



Biodiversity Net Gain Assessment

Premier inn Manchester (West Didsbury) Christie Fields Business Park, Derwent
Avenue, Manchester M21 7QS

Whitbread Group PLC

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Industry Guidelines and Standards

This report has been written with due consideration to:

- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management, Construction Industry Research and Information Association & Institute of Environmental Management and Assessment (2019). Biodiversity Net Gain – Good Practice Principles for Development.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by Whitbread Group PLC to undertake a Biodiversity Net Gain (BNG) Assessment at Premier Inn Manchester (West Didsbury), Manchester M21 (hereafter referred to as “the site”). The assessment was required to inform a planning application with the Manchester City Council. The proposal is described as the demolition of an existing public house and construction of a new structure to provide additional hotel rooms, along with internal renovations to the existing hotel to provide a breakfast room (hereafter referred to as “the proposed development”).

Area Based Habitat Units

The baseline habitat value of the site is 1.03 units, comprising buildings, hard standing, introduced shrubs, modified grassland and urban trees.

The post development habitat value of the site is 1.3 units, comprising the:

- ❖ Retention of exiting shrubs
- ❖ Retention of exiting trees
- ❖ Creation of introduced shrubs
- ❖ Creation of mixed scrub
- ❖ Creation of other neutral grassland
- ❖ New tree planting

This results in a net change in biodiversity of 26% (i.e. a net gain).

Linear-Based Habitat Units

The baseline linear-based habitat value of the site is 0.11 units, comprising of non-native ornamental hedgerow.

The post development habitat value of the site is 0.26 units, comprising the:

- ❖ creation of 0.01 units new native hedgerow
- ❖ retention of existing non-native ornamental hedgerow (0.11 units)

This results in a net change in biodiversity of 17.30% (i.e. a net gain).

A Biodiversity Net Gain (BNG) Management Plan 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.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Whitbread Group PLC to undertake a Biodiversity Net Gain (BNG) Assessment at Premier inn Manchester (West Didsbury), Manchester M21 7QS (hereafter referred to as “the site”). The assessment was required to inform a planning application with the Manchester City Council. The proposal is described as the demolition of an existing public house and construction of a new structure to provide additional hotel rooms, along with internal renovations to the existing hotel to provide a breakfast room. (hereafter referred to as “the proposed development”). A plan showing the proposed development is provided in Appendix 1.

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

- BNG Metric - Premier Inn, Manchester (West Didsbury), M21 7QS - v2 – 200624
- Preliminary Ecological Appraisal and Preliminary Roost assessment for the site (Arbtech 2024)
- BS5837 - Premier Inn West Didsbury - Arbtech TSR 01 - 07-06-24

1.2 Site Location, Geology and Landscape Context

The rectangular survey site is centred on National Grid Reference SJ 82963 92139 and has an area of approximately 0.7ha. The site comprises two buildings including a hotel and a public house, with significant areas of hardstanding, along with sections of ornamental planting and modified grassland, that border the site. The site is surrounded by residential development to the east, south and west, and a cemetery to the north. Major commuter roads are also adjacent to the site on the northern and eastern boundaries. A site location plan is provided in Appendix 2.

1.3 BNG Informative

BNG is a specific, measurable outcome of project activities that deliver demonstrable and quantifiable benefits to biodiversity compared to the baseline situation. In order to achieve BNG, a project must be able to demonstrate that it has followed all 10 of the Principles of Biodiversity Net Gain (as outlined in the British Standard 8683:2021 Process for Designing and Implementing Biodiversity Net Gain).

The legalised Environment Act (2021) requires developments in England to demonstrate a measurable net gain in biodiversity and sets a target of a minimum of 10% BNG for all developments. It also stipulates that a management plan with a minimum 30-year term, should be adopted to ensure biodiversity net gain can be delivered. The Environment Act (2021) states biodiversity net gain is mandatory for sites over 0.5ha as of February 2024. The requirement for biodiversity net gain is also enshrined within the National Planning Policy Framework (NPPF, 2021). The DEFRA Statutory Biodiversity Metric is the widely accepted tool used to calculate BNG. It enables the calculation of habitat value pre- and post-development in order to determine the overall change in biodiversity value as a result of the proposed development. The Biodiversity Metric has separate BNG assessments for areas of habitat, hedgerows and watercourses. The biodiversity value of a site should be maximised. However, it may not always be possible to achieve a 10% biodiversity net gain within a site and therefore the Statutory Biodiversity Metric can also account for offsite habitat creation, where land is

available. Alternatively, developers can seek to provide an agreed financial contribution to an appropriate third party (such as the Local Authority, the UK Government or another landowner) to deliver the required biodiversity net gain elsewhere on their behalf.

