

Baseline Biodiversity Net Gain Assessment

Survey site:

Land at Pound Farm, Bedford Road, Ickleford, Hitchin, North Hertfordshire, SG5 3RS

Client:

Bugler Homes Ltd

Survey date:

28th November 2025

Last updated:

04th February 2026

Project:

This report is prepared to inform a planning application with the North Hertfordshire District Council.

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	Harry Brindle, BSc (Hons), Consultant Ecologist	28/11/2025
Final	1.0	Harry Brindle, BSc (Hons), Consultant Ecologist	12/12/2025
Updated	2.0	Harry Brindle, BSc (Hons), Consultant Ecologist	04/02/2026

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.

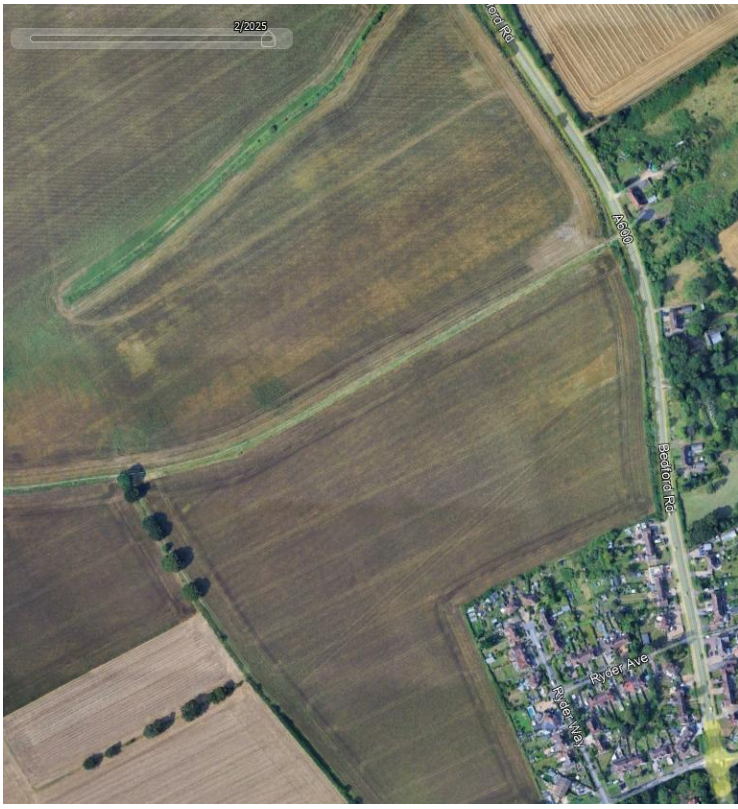
Arbtech cannot be held responsible for any project management failures, delays or unforeseen costs arising from failure to read and ensure understanding of the content with in, nor is Arbtech responsible for any adverse outcomes arising from failure to account for ecological advice given at any stage 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 proposed development plan in Appendix 2, headline BNG results in Appendix 3, and condition assessments in Appendix 4. The survey site is centred on National Grid Reference TL 17506 31634 and has an area of approximately 20ha. The site is a large agricultural field south of Pound Farm, with the eastern boundary following the Beford Road. It is situated on the outskirts of Ickleford, north of Hitchin. There are scattered trees within the site as well as native hedgerow extending into the local garden landscape. Aerial imagery shows the local landscape to have an agricultural landscape, with several very small woodland swathes in close proximity to the site. Many minor watercourses can be seen within close proximity to site as well as the River Oughton. Such features likely enhance the area for a variety of species, including bats, amphibians and reptiles. The site is situated upon slightly acid loamy and clayey soils with impeded drainage upon the Gault Formation – mudstone. This report should be read in conjunction with the following documents: ❖ Statutory BNG Metric - Land at Pound Farm, SG5 3RD – v2 (Arbtech Consulting Ltd., 2025) ❖ Proposed Plan (2025) ❖ Preliminary Ecological Appraisal (PEA) - Land at Pound Farm, SG5 3RD – v1 (Arbtech Consulting Ltd., 2025)
Executive Summary
In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 31.26 will need to be achieved. To achieve a +10% biodiversity net gain for linear-based habitats, a minimum linear-based unit score of 0.73 will need to be achieved. To achieve a +10% biodiversity net gain for watercourse habitats, a minimum linear-based unit score of 0.81 will need to be achieved. Completed BNG part 2 calculations should be carried out to determine net gain outcomes as a result of the proposed development. The proposed development needs to be compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024) for a minimum biodiversity net gain of +10% to be achieved for both area and linear-based habitat units, upon satisfying all trading conditions. In line with the Statutory Biodiversity Metric User Guide (2024), any loss of a habitat must be replaced on a like-for-like or like-for-better principle. To maximise the biodiversity value of the site itself, the following alterations to the current landscaping proposals could be considered:

- The watercourse units are likely to natural improve due to the creation of wet woodland and natural habitat along the southern bank of the ditch. This will improve the riparian zone, meaning there will be less encroachment.
- The habitats on site are of low value, however they take up a large area which is why the baseline units appear to be high. It is likely that the habitat proposed within the indicative landscape plan will compensate for the units required.
 - This will include areas of modified and neutral grassland, tree planting, woodland creation, native scrub planting, and hedgerows.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	3rd November 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 June 2021 and February 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 3 rd July 2025.
BNG Target Uplift	+10%
National Character Area (NCA)	110 - Chilterns
Strategic Significance	Hertfordshire Nature Recovery Partnership and the Local Nature Recovery Strategy
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	0.0675	A short artificial track that runs through the centre of the site.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Cereal crops	11.6925	The dominant habitat of the site is other cereal crop which makes up the entire internal area of the site other than the footpath. The crop is consistent throughout the whole site in type and length. The length was about 3 inches at the time of the survey.		
Modified grassland	0.3726	Modified grassland was observed as edges to the footpath separating the northern and southern sides of the site. This area receives a moderate amount of footfall and is used as a private access road occasionally.	Poor: Fails essential criteria A.	
Bramble scrub	0.2736	A short area of bramble scrub was present in a ten-metre gap in the native hedgerow	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	
Rural tree	0.2669	A group of tree located along the western boundary of the site comprising 2 small, 2 medium, 2 large and 2 very large trees.	Good: passes 5 of 6 criteria.	

Linear-Based Habitats (B-1)				
Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Native hedgerow	0.1101	Native species dominated hedgerow along the southern boundary of the site and backing onto private garden. Native species dominated hedgerow along the eastern boundary of the site and backing onto Bedford Road.	Good: Passes 7 of 8 criteria	Low Strategic Significance
Watercourse-Based Habitats (C-1)				
Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Ditches	0.2454	A ditch that runs along the north of the site.	Poor: Passes 4 of 8 criteria	Low Strategic Significance

