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Biodiversity Net Gain Assessment

Survey site:

Kyngs Golf and Country Club, Market Bosworth, CV13 0AR

Client:

George Denny

Survey date:

23rd December 2024

Project:

This report is prepared to inform a planning application with the Hinckley and Bosworth Borough Council. The proposal is described as:
HYBRID planning application seeking Full Planning Permission for the Erection of a Golf Wellness Spa & Leisure Centre with associated works and an
Outline Planning Permission (all matters reserved excepted for access) for the Erection of up to 126 Golf Holiday Homes

Biodiversity Net Gain Assessment

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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 George Denny to undertake a Biodiversity Net Gain (BNG) Assessment at Kyngs Golf and Country Club, Market Bosworth, CV13 OAR (hereafter referred to as “the site”). The assessment was required to inform a planning application for HYBRID planning application seeking Full Planning Permission for the Erection of a Golf Wellness Spa & Leisure Centre with associated works and an Outline Planning Permission (all matters reserved excepted for access) for the Erection of up to 126 Golf Holiday Homes (hereafter referred to as “the proposed development”).

BNG change summary:

	Habitat area units	Hedgerow units	Watercourse units
Change in units	14.86%	N/A	-100%
Units required for a 10% net gain	1.23 units of scattered trees are required to meet BNG trading rules.	N/A	0.50 units

Areas of Habitat

The baseline habitat value of the site is 11.98 units, comprising 8.52 units of modified grassland, 0.14 units of bramble scrub, 0.71 units of ponds and 2.62 units of scattered trees.

The post development habitat value of the site is 13.76 units, comprising retained modified grassland (1.53 units), ponds (0.15 units) and scattered trees (0.90 units) as well as proposed Modified grassland (5.66 units), ponds (1.35 units), Mixed scrub (3.66 units) and scattered trees (0.49 units).

This results in a net change in biodiversity of 14.86% (i.e. a net gain).

However, current proposed plans do not satisfy BNG trading rules due to the loss of scattered trees.

Watercourses

The baseline habitat value of the site is 0.45 units, comprising ditches.

The post development habitat value of the site is 0 units.

This results in a net change in biodiversity of -100% (i.e. net loss).

Recommendations to meet BNG

Retain all trees on site or plan additional trees to satisfy BNG trading rules. Recreate the ditch lost to the construction of the spa. More information is available in section 4.2.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by George Denny to undertake a Biodiversity Net Gain (BNG) Assessment at Kyngs Golf and Country Club, Market Bosworth, CV13 0AR (hereafter referred to as “the site”). The assessment was required to inform a planning application for HYBRID planning application seeking Full Planning Permission for the Erection of a Golf Wellness Spa & Leisure Centre with associated works and an Outline Planning Permission (all matters reserved excepted for access) for the Erection of up to 126 Golf Holiday Homes (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:

- Defra Statutory Biodiversity Metric for Kyngs Golf and Country Club, Market Bosworth, CV13 0AR
- Preliminary Ecological Appraisal (PEA) for Kyngs Golf and Country Club, Market Bosworth, CV13 0AR (Arbtech, December 2024).

1.2 Site Location, Geology and Landscape Context

Northern development site

The northern development site is centred on National Grid Reference SK 39478 04129 and has an area of approximately 4.5ha. The site comprises modified grassland, scattered trees, bramble scrub, ponds and dry ditches that form bunkers across the golf course. The site is bordered by a brook lined with trees and bramble scrub to the north, deciduous woodland at the eastern end of the northern border and scrub to the west. The habitats to the south and east are similar to that within the development boundary and golf course.

Southern development site

The southern development site is centred on National Grid Reference SK 39665 03455 and has an area of approximately 1.06ha. The site comprises modified grassland, scattered trees, one pond and a dry ditch with ruderal vegetation. The site is bordered by further modified grassland with scattered trees of a similar nature to habitats within the development site that form the golf course. There is an access track directly to the west.

