

Biodiversity Net Gain Assessment

Site Address:

Home Farm, Shaw Hill, Shaw, Wiltshire, SN12 8EW

Client:

TJ Professional Builders

Assessment Date:

15th April 2026

Project:

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

‘The erection of 2no. dwellings with associated soft landscaping’.

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	Katie Whitfield BSc (Hons) MSc, Graduate Ecologist	06/11/2024
Review	0.2	Georgina Rennie BSc (Hons), MSc. Consultant Ecologist	11/11/2024
Final	1.0	Katie Whitfield BSc (Hons) MSc, Graduate Ecologist	12/11/2024
Updated	2	Katie Whitfield BSc (Hons) MSc, Graduate Ecologist	04/08/2025
Updated plans	3	Katie Whitfield BSc (Hons) MSc, Graduate Ecologist	01/12/2025
Updated with part 2	4	Katie Whitfield BSc (Hons) MSc, Graduate Ecologist	20/02/2026
Updated plans 2	5	Katie Whitfield BSc (Hons) MSc, Consultant Ecologist	15/04/2026

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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 site is centred at National Grid Reference ST 88175 65402 and has an area of approximately 0.33ha. The site is characterised by 2 buildings, sealed/unsealed surfaces, modified grassland, bare ground, native hedgerow with trees, ornamental hedgerow and scattered trees. The site is surrounded by residential dwellings. The wider landscape comprises woodland, agricultural fields and farmlands in all directions.

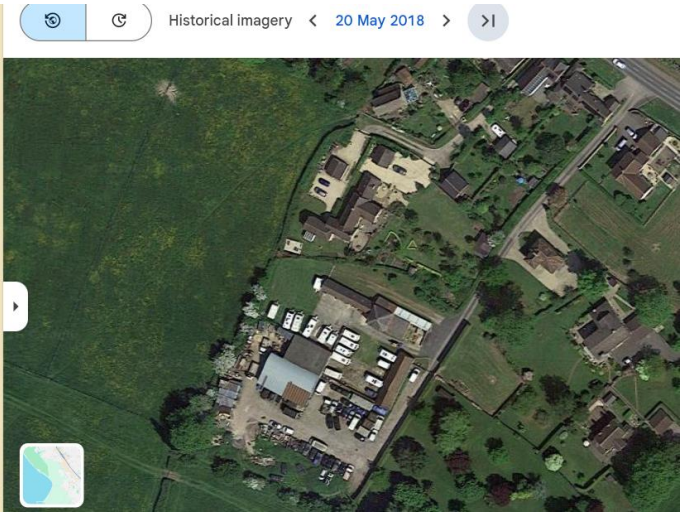
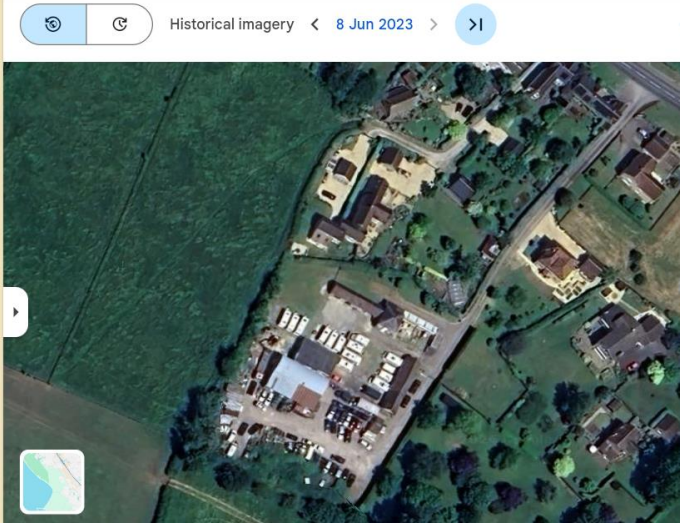
This report should be read in conjunction with the following documents:

- ❖ Statutory BNG Metric – Home Farm, SN12 8EW – v5 (Arbtech Consulting Ltd., 2026)
- ❖ Proposed Plan (Revision G)
- ❖ Preliminary Ecological Appraisal (PEA) - Home Farm, SN12 8EW – v1 (Arbtech Consulting Ltd., 2024)

