha, comprising of a felled tree and ruderal habitat. From historic aerial imagery, on 31st July 2020, the site formed part of a residential dwelling and garden habitat, and appeared to have a medium sized tree and an area of presumed mixed scrub. The site is bound by residential dwellings with associated garden space to the east, west and south, and Pretoria Road to the north. The wider landscape comprises of residential dwellings with associated garden space, agricultural land, grassland, and pockets of woodland, interspersed by hedgerows and lines of trees. An active railway line is located c. 120m south beyond the A342 (Andover Road).

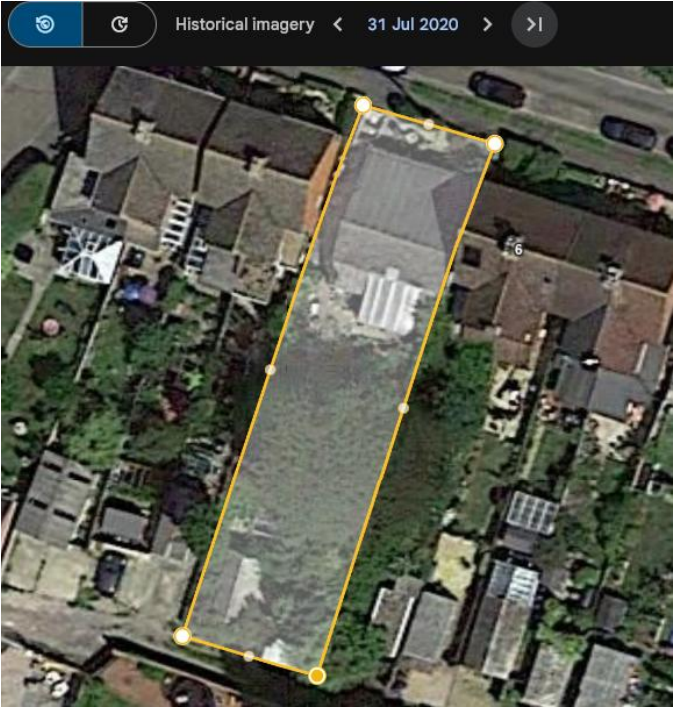
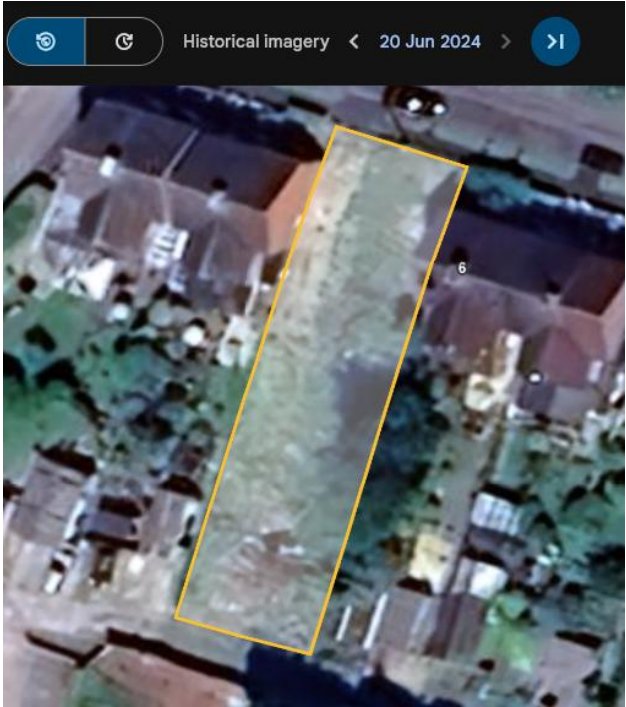
This report should be read in conjunction with the following documents:

- ❖ Statutory BNG Metric (Arbtech Consulting Ltd., 2025)
- ❖ Proposed Plan
- ❖ Preliminary Ecological Appraisal (PEA) (Arbtech Consulting Ltd., 2025)