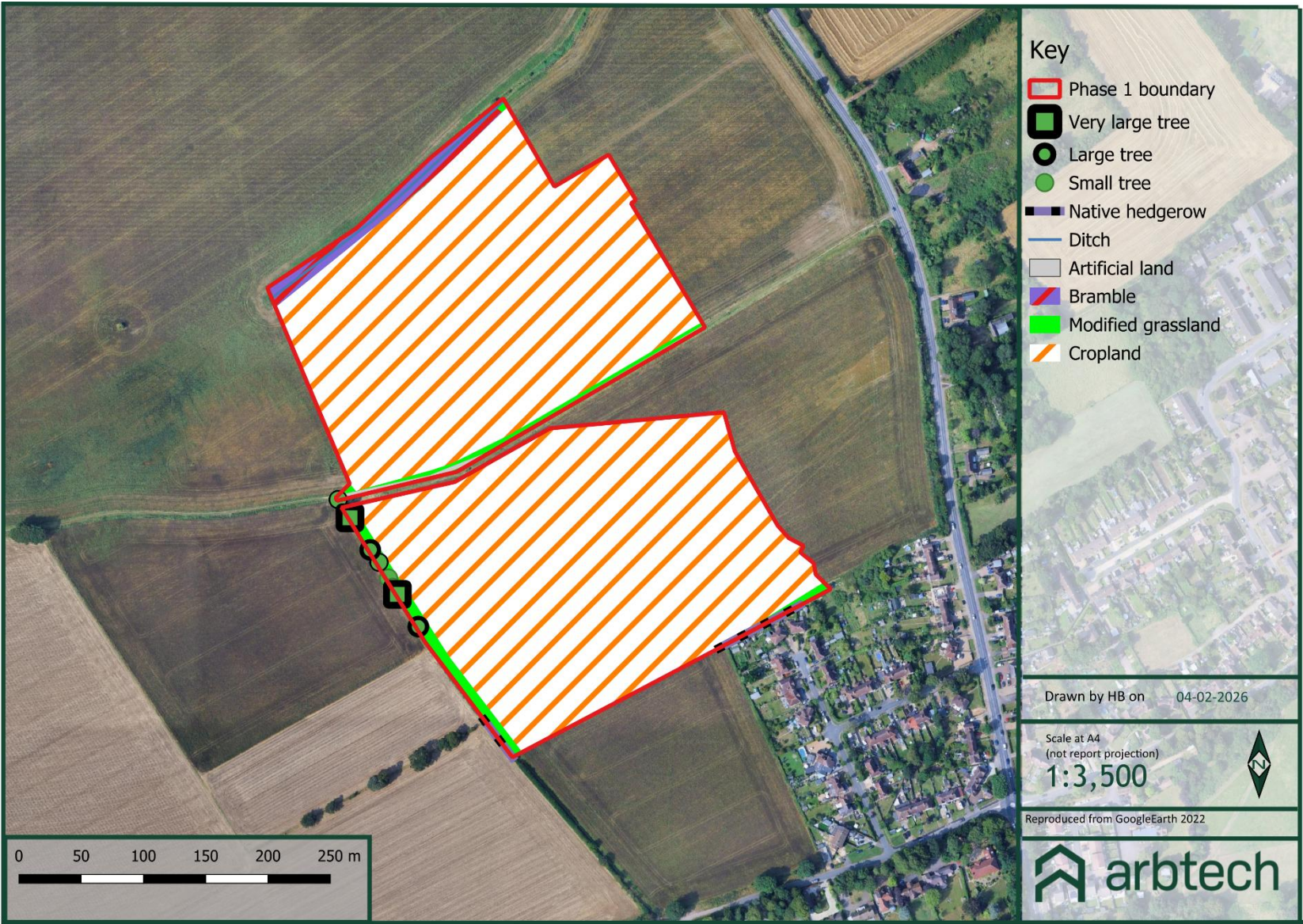
Biodiversity value of the site

		Biodiversity Units		
		Area-Based	Linear-Based	Watercourse-Based
On-Site	Baseline	28.43 units	0.66 units	0.74 units
Off-Site	Baseline	N/A	N/A	N/A

Results, Discussion, and Next Steps

BNG Informative	
Results Recommendations and Next Steps	In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 31.26 will need to be achieved. To achieve a +10% biodiversity net gain for linear-based habitats, a minimum linear-based unit score of 0.73 will need to be achieved. To achieve a +10% biodiversity net gain for watercourse habitats, a minimum linear-based unit score of 0.81 will need to be achieved. Completed BNG part 2 calculations should be carried out to determine net gain outcomes as a result of the proposed development. The proposed development needs to be compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024) for a minimum biodiversity net gain of +10% to be achieved for both area and linear-based habitat units, upon satisfying all trading conditions. In line with the Statutory Biodiversity Metric User Guide (2024), any loss of a habitat must be replaced on a like-for-like or like-for-better principle. To maximise the biodiversity value of the site itself, the following alterations to the current landscaping proposals could be considered: • The watercourse units are likely to natural improve due to the creation of wet woodland and natural habitat along the southern bank of the ditch. This will improve the riparian zone, meaning there will be less encroachment. • The habitats on site are of low value, however they take up a large area which is why the baseline units appear to be high. It is likely that the habitat proposed within the indicative landscape plan will compensate for the units required. ○ This will include areas of modified and neutral grassland, tree planting, woodland creation, native scrub planting, and hedgerows.

Appendix 1: Baseline Habitat Plan



Appendix 2: Proposed Development Plan



Appendix 3: Headline BNG Results

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

On-site baseline	Area habitat units	28.43
	Hedgerow units	0.66
	Watercourse units	0.74

Appendix 4: Baseline Habitat Condition Assessment Sheets

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition.	No	
	Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m ² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.		
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.	yes	
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	yes	
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.	yes	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	yes	
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	yes	
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	yes	
Essential criterion achieved (Yes or No)			
Number of criteria passed			
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved */✓	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)		
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	Yes	

Condition Sheet: INDIVIDUAL TREES Habitat Type

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	
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	
C	The tree is mature (or more than 50% within the block are mature) ¹ .	yes	
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	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	no	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	yes	
Number of criteria passed			
Condition Assessment Result (out of 6 criteria)		Condition Assessment Score	Score Achieved x/✓
Passes 5 or 6 criteria		Good (3)	yes
Passes 3 or 4 criteria		Moderate (2)	
Passes 2 or fewer criteria		Poor (1)	
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			

Condition Sheet: INDIVIDUAL TREES Habitat Type

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	
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	
C	The tree is mature (or more than 50% within the block are mature) ¹ .	no	
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	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	no	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	yes	
Number of criteria passed			
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)	yes
Passes 2 or fewer criteria		Poor (1)	
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			

Condition Sheet: DITCH Habitat Type

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	no	
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	no	
C	There is less than 10% cover of filamentous algae and or duckweed <i>Lemna</i> spp. (these are signs of eutrophication).	yes	
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	no	
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	yes	
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	no	
G	Less than 10% of the ditch is heavily shaded.	yes	
H	There is an absence of non-native plant and animal species ¹ .	yes	
Number of criteria passed			
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved x/✓	
Passes 8 criteria	Good (3)		
Passes 6 or 7 criteria	Moderate (2)		
Passes 5 or fewer criteria	Poor (1)	yes	

Condition sheet: HEDGEROW Habitat Types

Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D and E)	Criteria – the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)	Notes (such as 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 the 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).	yes	
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 (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >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).	yes	
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).	yes	
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).	yes	
C1. Undisturbed ground and perennial vegetation	>1m 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 hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is 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 hedgerow. This criterion recognises the value of the hedgerow 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.	no	
C2. Nutrient-enriched 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, does not exceed the 20% cover threshold.	yes	
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 3 of WCA) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ¹ , as well as the BSBI website ² where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ³ .	yes	
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 (for example, excessive hedgerow cutting).	yes	

Condition categories for hedgerows without trees

Category	Category Requirements	Metric 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 (for example, 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 (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1
Score achieved:		Good