Executive Summary

- ❖ The current landscaping proposal generates a net gain of area-based habitat units (+31.67%) and a net gain of linear-based habitat units (+12.99%).
- ❖ All trading conditions have been satisfied.
- ❖ A Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP) must be produced for the site.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	22 nd August 2024
	The baseline biodiversity value of the site is derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2024). As evident in the screenshots of satellite imagery obtained from GoogleEarth dated 20 th May 2018 and 8 th June 2023, 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)	117 – Avon Vales	

Strategic Significance	Wiltshire Council Local Nature Recovery Strategy:		
	Wiltshire and Swindon Local Nature Recovery Strategy - Wiltshire Council		
	Habitat	Baseline / Post-Development	Justification
	Sealed/unsealed surfaces	Baseline/post-development	Such habitats are of low value and are not formally identified in the local strategy. As such sealed/unsealed surfaces have 'low' strategic significance.
	Modified grassland	Baseline/post-development	All baseline habitats with published LNRS are assessed as having 'low' strategic significance as per the guidelines.
	Bare ground	Baseline/post-development	Such habitats are of low value and are not formally identified in the local strategy. As such sealed/unsealed surfaces have 'low' strategic significance.
	Urban tree	Baseline/post-development	All baseline habitats with published LNRS are assessed as having 'low' strategic significance as per the guidelines. No trees are created as part of the development and as such retained trees retain a low significance.
	Native hedgerow with trees	Baseline/post-development	All baseline habitats with published LNRS are assessed as having 'low' strategic significance as per the guidelines. No further hedgerows with trees are created as part of the development and as such retained trees retain a low significance.
	Vegetated garden	Post-development	Such habitats are of low value and are not formally identified in the local strategy. As such vegetated gardens have 'low' strategic significance.
	Mixed scrub	Post-development	The site is within an area of importance for 'creating and improving habitats for nature on our doorstep' under code: NOD. As such the proposed mixed scrub to act as wildlife corridors are assessed as having 'high' strategic significance.
	Native hedgerow	Post-development	The site is within an area of importance for 'creating and improving habitats for nature on our doorstep' under code: NOD. As such the proposed native hedgerow is assessed as having 'high' strategic significance.
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
Developed land; sealed surface	0.1264	There are two buildings on-site that will be impacted by the development works - Building 1 (B1) and Building 2 (B2) which comprise four sections (B1a, B1b, B2a, B2b). Areas of hardstanding surround the two buildings.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Artificial unvegetated, unsealed surface	0.0383	Area of artificial unvegetated, unsealed surface comprises the driveway and is adjacent to northern area of modified grassland and north-eastern site boundary. An additional area of unsealed surfaces with ruderal vegetation is found adjacent to the southern elevation of B1. The species assemblage of the ruderal vegetation includes ribwort plantain <i>Plantago lanceolata</i> , dandelion <i>Taraxacum officinale</i> agg., white clover <i>Trifolium repens</i> , wood cranesbill <i>Geranium sylvaticum</i> , creeping thistle <i>Cirsium</i> .	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	
Bare ground	0.1169	Area of bare ground is found to the west and south. The area of bare ground appears to have been tilled recently, with no vegetation present.	Poor: passes 1 of 3 criteria Assessed using the 'Urban' habitat type condition sheet.	
Modified grassland	0.0754	There are three areas of modified grassland. The species assemblage includes common bent <i>Agrostis capillaris</i> , white clover <i>Trifolium repens</i> , perennial ryegrass <i>Lolium perenne</i> , creeping buttercup <i>Ranunculus repens</i> , dandelion <i>Taraxacum officinale</i> agg., ribwort plantain <i>Plantago lanceolata</i> , Yorkshire fog <i>Holcus lanatus</i> in all three areas, with ivy <i>Hedera helix</i> found within area 2 and 3.	Poor: passes 5 of 7 criteria excluding essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	