Executive Summary

- ❖ The current proposed plan results in a -92.47% net loss in area habitat units. This is less than the 10% target of biodiversity net gain and therefore compliant with current legislation (Environment Act 2021) and current planning policies (National: National Planning Policy Framework, 2023; Local: Wiltshire Council).
- ❖ In order to achieve a 10% biodiversity net gain, a minimum area-based unit score of 0.44 area habitat units will need to be achieved, of which 0.24 must be mixed scrub, and 0.2 must be individual urban trees to satisfy trading rules.
- ❖ Based on the proposed plans, it is not possible to achieve the required 10% net gain on-site. All feasible options for habitat retention have been explored and do not result in a net gain whereby the purpose of the proposed development is not heavily compromised. Therefore, in line with the biodiversity net gain hierarchy, off-site biodiversity enhancements purchased through an approved scheme will be required to achieve the 10% net gain for area-based habitat units.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	31 st July 2020 (Google Earth imagery)
	The baseline biodiversity value of the site is derived from Google Earth imagery, as evidence of habitat degradation has occurred, as evident in the screenshots of satellite imagery obtained from Google Earth dated 31 st July 2020 and 20 th June 2024. Therefore, the baseline observed during the PEA field survey (Arbtech Consulting Ltd., 2025), has not been used for this BNG assessment.	
	 	
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 3 rd July 2025.
BNG Target Uplift	+10%
National Character Area (NCA)	130 - Hampshire Downs
Strategic Significance	Wiltshire Council, the responsible authority for drafting the Local Nature Recovery Strategy (LNRS) and has yet to adopt a comprehensive LNRS. As no formal interim documents are cited by Wiltshire Council, the following documents from its adopted Local Core strategy (adopted January 2015) were used to determine strategic significance.
Limitations	
Due to the clearance works and habitat degradation on-site, assumptions of habitats present and their condition has been made using information from Google Earth Imagery.	

Baseline

Baseline Biodiversity Value: On-Site

Area-Based Habitats

Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Mixed scrub	0.0297	These habitats have been cleared prior to the PEA survey (Arbtech Consulting Ltd, 2025). Information from Google Earth Imagery has been utilised to establish the baseline habitats present and their condition.	Moderate: assumed to have passed 3 of 5 criteria based on information from Google Earth Imagery. Assessed using the 'Scrub' habitat type condition sheet.	Low Strategic Significance
Urban tree	0.0163		Good: assumed to have passed all 6 criteria based on information from Google Earth Imagery. Assessed using the 'Individual tree' habitat type condition sheet.	
Developed land; sealed surface	0.0226		Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	

Post-Development

Post-Development Biodiversity Value: On-Site					
Area-Based Habitats					
	Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Created	Developed land; sealed surface	0.0353	Created residential dwellings and garages, with associated hardstanding including parking and footpaths.	Habitat condition pre-determined as 'N/A' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Vegetated garden	0.0169	Created vegetated garden associated with the created residential dwellings.		

Change of Biodiversity Value

		Biodiversity Units
		Area-Based
On-Site	Baseline	0.43 ❖ Mixed scrub (0.24) ❖ Urban tree (0.2) ❖ Developed land; sealed surface (0 – no value)
	Post-Development	0.03 ❖ Created developed land; sealed surface (0 – no value) ❖ Created vegetated garden (0.03)
Overall Net Change		-0.4 (-92.47%)

Results, Discussion, and Next Steps

BNG Informative

Results and Next Steps

The current proposed plan results in a -92.47% net loss in area habitat units. This is less than the 10% target of biodiversity net gain and therefore compliant with current legislation (Environment Act 2021) and current planning policies (National: National Planning Policy Framework, 2023; Local: Wiltshire Council).