2.0 Methodology

2.1 Baseline Biodiversity Value

The baseline BNG Calculation was informed by Preliminary Ecological Appraisal and Preliminary Roost Assessment for Premier Inn Manchester (West Didsbury), Manchester M21 7QS (Arbtech, 2024). A baseline habitat plan is provided in Appendix 3.

Habitat Classification

The PEA classified the habitats on site according to The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023).

Habitat Area/Length

The area or length of each habitat was calculated using qGIS software. In calculating the area or length of each habitat, habitats which occur as two or more isolated parcels across the site were combined, where they were deemed to be of a similar composition and condition. Distinctions were made between habitats to be retained (i.e. left as found in baseline), enhanced (i.e. improved condition) or lost (i.e. destroyed by proposed development).

Areas of scattered trees were calculated using the Tree Helper tool within the Statutory Biodiversity Metric. Class sizes for urban trees are set out in Table 8-1 of the Statutory Biodiversity Metric User Guide (Natural England, 2024).

Habitat Condition

Habitat condition was assessed using the relevant condition assessment sheets found in the Statutory Biodiversity Metric User Guide (Natural England, 2024).

Strategic Significance

Strategic significance was assigned for each habitat based upon a review of the following:

- Ecological value
- Function within the landscape
- Any site or habitat allocations under Manchester's Local Development Framework and the addendum to Manchester Core Strategy 2024

2.2 Post Development Biodiversity Value

The post development BNG Calculation was informed by the proposed development plan which is included in Appendix 1. A post development habitat plan is provided in Appendix 4.

Habitat Classification

Proposed habitats were translated to their equivalents in the UK Habitat Classification using The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023) and the information provided within the proposed development plan.

Habitat Area/Length

The area or length of each proposed habitat was calculated using qGIS software. In calculating the area or length of each habitat, habitats which occur as two or more isolated parcels across the site were combined, where they were deemed to be of similar composition and condition. Distinctions were made between habitats to be retained (i.e. left as found in baseline), enhanced (i.e. improved condition) or newly created.

Areas of scattered trees were calculated using the Tree Helper tool within the Statutory Biodiversity Metric. Class sizes for urban trees are set out in Table 8-1 of the Statutory Biodiversity Metric User Guide (Natural England, 2024).

Habitat Condition

Target habitat condition for each proposed habitat was determined assessed using the Temporal Multipliers Tool and the Enhancement Temporal Multipliers Tool included in the Statutory Biodiversity Metric spreadsheet as well as the relevant condition assessment sheets found in the Statutory Biodiversity Metric User Guide (Natural England, 2023). This is based on the assumption that a 30-year management plan will be adopted for the site.

Strategic Significance

Strategic significance was assigned for each proposed habitat based upon a review of the following:

- Likely ecological value
- Function within the landscape
- Any site or habitat allocations under the under Manchester's Local Development Framework and the addendum to Manchester Core Strategy 2024.

2.3 Limitations

There were no specific limitations to the assessment.

3.0 Results

3.1 Baseline Habitats

Table 1 details the baseline habitats present within the site along with their area/length, condition and strategic significance. A full condition assessment for each habitat (where relevant) is provided in Appendix 5a.

Table 1: Baseline Biodiversity Value

Type	Habitat	Area / Length	Description	Condition Assessment	Strategic Significance
Area-Based	u1b5 - Buildings	0.17363ha	There are two buildings on site, described as B1 and B2. B1 is a four-storey brick-built structure with a black tile pitched roof structure. There are timber eaves present throughout the structure along with aluminium/uPVC windows. The upper levels of structure contain uPVC panelling, along with a central section. Concrete cladding is also present externally. Overall, the building is in excellent condition throughout. Internally, the roof structure comprises a modern timber frame, with plastic roof lining that is in excellent condition. B2 is a single pitch, two-storey brick-built structure. It is identical in its structural composition to that of B1, with a black slate roof present. As with B1, B2 is in excellent condition and well maintained, in line with its keeping as a regularly used public house and hotel complex.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy
	u1b6 - Other developed land	0.41279ha	The site is dominated by areas of tarmacked roads and carparking spots, along with paved areas and decking for amenity use for the users of the hotel and public house.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy.
	g4 - Modified grassland	0.07617ha	On the northern boundary of the site is a strip of modified grassland that has been intensively managed to maintain its amenity value for the hotel. Species composition is poor, being dominated by perennial ryegrass, with an extremely limited herbaceous layer.	Poor: passes 5 of 7 criteria excluding essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance Area/compensation not in local strategy.
	847 - Introduced shrubs	0.04788ha	Throughout the site on the northern and southern boundaries along with in some central sections of the site are small patches of ornamental shrubs. No species is dominant with a number of non-native introduced species present such as climbing euonymus, weigelia and cabbage palm present. Some native species are	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity	Low Strategic Significance