Rural tree	0.0041	There is one scattered tree with a Diameter at Breast Height (DBH) >7.5cm comprising a semi-mature apple tree (T4) of 8.4cm DBH. T4 has good canopy cover which is overselling understory vegetation and natural ecological niches like surface wounds, peeling bark and moss, as well as providing abundant foraging opportunities for pollinators.	Good: <i>passes 5 of 6 criteria.</i> Assessed using the 'Individual Trees' habitat type condition sheet.	
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Baseline Biodiversity Value: On-Site**Linear-Based Habitats (B-1)**

Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Native hedgerow with trees	0.127	Native hedgerow with trees is adjacent to the western, northern and southern site boundary. The species assemblage of the western/southern hedgerow includes hawthorn <i>Crataegus monogyna</i> , hazel <i>Corylus avellana</i> , ivy <i>Hedera helix</i> , bramble <i>Rubus fruticosus agg.</i> , common elder <i>Sambucus nigra</i> , common nightshade <i>Solanum nigrum</i> . The hedgerow has a good understory vegetation with species assemblage as follows: common nettle <i>Urtica dioica</i> , dogbane <i>Apocynum cannabinum</i> , Yorkshire fog <i>Holcus lanatus</i> , perennial ryegrass <i>Lolium perenne</i> , creeping buttercup <i>Ranunculus repens</i> and yarrow <i>Achillea millefolium</i> . The species assemblage of the northern hedgerow includes hawthorn <i>Crataegus monogyna</i> , ivy <i>Hedera helix</i> , hazel <i>Corylus avellana</i> , bramble <i>Rubus fruticosus agg.</i> The composition and condition of the understory vegetation is the same as for the first hedgerow.	Good: No more than one failure. Assessed using the 'Hedgerow' 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)	Bare ground	0.1055	Retained parcels of bare ground.	Poor.	Low Strategic Significance
	Rural tree	0.0041	T4 to be retained.	Good.	
Created (A-2)	Sealed surface	0.182	Created dwellings and associated areas of hardstanding.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	
	Vegetated garden	0.1179	Created vegetated gardens comprising predominantly of amenity grassland as well as erection of a vegetable patch.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	High Strategic Significance
	Modified grassland	0.0243	Modified grassland to be dug out and reseeded with EG1 General Purpose Meadow Grass Mixture. Species composition includes common bent, crested dogtail, red fescue, smaller cats-tail and smooth-stalked meadow grass. It is anticipated that the grassland will have a lack of varied sward height due to associated management with possible areas of bare ground and damage caused by pedestrian access.	Poor: <i>passes 3 of 6 criteria excluding essential criterion A.</i> Assessed using the 'Grasslands Med/High/V High Distinctiveness'	

				habitat type condition sheet.	
	Mixed scrub	0.0326	Created mixed scrub comprising a dense composition of species such as blackthorn, hazel, bramble, hawthorn, willow, alder and birch. No invasive species are anticipated.	Poor: <i>passes 2 of 5 criteria.</i> Assessed using the 'Scrub' habitat type condition sheet.	

Post-Development Biodiversity Value: On-Site
Linear-Based Habitats

	Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Retained (B-1)	Native hedgerow with trees	0.127	Native hedgerow with trees retained in full.	Good.	Low Strategic Significance
Created (B-2)	Native hedgerow	0.044	Created native hedgerow comprising species such as hawthorn, field maple, spindle and hazel.	Good: No more than one failure anticipated. Assessed using the 'Hedgerow' habitat type condition sheet.	High Strategic Significance