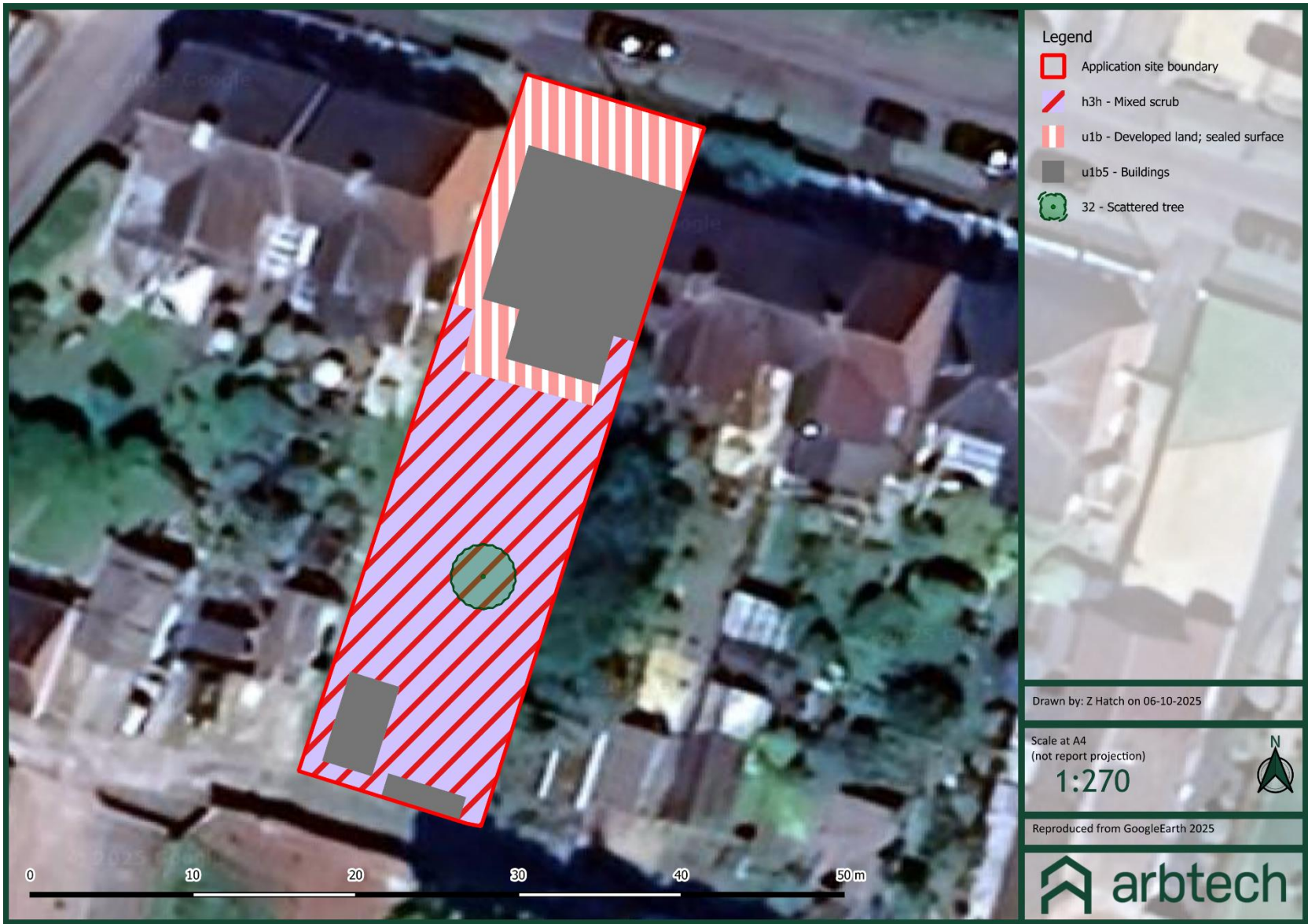
Based on the proposed plans, it is not possible to achieve the required 10% net gain on-site. All feasible options for habitat retention have been explored and do not result in a net gain whereby the purpose of the proposed development is not heavily compromised. Therefore, in line with the biodiversity net gain hierarchy, off-site biodiversity enhancements purchased through an approved scheme will be required to achieve the 10% net gain for area-based habitat units. Where offsite biodiversity units cannot be secured through an off-site provider, statutory biodiversity credits will be required to be purchased however, this should be as a last resort.