			also present including privet and willow. These shrubs are regularly managed to maintain their ornamental value.	Condition Assessment Supplement.	Area/compensation not in local strategy.
	Urban trees	0.0977ha	Area based on 16 small trees and 2 medium from Arbtech Tree Constraints Plan (2024)	Moderate: passes 4 of 7 criteria Assessed using the 'Individual Trees' habitat type condition sheet.	Low Strategic Significance Area/compensation not in local strategy.
Linear-Based	h2b – Non-native and ornamental hedgerows	0.106km	Throughout the site are several stretches of ornamental hedgerows that comprise a range of species, usually non-native. These hedgerows are extensively managed to maintain their amenity value and as a result are approximately 1m high throughout. Species largely comprise laurel, with some privet also present in sections.	Habitat condition pre-determined as ' Poor ' as detailed within the Statutory Biodiversity Metric Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy.

3.2 Post Development Habitats

Table 2 details the post development habitats present within the site along with their area/length, condition and strategic significance. An assessment of the anticipated condition for each habitat (where relevant) is provided in Appendix 5b, which is based on the assumption that a 30 year management plan will be implemented for the site. The proposed development will result in the gain of 0.27 habitat units and 0.01 hedgerow units.

Table 2: Post Development Biodiversity Value

Habitat			Area / Length	Description	Target Condition	Strategic Significance
Created	Area-Based	U1b5 – Building	0.0717ha	The proposed building extension will provide additional rooms and will replace the demolished building at the southeast of the site.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy
		U1b6 – Other developed land; sealed surface	0.04ha	New carparking will be installed along with new paved areas around the new building.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy
		200 – Individual trees	0.0366ha	There will be 9 new tree plantings along the northeastern site boundary within the oversailing the wildflower meadow.	Moderate Passes 4 of 6 criteria. Assessed using 'Individual trees' habitat type condition sheet.	Low Strategic Significance Area/compensation not in local strategy
		H3h – Mixed scrub	0.0192ha	Mixed scrub will be planted in the southeast corner of the site to the southern elevation of the new building. Identified as native but species have not been specified in the proposed plans.	Moderate: Passes 4 of 5 criteria Assessed using 'Scrub' habitat type condition sheet	Low Strategic Significance Area/compensation not in local strategy
		G3c – Wildflower meadow	0.0766ha	Proposed wildflower meadow will be planted to replace the existing modified grassland, species and seed mix have not been specified in the proposed plan.	Poor: Passes 4 criteria excluding criterion A and F. Assessed using the 'Grasslands	Low Strategic Significance Area/compensation not in local strategy

					Medium/High/Very High Distinctiveness' habitat type condition sheet	
	Linear-Based	H2b – Non-native ornamental hedgerow	0.019km	Proposed hedge planting will involve non-native hedge species, not specified in the proposed plan.	Habitat condition pre-determined as ' Poor ' as detailed within the Statutory Biodiversity Metric Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy
Retained	Area-Based	U1b5 - Building	0.09925ha	The building at the northern boundary of the site will remain as is and will not be affected by the development.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy
		U1b6 – Other developed land; sealed surface	0.3768ha	The majority of the carpark will remain as is, with new carparking being created.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy
		847 – Introduced shrub	0.02743ha	A small section of introduced shrub will be lost at the base of the newly created building in the southeast corner. It will be replaced by mixed scrub and new native hedgerows.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy
		Urban trees	0.0896ha	Two small trees (T04 and T10) to be removed. All other existing trees to be retained	Moderate: passes 4 of 7 criteria Assessed using the 'Individual Trees' habitat type condition sheet.	Low Strategic Significance Area/compensation not in local strategy.
	Linear-Based	H2b – Non-native ornamental hedgerow	0.106km	Existing hedgerows should not be impacted by the developed and conditions will remain the same as the base assessment.	Habitat condition pre-determined as ' Poor ' as detailed within the Statutory Biodiversity Metric Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy

3.3 Change in Biodiversity Value of the Site

Full details are provided in the Defra Statutory Biodiversity Metric.