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 BS 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 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 PEA (Arbtech, December 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 14 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 the Hinckley and Bosworth Borough Council Local Plan 2006 to 2026

2.2 Post Development Biodiversity Value

The post development BNG Calculation was informed by a layout design (Housemartin Designs, November 2024) which is included in Appendix 1. A post development habitat plan is provided in Appendix 4.

Biodiversity Net Gain Assessment

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 layout design.

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 14 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 Hinckley and Bosworth Borough Council Local Plan 2006 to 2026

2.3 Limitations

The PEA survey was completed outside of the optimal survey period (April to October) for botanical species identification. However, due to the low value habitats affected on site (regularly mown modified grassland) that is maintained as a golf course, this is not considered to be a major limitation. No further limitations encountered during this 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

Unit type	Habitat	Area Length	Description	Condition Assessment	Strategic Significance
Habitat area units	Modified grassland	4.25804	For baseline conditions see Preliminary Ecological Appraisal (Arbtech, December 2024).	Poor	Low
	Bramble scrub	0.03384	For baseline conditions see Preliminary Ecological Appraisal (Arbtech, December 2024).	Condition Assessment N/A	Area/compensation not in local strategy
	Ponds (non-priority habitat)	0.08112	For baseline conditions see Preliminary Ecological Appraisal (Arbtech, December 2024).	Moderate	Medium Location ecologically desirable but not in local strategy
	Rural tree	0.2972	For baseline conditions see Preliminary Ecological Appraisal (Arbtech, December 2024). Sizes consist of 52 small trees, 3 medium trees and 1 large tree.	Moderate	Medium Location ecologically desirable by providing habitat for amphibians as well as a water source for local fauna but not in local strategy
					Medium Location ecologically desirable by providing suitable habitat for protected fauna such as bats as well as nesting birds but not in local strategy. Reference to the importance of scattered trees can be found within Space for Wildlife 2016 – 2026 (Leicester, Leicestershire and Rutland Biodiversity Action Plan)

Watercourse e units	Ditches	0.13311	For baseline conditions see Preliminary Ecological Appraisal (Arbtech, December 2024).	Moderate	Area/compensation not in local strategy/ no local strategy
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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 loss of the ditch as well as the majority of habitats present to the north site.

Table 2: Post Development Biodiversity Value

Unit type	Habitat	Area Length /	Description	Target Condition	Strategic Significance
Habitat area units	Modified grassland	Proposed: 1.21566 Retained: 0.76576	Areas of proposed grassland. Current seed mixture is unknown, it is recommended that a high quality mixture (such as EM2 Standard General Purpose Meadow Mixture) is used and planted in accordance to instructions to meet target condition. For retained see PEA.	proposed: Good Retained: poor	Low Area/compensation not in local strategy
	Ponds (non-priority habitat)	Proposed: 0.17055 Retained: 0.01669	Four ponds created to the north of the site amongst the holiday homes. For retained see PEA.	Moderate	Medium Location ecologically desirable by providing habitat for amphibians as well as a water source for local fauna but not in local strategy
	Mixed scrub	Proposed: 0.86231	Areas of mixed scrub that boarder the hardstanding (roads) to the north of the site. Current mix is unknown but is proposed as native. Recommended species include woody species that spread well such as alder, hawthorn, hazel or bramble.	Poor	Medium Location ecologically desirable by providing suitable habitat for protected fauna such as bats as well as nesting birds but not in local strategy. Reference to the importance of scrubland can be found within Space for Wildlife 2016 – 2026 (Leicester, Leicestershire and Rutland Biodiversity Action Plan)
	Developed land; sealed surface (Buildings)	Proposed: 1.28002	Proposed buildings including the holiday homes to the north of the site and proposed health spa.	N/A - Other	Low Area/compensation not in local strategy
	Developed land; sealed surface (Hardstanding)	Proposed: 0.06201	Proposed hardstanding for associated infrastructure.	N/A - Other	Low Area/compensation not in local strategy

Habitat area units	Urban tree	Proposed: 0.1466 Retained: 0.1018	36 small proposed trees to the north of the site amongst the holiday homes. Retained trees within the southern site including 16 small and 1 large tree. For description see PEA.	Moderate	Medium Location ecologically desirable by providing suitable habitat for protected fauna such as bats as well as nesting birds but not in local strategy. Reference to the importance of scattered trees can be found within Space for Wildlife 2016 – 2026 (Leicester, Leicestershire and Rutland Biodiversity Action Plan)
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3.3 Change in Biodiversity Value of the Site

Full details are provided in the Defra Statutory Biodiversity Metric. The headline results are presented in Appendix 6.