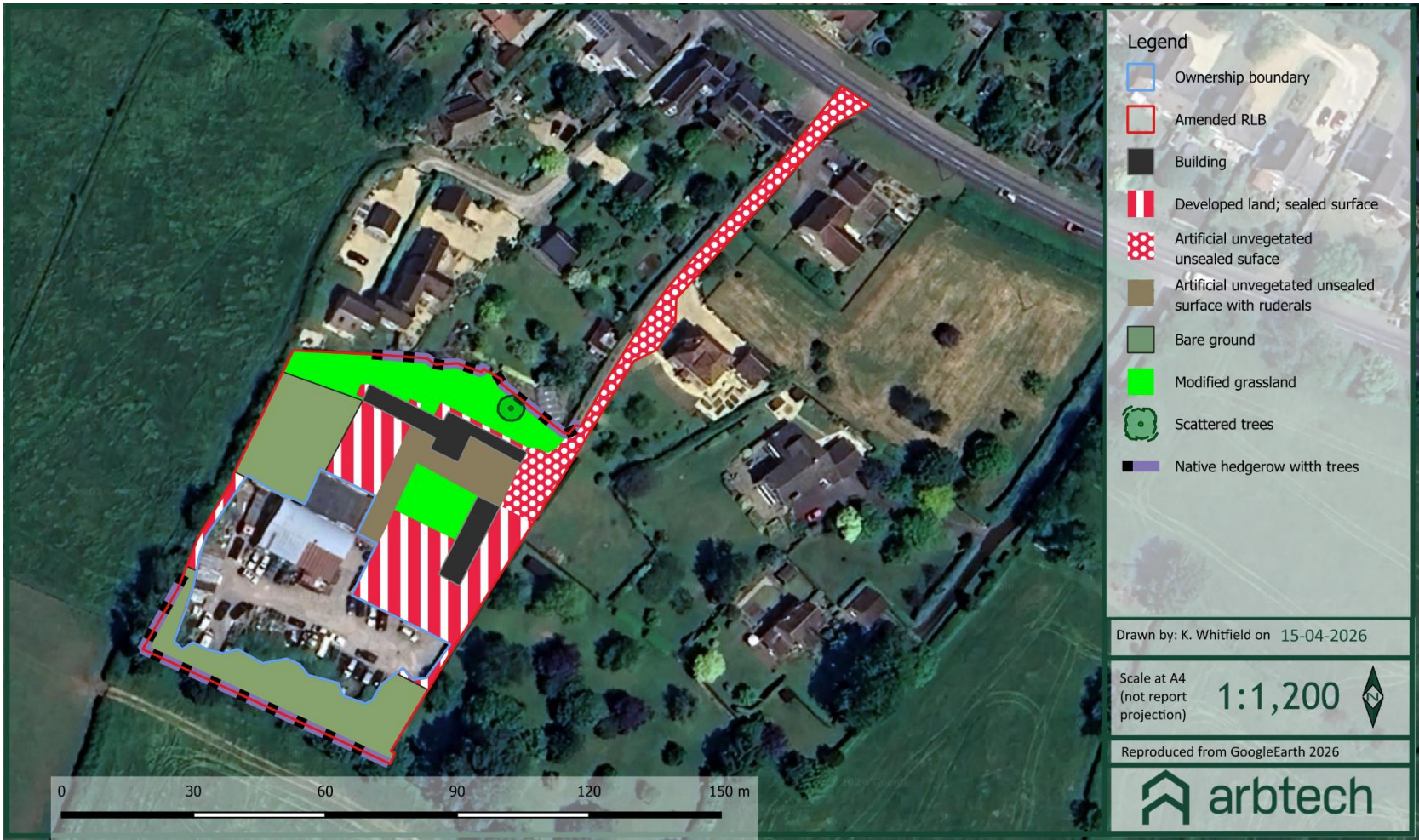
Change of Biodiversity Value

		Biodiversity Units		
		Area-Based	Linear-Based	Watercourse-Based
On-Site	Baseline	0.43 ❖ Sealed/unsealed surfaces (0) ❖ Modified grassland of poor condition (0.15) ❖ Bare ground of poor condition (0.23) ❖ Rural tree of good condition (0.05)	1.52 ❖ Native hedgerow with trees of good condition (1.52)	N/A
	Post-Development	0.57 ❖ Retained bare ground of poor condition (0.10) ❖ Retained rural tree (0.05) ❖ Created sealed surfaces (0) ❖ Created vegetated garden (0.23) ❖ Created mixed scrub of poor condition (0.14) ❖ Created modified grassland of poor condition (0.05)	1.72 ❖ Retained native hedgerow with trees (1.52) ❖ Created native hedgerow of good condition (0.20)	
	Overall Net Change	+0.14 (+31.67%)	+0.20 (12.99%)	

Results, Discussion, and Next Steps

BNG Informative	
Results and Next Steps	The current landscaping proposal generates a net gain of area-based habitat units (+31.67%) and a net gain of linear-based habitat units (+12.99%). 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 to hedgerows and 1no. tree have been avoided in full.
Minimisation	Grassland to be removed is necessary to facilitate the new driveway and gardens and as such impacts cannot be avoided. Further, areas of removed grassland are to be recreated as below.
Mitigation	Creation of modified grassland is proposed to address the loss of grassland. Further, areas of mixed scrub and hedgerow have been provisioned. Such enhancements satisfy all trading rules.
Offset	N/A: net gain is achieved within the red line boundary.