Area Based Habitat Units

The baseline habitat value of the site is 1.03 units, comprising buildings, hard standing, introduced shrubs, modified grassland and urban trees.

The post development habitat value of the site is 1.3 units, comprising the:

- ❖ Retention of exiting shrubs
- ❖ Retention of exiting trees
- ❖ Creation of introduced shrubs
- ❖ Creation of mixed scrub
- ❖ Creation of other neutral grassland
- ❖ New tree planting

This results in a net change in biodiversity of 26% (i.e. a net gain).

Linear-Based Habitat Units

The baseline linear-based habitat value of the site is 0.11 units, comprising of non-native ornamental hedgerow.

The post development habitat value of the site is 0.26 units, comprising the:

- ❖ creation of 0.01 units new native hedgerow
- ❖ retention of existing non-native ornamental hedgerow (0.11 units)

This results in a net change in biodiversity of 17.30% (i.e. a net gain).

4.0 Recommendations to Deliver BNG**4.1 Discussion**

The current proposed plan results in a 26.51% net gain in habitat units and 17.30% net gain in hedgerow units. This is more than the 10% target of biodiversity net gain.

A Biodiversity Net Gain (BNG) Management Plan 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.

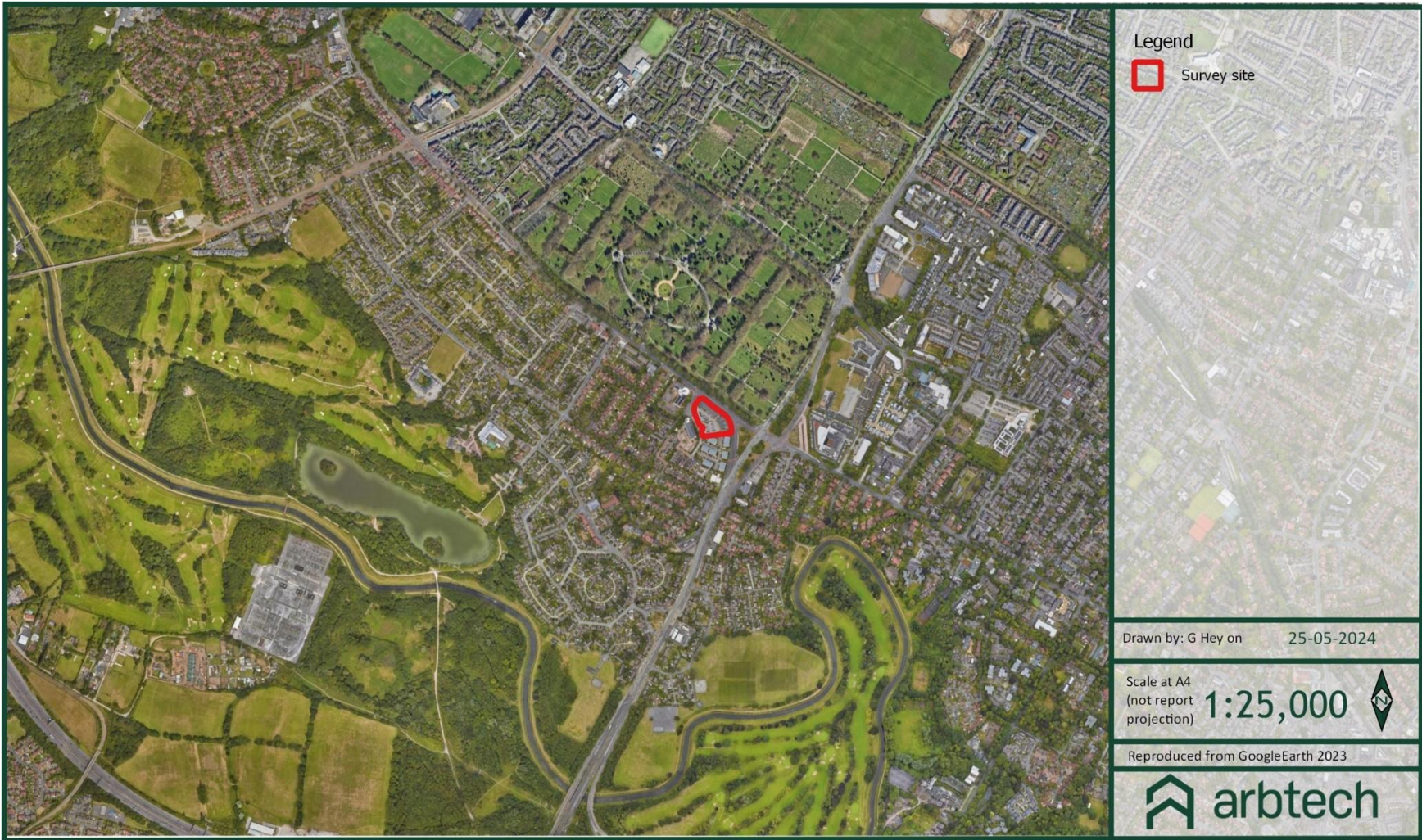
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Appendix 1: Proposed Development Plan