Areas of Habitat

The baseline habitat value of the site is 11.98 units, comprising 8.52 units of modified grassland, 0.14 units of bramble scrub, 0.71 units of ponds and 2.62 units of scattered trees.

The post development habitat value of the site is 13.76 units, comprising retained modified grassland (1.53 units), ponds (0.15 units) and scattered trees (0.90 units) as well as proposed Modified grassland (5.66 units), ponds (1.35 units), Mixed scrub (3.66 units) and scattered trees (0.49 units).

This results in a net change in biodiversity of 14.86% (i.e. a net gain).

However, current proposed plans do not satisfy BNG trading rules due to the loss of scattered trees.

Watercourses

The baseline habitat value of the site is 0.45 units, comprising ditches.

The post development habitat value of the site is 0 units.

This results in a net change in biodiversity of -100% (i.e. net loss).

4.0 Recommendations to Deliver BNG

4.1 Discussion

The current proposed plan results in a 14.86% net gain in habitat units and a 100% net loss in watercourse units. This is less than the 10% target of biodiversity net gain.

In order to satisfy trading rules for area based units an additional **1.23 units of scattered trees** is required.

Similarly, to achieve a +10% biodiversity net gain for watercourse units, a minimum watercourse unit score of **0.50** will need to be achieved. At present, there is a unit deficit of **0.50** units.

In order to achieve the required minimum 10% net gain in biodiversity as a result of the proposed development, the provision of additional or alternative landscaping should be explored and the proposed plans amended accordingly to either achieve a 10% net gain on site or to reduce off-site compensation requirements that may be required to achieve a 10% net gain.

4.2 Landscaping

To maximise the biodiversity value of the site itself, the following alterations to the current landscaping proposals could be considered:

- Retain all scattered trees presently on site. If this cannot be achieved a total of 90 small trees will be required (36 currently proposed on site).
 - These trees should be planted in ecological beneficial areas such as grassland or scrub areas. Trees should be planted in a productive season (summer or spring). At least 70% of the trees should be native and should be replaced if they are heavily damaged or destroyed. Native trees can be purchased here: <https://shop.woodlandtrust.org.uk/trees>.
- In order to satisfy watercourse units the ditch should be recreated around the rear (east) of the building. The ditch should be created to match the condition of the habitat currently on site.

Should these alterations be incorporated this BNG Assessment will need to be updated to accurately reflect the change in biodiversity value of the site pre- and post-development.

4.3 Biodiversity Offsetting

If the landscaping plans are not altered or if the above alterations still do not deliver a 10% net gain, the deficit will need to be delivered in a suitable offsite location i.e. biodiversity offsetting.

The deficit in scattered tree units can be made up by offsetting if the recommended landscaping above cannot be included within the development proposal.

According to the Defra Statutory Biodiversity Metric there is a unit deficit of 0.50 watercourse unit's habitat units and this will need to be provided to offset the loss in biodiversity and achieve a 10% biodiversity net gain.

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

4.4 Post Development

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.