Appendix 1: Baseline Habitat Plan



Appendix 2: Post-Development Habitat Plan



Proposed Site Plan - Scale 1:500

The aerial view shows a residential area with several houses. A red boundary outlines the proposed development site. Key features include:

- Existing Buildings:** Several houses are shown, some labeled as "New Hedge" or "Created Mixed".
- Landscaping:** Various trees and shrubs are indicated, such as "Hedgehog hole", "2m high close boarded fence", and "2m high stone wall".
- Parking:** A parking area is shown near the center of the site.
- Access Points:** Labels like "Refuse and recycling collection point" and "Existing passing point extended" indicate specific access areas.
- Color Coding:** Red shaded areas indicate the extent of original buildings, while other colors highlight new developments.

Notes:

- All dwellings to have refuse storage to rear of dwellings. This is Wiltshire Council's requirement. Max 180ltr black refuse bin. 180ltr should recycle bins and also black recycling bins.
- C/S - 2 x 4.5m Secure by Design cycle storage.
- Note: Hibernum/In accordance with Amphibian and Reptile Group (ARSG) Advice Note 10.
- Bat Note: To avoid a detrimental impact on bats using the site, there will be no increased light up-lighting to the corridors where bats are most likely to roost and commute, or nesting features. Lighting will be kept to a low level. To avoid a detrimental impact on bats using the site, the following measures will be implemented within the lighting scheme:
 - Minimize light spill through careful siting, positioning and selection of luminaires.
 - LED luminaires will be used where possible due to their sharp cut off lower intensity and dimming capacity.
 - Lighting will have no upward spill.
 - Warm white luminaires with peak >5SDim. UV lighting will be avoided.
 - Reduce the light intensity to the minimum required for safety and security.
 - Where security lamps are used these will use a trigger to illuminate them (e.g. infra-red detector), and switch off after a short period, rather than remaining on all night.

Proposed materials

Boundary treatments	Roof	Hard landscaping	Miscellaneous
2m high close boarded fences to rear of dwellings (brown line)	Terracotta profile roof tile.	Tarmac road to driveway and parking.	Single-hole Secure by Design shed storage to all properties.
2m high stone wall	Slate roof tile.	Buff coloured paving slabs to entrances and rear gardens.	Wall mounted car charger on all plots.
Fencing	Black re-inforced goods.		Shed: Manxhorse Swift brick.
Planting to ecological report to allow for onsite BNG.	Black coffees with exposed rubber feet.		Shed: Schwegler 20' fuel tube.
Existing tree retained.	Conservation rooflights.		Hedgehog hole
Proposed tree to allow for onsite BNG.			2Fas: Istock bee brick.
Hawthorn/Hard Maple/Spindle Round hedge to allow for onsite BNG.			
Proposed hedge - Linear 4-6m			

Appendix 4: Headline BNG Results

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	0.14
	<i>Hedgerow units</i>	0.20
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	31.67%
	<i>Hedgerow units</i>	12.99%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
<i>Area habitat units</i>	10.00%	0.43	0.48	0.00
<i>Hedgerow units</i>	10.00%	1.52	1.68	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

Modified Grassland; assessed using 'Grasslands Low Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria:		Condition Achieved (Y/N)	Notes/Justification
A	There must be 6-8 vascular plant species per m ² , including at least 2 forbs. NB - this criterion is essential for achieving moderate condition.	N	There are 5 vascular plant species per m ²
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 vertebrates and invertebrates to live and breed.	N	Sward height is <7cm in all three areas.
C	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	No scattered scrub present (less than 20% coverage).
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Y	Physical damage present in less than 5% of total grassland area.
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Y	Bare ground cover between 1% and 10%.
F	Cover of bracken less than 20%.	Y	No bracken observed (less than 20% coverage).
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	Absence of invasive species.
Essential criterion 1 achieved (Y/N)			N
Number of criteria passed			5

Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
Passes 6 or 7 of 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 of 7 criteria including passing essential criterion A	Moderate (2)		
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion A	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	The habitat doesn't have a varied vegetation structure.
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	The habitat parcel doesn't contain different plant species.
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	No invasive species detected
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)	✓	

Urban 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	All trees are 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).	Y	All 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	Only T6 is mature.
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.	Y	Little to no evidence of adverse anthropogenic impacts; all trees have retained >75% of their expected canopy.

E	Natural Ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y	Natural ecological niches are present such as surface wounds, and peeling bark and moss.
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			5
Condition Assessment Result		Condition Assessment Score	Score Achieved x/✓
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)	

Native Hedgerow with Trees; assessed using 'Hedgerow' habitat type condition sheet:

Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D & E)	Criteria (the minimum requirements for 'favourable condition'	Description	Condition Achieved (Y/N)	Notes/Justification
Core groups - applicable to all hedgerow types				
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	Y	Hedgerow height is >1.5m.

		indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). 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).	Y	Hedgerow width is >1.5m
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).	Y	Gap between ground and base of canopy is >0.5m for >90% 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).	Y	Gaps make up <10% of total length and no canopy gaps >5 m

		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).		
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.	Y	There is >1m width of undisturbed ground
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	Species present are indicative of nutrient enrichment of soils in the form of common nettles.
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 damage caused by human activities	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).	Y	>90% of hedgerow and understorey is free of damage caused by human activities.
E1. Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	N	There is only one age class of tree present
E2. Tree Health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). 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.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	Y	At least 95% of hedgerow trees are in healthy condition.
Condition categories for hedgerows with trees				
Category	Maximum number of attributes that can fail to meet 'favourable'	Weighting (score)		

	condition' criteria in Table TS1-2		
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3	
Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (e.g., fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2	
Poor	Fails a total of more than 5 attributes; OR <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1	
Score achieved:	Good		

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

Modified Grassland; assessed using 'Grasslands Low Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria:		Condition passed (Yes or No)	Notes/Justification
A	There must be 6-8 vascular plant species per m ² , including at least 2 forbs. Note – this criterion is essential for achieving moderate condition.	N	Fewer than 6 vascular plant species per m ² based on proposed seed mix (5 species within).
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 vertebrates and invertebrates to live and breed.	N	Habitat anticipated to be regularly mown.
C	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	No scattered scrub anticipated.
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N	Physical damage anticipated via vehicle usage.
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	N	Bare ground anticipated due to vehicle and pedestrian access.
F	Cover of bracken less than 20%.	Y	No bracken anticipated.
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	No invasive species anticipated.
Essential criterion achieved (Y/N)			N
Number of criteria passed			3
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Passes 6 or 7 of 7 criteria including passing essential criterion A		Good (3)	
Passes 4 or 5 of 7 criteria including passing essential criterion A		Moderate (2)	

Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion A	Poor (1)	✓	
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Mixed scrub; 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	Proposed species anticipated to closely match 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	Mature shrubs are not anticipated.
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.	N	Well-developed edge is not anticipated.
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	N	Natural openings are not anticipated.
Number of criteria passed			2
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)	✓

Native 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). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).	Y	Hedgerow anticipated to average ~1.5m in 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).	Y	Hedgerow anticipated to average ~1.5m 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.	Y	Gaps anticipated to be <0.5m for >90% of length.

		Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).		
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 anticipated.
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	Some areas of disturbed ground are anticipated due to vehicle and pedestrian usage of grassland surrounding the proposed hedge.
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	Plants indicative of nutrient enrichment anticipated to be <20% due to overseeding of grassland.
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 anticipated.

D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).	Y	>90% of hedgerow and understorey is anticipated to be free of damage caused by human activities.
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</u> in more than one functional group (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</u> in more than one functional group (e.g. fails attributes A1, A2, B1, and B2 = poor condition)	1		
Score achieved:	Good			