Appendix 2: Site Location Plan



Appendix 3: Baseline Habitat Plan



Appendix 4: Post Development Habitat Plan



Appendix 5a: Habitat Condition Assessment Sheets - Baseline

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	Fewer than 6 vascular plant species per m ² . Dominated by rye grass.
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	Regularly intensively mown, uniform sward height present.
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 1	Good (3)		
Passes 4 or 5 of 7 criteria including passing essential criterion 1	Moderate (2)		
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion 1	Poor (1)	✓	

Urban trees; assessed using 'Individual trees' habitat type condition sheet:

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	Mostly 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).	Yes	Individual trees
C	The tree is mature (or more than 50% within the block are mature) ¹ .	No	Largely young and semi-mature trees
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	Trees largely in good health
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No	Trees not of age to provide wildlife niches
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	Trees mostly over grassland shrubs
Number of criteria passed		4	
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)	√	
Passes 2 or fewer criteria	Poor (1)		

Appendix 5b: Habitat Condition Assessment Sheets - 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 (such as justification)
A	The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present. Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	N	Species mix not specified
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 ¹ .	Y	Cover of bare ground anticipated to not 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 ² 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 ³ (as listed on Schedule 9 of WCA ⁴) are present, this criterion is automatically failed.	Y	Physical damage anticipated to not exceed 5% of total area. No invasives anticipated.
Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	N	Species composition of seed mixes has not been specified.
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		N	
Number of criteria passed		4	
Condition Assessment Result		Condition Assessment Score	Score Achieved x/✓
Non-acid grassland Types (Result out of 6 criteria)			
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.		Good (3)	
Passes 3 - 5 criteria, including essential criterion A.		Moderate (2)	
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.		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 proposed tree plantings will be of native tree species
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	No mature trees on site.
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	Management anticipated to minimise adverse anthropogenic impacts; all trees expected to retain >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.	N	New tree plantings so there will be minimal features..
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			4
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 ; 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 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	Target conditions and proposed management for the hedgerow will enable to condition of the hedge to meet the required average height of 1.5m.
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	Target conditions and proposed management for the hedgerow will enable to condition of the hedge to meet the required average width of 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	Management anticipated to ensure gap between ground and base of canopy <0.5 m 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). 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	Management anticipated to maintain <10% canopy gaps <5m for each segment of hedgerow.

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	At least one side of the hedge will >1m of undisturbed ground with perennial herbaceous vegetation for >90% of length due to the proposed mixed scrub planting.
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	Management anticipated to ensure species indicative of nutrient enrichment remain <20%
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	Management anticipated to remove non-native invasive species
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	Management anticipated to ensure >90% of the hedgerow remains free of damage
Condition categories for hedgerows				
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 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 = 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	3	
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Mixed Scrub; assessed using 'Scrub' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as 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 ¹ , 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).	N	Species composition has not been specified.
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ²) shrubs are all present.	Y	Management anticipated to maintain a balance of all age classes.
C	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴) and species indicative of sub-optimal condition ⁵ 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 modified grasslands of good condition.
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Y	Scrub to be planted with open areas to create natural openings. Such openings anticipated to be under management.
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)	✓
Passes 2 or fewer criteria		Poor (1)	