4.5 Design Statement

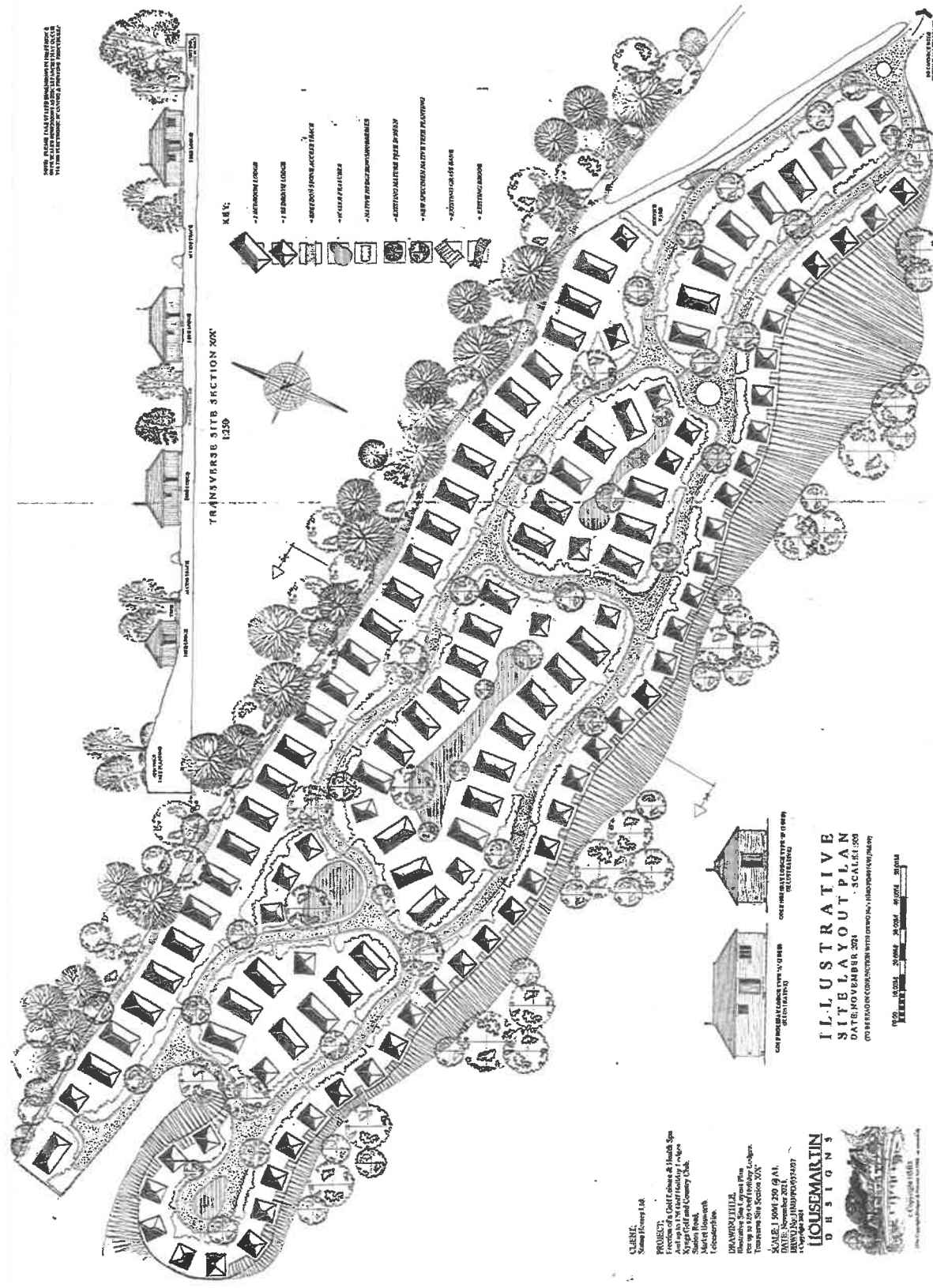
This report contains recommendations on measures for achieving BNG. These recommendations do not constitute a design for BNG. In submitting these recommendations, Arbtch Consulting has no Design Liability associated with these recommendations for BNG. The strategy sets out the criteria which the landscape team can use to design the creation and management of the site.