In order to achieve a 10% biodiversity net gain, a minimum area-based unit score of 0.44 area habitat units will need to be achieved, of which 0.24 must be mixed scrub, and 0.2 must be individual urban trees to satisfy trading rules.

According to the Defra Statutory Biodiversity Metric an additional 0.44 habitat units are required to meet the trading rules and achieve a minimum of 10% biodiversity net gain. The mechanism for securing this off-setting will need to be proposed to, and confirmed by the LPA e.g., purchasing conservation credits through a registered provider, habitat creation directly through the client owned or LPA offered land or a financial contribution towards another provider such as a local nature reserve or park. As well as the creation of new habitats, this should also secure the management of the proposed habitats to help achieve the desired condition for at least 30 years. This would be linked to the application through a planning obligation Section 106 (S106) agreement. The proposed habitat compensation should be of an appropriate distinctiveness to meet the trading rules of BNG. An ecology survey of the baseline habitat of any off-site land will be required to inform the baseline conditions of any land subject to off-site compensation measures.

- ❖ The costs of BNG compensation using statutory credits have been issued by the government as outlined here: <https://www.gov.uk/guidance/statutory-biodiversity-credit-prices>
- ❖ Statutory prices are not guideline prices for biodiversity units sold in the off-site private market. Credit prices are set high to ensure they do not compete with the development of the private market.
- ❖ These units may be cheaper to source in the local third party BNG unit market, or in collaboration with the LPA.
- ❖ If you buy statutory credits, a 'spatial risk multiplier' (SRM) will apply, which doubles the number of statutory credits you need.
- ❖ For each habitat type in the table, you can see its 'tier'. Statutory credits are priced in tiers according to habitat type for area-based biodiversity units.

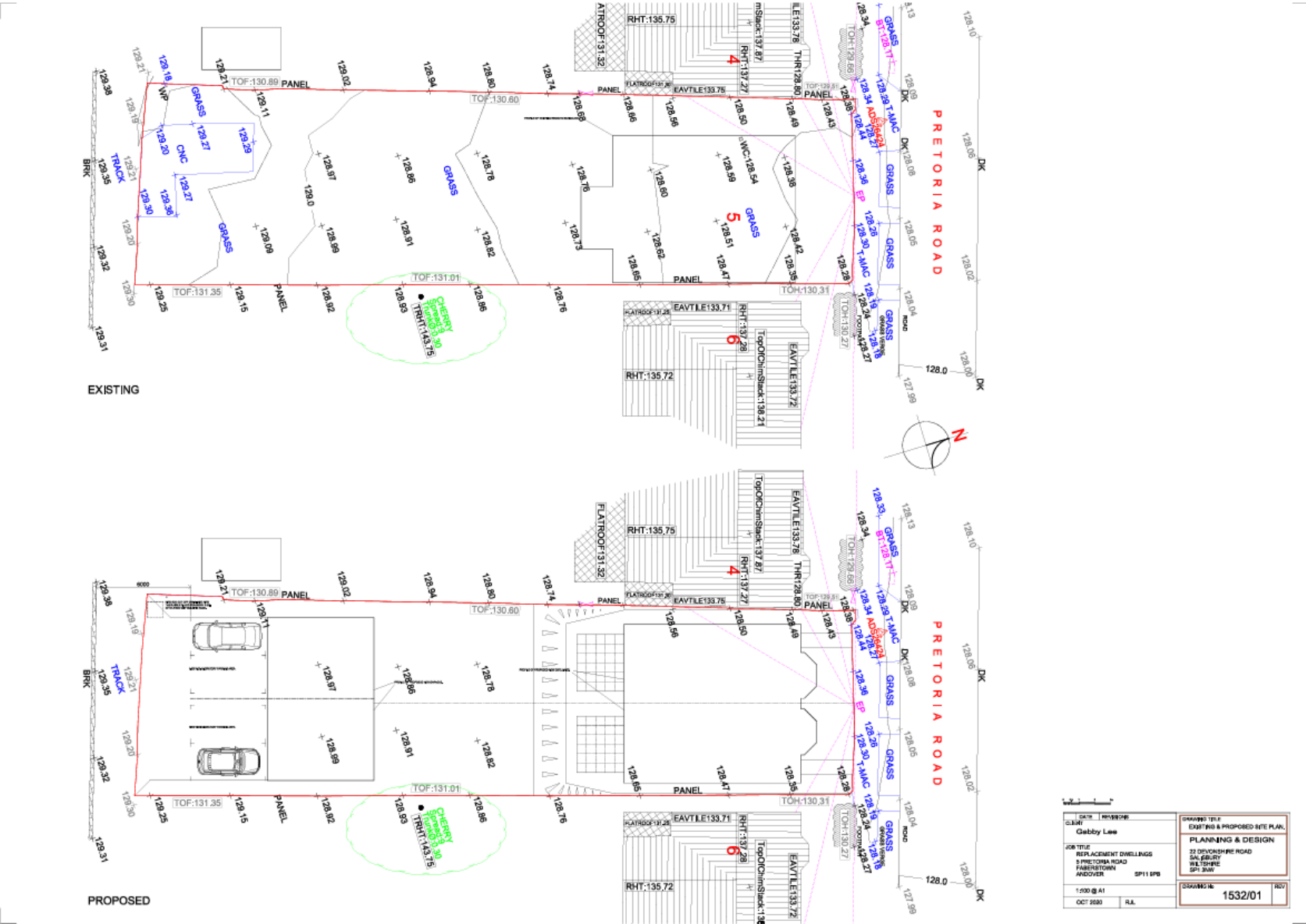
Appendix 1: Baseline Habitat Plan



Appendix 2: Post-Development Habitat Plan



Appendix 3: Proposed Development Plan



Appendix 4: Headline BNG Results

The Defra Statutory Biodiversity Metric is provided as a separate excel spreadsheet.

FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-0.40		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-92.47%	Total net gain achieved is less than target set ▲	
	Hedgerow units	0.00%		
	Watercourse units	0.00%		
Trading rules satisfied?	No - Check Trading Summaries ▲			
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	0.43	0.48	0.44
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00
				No additional hedgerow units required to meet target ✓
				No additional watercourse units required to meet target ✓

Appendix 5: Baseline Habitat Condition Assessment Sheets

Individual Trees Condition Assessment

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	Yes	Tree assumed to have been native
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).	Yes	Individual trees automatically pass
C	The tree is mature (or more than 50% within the block are mature) ¹ .	Yes	Tree assumed to have been mature
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Yes	No adverse impact prior to felling assumed
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Yes	Natural ecological niches assumed to have been present
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	>20% of tree canopies over sail vegetation
Number of criteria passed		6	
Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved x/√	
Passes 5 or 6 criteria	Good (3)	✓	
Passes 3 or 4 criteria	Moderate (2)	X	
Passes 2 or fewer criteria	Poor (1)	X	

Scrub Habitat Type Condition Assessment

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). ¹ - At least 80% of scrub is native, - There are at least three native woody species ² , - No single species comprises 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).	Yes	More than 3 native woody species assumed to have been present
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	Yes	All age classes assumed to have been present
C	There is an absence of invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) and species indicative of suboptimal condition ⁶ make up less than 5% of ground cover.	Yes	No invasive species assumed to have been present
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	No	No well-developed edge visible from historic satellite imagery.
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	No	No clearings, glades or rides visible from historic satellite imagery
Number of criteria passed			3
Condition Assessment Result (out of 5 criteria)	Condition Assessment Score	Score Achieved ×/✓	
Passes 5 criteria	Good (3)	X	
Passes 3 or 4 criteria	Moderate (2)	✓	
Passes 2 or fewer criteria	Poor (1)	X	