5.0 Bibliography

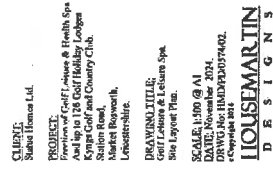
- Arbtch (2024) Preliminary Ecological Appraisal for Kyngs Golf and Country Club, Market Bosworth, CV13 0AR. December 2024.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- CIEEM-CIRIA-IEMA (2019) Biodiversity Net Gain – Good Practice Principles for Development.
- Housemartin Designs (2024) Site layout for Kyngs Golf and Country Club, Market Bosworth, CV13 0AR. November 2024.
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey a technique for environmental audit.
http://jncc.defra.gov.uk/PDF/pub10_handbookforphase1habitatsurvey.pdf
- Natural England (2024). The Statutory Biodiversity Metric (JP039).
- Natural England (2024). The Statutory Biodiversity Metric User Guide (JP039).
- Natural England (2024). The Statutory Biodiversity Metric Technical Annex 1 - Condition Assessment Sheets and Methodology (JP039).
- Natural England (2024). The Statutory Biodiversity Metric Technical Annex 2 – Technical Information (JP039).
- The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023)

Appendix 1: Proposed Development Plan

Northern site:



NOTES: PLEASE TAKE SPECIAL DIMENSIONS IN THE FIRST AND LAST DIMENSIONS AS THESE COMPANIES MAY VARY VIA THE ELECTRONIC SCANNING & PRINTING PROCESSES.

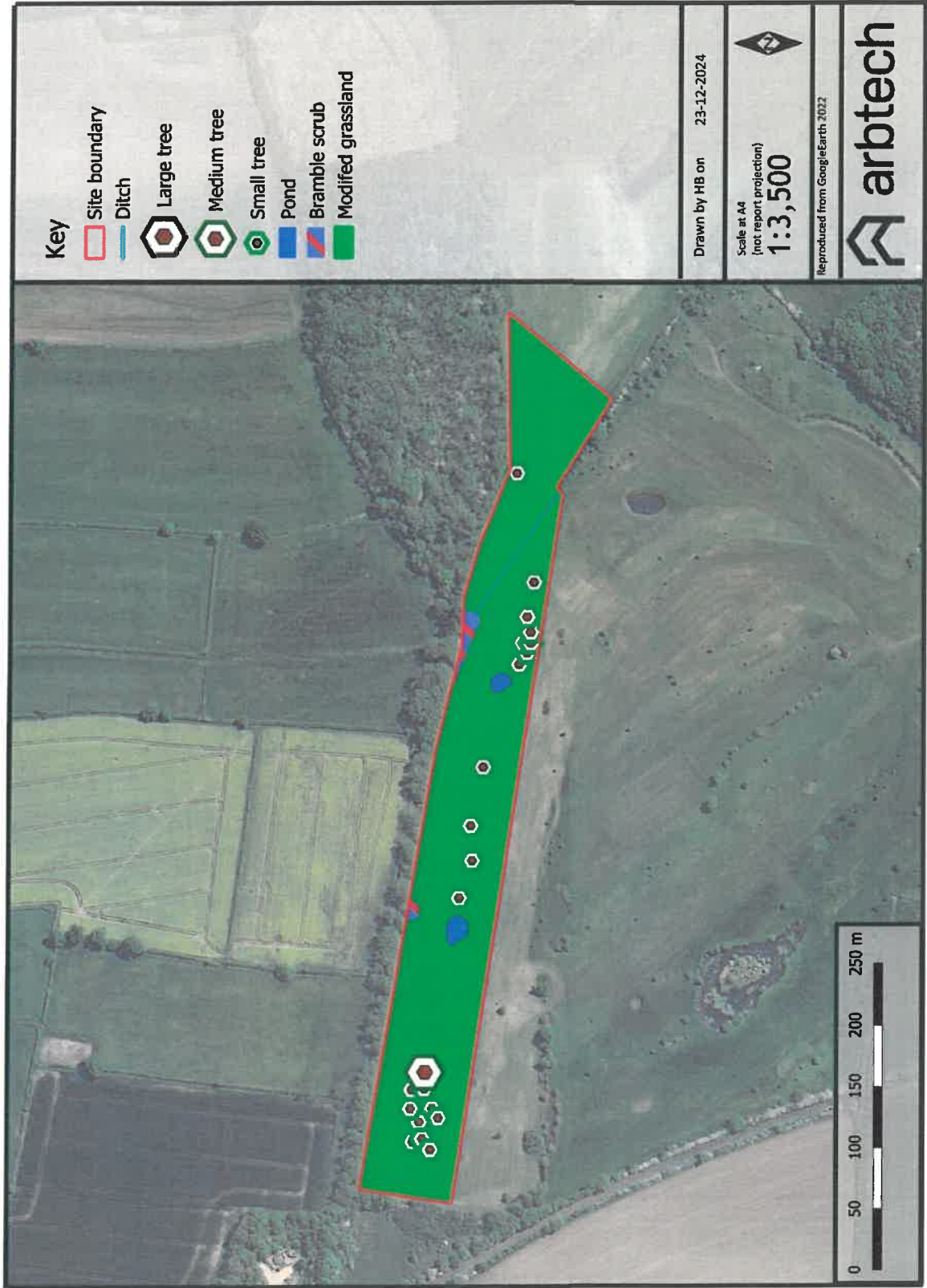


Appendix 2: Site Location Plan



Appendix 3: Baseline Habitat Plan

Northern site:

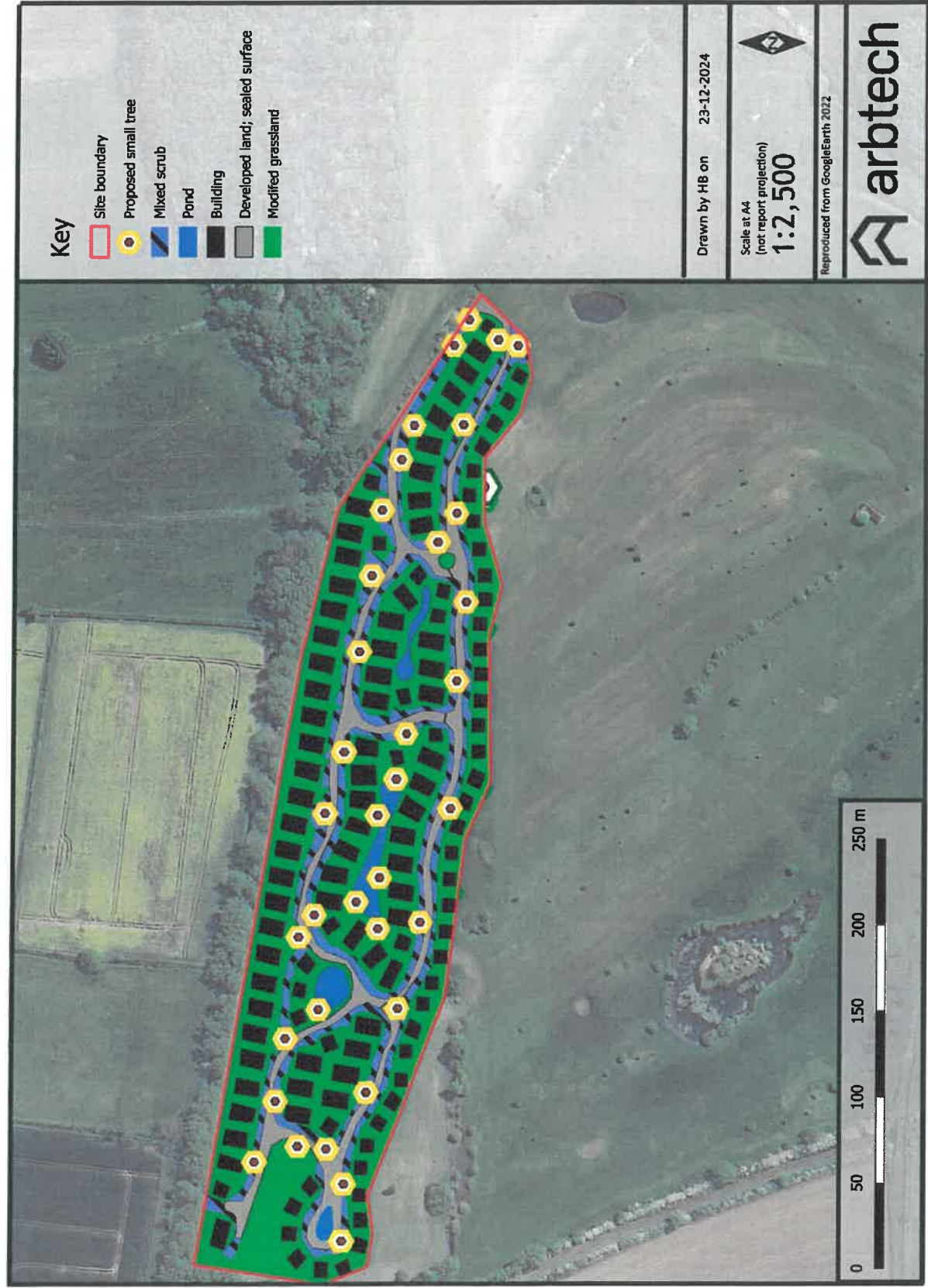


Southern site:



Appendix 4: Post Development Habitat Plan

Northern site:



Southern site:



Appendix 5a: Habitat Condition Assessment Sheets - Baseline

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: GRASSLAND Habitat Type (low distinctiveness)			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
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	
A	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 UK-Hab 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.	no	
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 .	no	
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 'VCA' ⁴).	yes	
		Essential criterion achieved (Yes or No)	
		Number of criteria passed	
		Score Achieved x/7	
Condition Assessment Result (out of 7 criteria)		Condition Assessment Score	
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: DITCH Habitat Type			
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	
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.	yes	
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.	yes	
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.	yes	
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.	no	
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)	yes	
Passes 5 or fewer criteria	Poor (1)		

Appendix 5b: Habitat Condition Assessment Sheets - Proposed

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) [†] .	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			
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	
Condition Assessment Criteria			
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Criterion passed (Yes or No)	Notes (such as justification)
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.	yes	
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.	yes	
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.	no	
H	There is an absence of non-native plant and animal species ¹ .	yes	
Condition Assessment Result (out of 8 criteria)		Number of criteria passed	
Passes 8 criteria		Condition Assessment Score	
Passes 6 or 7 criteria		Good (3)	
Passes 5 or fewer criteria		Moderate (2)	
		Poor (1)	
		Score Achieved x/4	

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
There are 6-9 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.		yes	
A	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)?	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 x/7
Passes 6 or 7 criteria including passing essential criterion A		Good (3)	yes
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)	

Condition Sheet: SCRUB Habitat Type

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range).¹ - At least 80% of scrub is native, - There are at least three native woody species², - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i>, common juniper <i>Juniperus communis</i>, sea buckthorn <i>Hippophae rhamnoides</i> (only in its restricted native range), or box <i>Buxus sempervirens</i>, which can be up to 100% cover).		no	
A			
Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.		no	
B			
There is an absence of invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) and species indicative of suboptimal condition ⁶ make up less than 5% of ground cover.		yes	
C			
The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.		yes	
D			
There are clearings, glades or rides present within the scrub, providing sheltered edges.		yes	
E			
		Number of criteria passed	
Condition Assessment Result (out of 5 criteria)		Score Achieved x/√	
Passes 5 criteria		Good (3)	
Passes 3 or 4 criteria		Moderate (2)	
Passes 2 or fewer criteria		Poor (1)	yes

Appendix 6: Headline BNG Results

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

FINAL RESULTS				
Total net unit change				
(Including all on-site & off-site habitat retention, creation & enhancement)		Habitat units	1.78	
		Hedgerow units	0.00	
		Watercourse units	-0.45	
Total net % change				
(Including all on-site & off-site habitat retention, creation & enhancement)		Habitat units	14.86%	
		Hedgerow units	0.00%	
		Watercourse units	-100.00%	
Trading rules satisfied?				
No - Check Trading Summaries ▲				
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	11.98	13.18	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.45	0.50	0.50

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