

Stourhead Garden Pathway Improvement

Biodiversity Net Gain (BNG) Report

Final

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Version	Details	Date
1.0 Draft	Draft Biodiversity Net Gain (BNG) issued to Client for review	16 May 2025
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NON-TECHNICAL SUMMARY

Purpose of the Report	To provide the results of a Biodiversity Net Gain (BNG) conducted for the Stourhead Garden, Wiltshire to inform the masterplanning of the development and the requirement for further habitat compensation and/or enhancement measures. This excludes final design development and, importantly any (as yet unknown) additional areas to facilitate the works (e.g. compounds, access tracks etc).
Summary of Proposed Development	The proposals include resurfacing, widening and narrowing of the pathway circumnavigating the gardens and the provision of bases to allow for the installation of fixed bases at the National Trust Stourhead, Wiltshire.
Surveys Undertaken	An extended UKHab survey and BNG condition assessment was conducted of all areas within the red line planning boundary at the Site to provide a habitat baseline on 24 March 2025.
Summary of Results	The development will result in a 0.42 habitat unit BNG and a 12.27% habitat BNG.
Conclusions	The footpath works result in no net loss of other neutral grassland and a 0.41 habitat unit gain modified grassland which results in overall ecological enhancement of the red line boundary area.
Compensation	No compensation is required.
Enhancement	The statutory 10% gain is being achieved through the enhancement of poor condition grassland to moderate, through the sowing of a diverse lawn mix. Medium distinctiveness other neutral grassland habitat is being created at the Site, the area of this relative to the size of the development is not significant and there are no higher distinctiveness habitats being created relative to the baseline habitats. As a result, an HMMP is not required for the enhancement works.
Data Valid Until	August 2025
Local Planning Authority BNG Statement	
Do you believe that, if the development is granted planning permission, the BNG Condition (as set out in pg 13 of Schedule 7A of the T&CPA 1990) would apply?	Yes
The date of the pre-development biodiversity value of onsite habitat(s) have been calculated and the reason that it is a date earlier than the planning application submission date	25 April 2025.
The pre-development biodiversity value of onsite habitats on this date	3.39 habitat baseline Units
Has there been any loss (or degradation) of any onsite habitat(s), resulting from activities carried out before the date specified in 1. Either: - On or after 30 January 2020 which were not in accordance with a planning permission; or - On or after 25 August 2023 which were in accordance with a planning permission	No
If yes, please provide details including: the date immediately before this activity was carried out; the onsite biodiversity on this date; and any supporting evidence (or reference to relevant document containing these details).	N/A
Publication date of the biodiversity metric tool used to calculate the biodiversity value	Statutory Biodiversity Metric July 2024
Does the application site have irreplaceable habitats	No
If yes, please provide a description of these habitats or reference to relevant documents	N/A
Confirm that application includes the following: i) Completed Biodiversity Metric Tool ii) Baseline and Post-Development Habitat Plans	Yes, Statutory Biodiversity Metric Tool submitted separately and results summarised in this report with the plans included (Figures

iii) If applicable; plans showing irreplaceable habitats on site	2 and 3).
Are there Protected and priority species on Site	Dormouse present in the wider woodland at the Site, but the proposals do not affect this habitat and it is highly unlikely that this species will be encountered.
Designated sites, important habitats or other biodiversity features	No
Features of geological conservation importance	No

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1 INTRODUCTION

1.1 BACKGROUND

National Trust commissioned Johns Associates Ltd to undertake a Statutory Biodiversity Net Gain (BNG) Metric assessment of the proposed garden pathway improvements site at Stourhead, in support of a planning application for the works. The site is located at post code BA12 6QF (central Ordnance Survey (OS) grid reference ST 7725 3401) and is hereafter referred to as the 'Site'. Figure 1 provides the Site location plan. The Site currently consists of a footpath which spans the circumference of the Garden Lake at Stourhead.

1.2 SUMMARY OF PROPOSALS

The proposals include the resurfacing, widening and narrowing of the footpath circumnavigating the National Trust Stourhead Gardens, as well as the provision of bases to allow for the installation of fixed benches.

1.3 PURPOSE OF THIS REPORT

The purpose of this report is to provide the results of a Statutory BNG assessment. Delivery of a 10% BNG became mandatory for most developments on the 12 February 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). If the required BNG cannot be met on-site, an off-site compensation area or compensation payment to a habitat banking scheme is required. This report will outline the results of the baseline UKHab survey and provide the results of the BNG habitat condition assessments, the post-development habitat condition assessments and the BNG calculations.

1.4 PERSONNEL

The UKHab survey, BNG Condition Assessments and BNG calculations were conducted by Ellie Brine. Ellie has a degree in Wildlife Ecology and Conservation Science and has worked and studied within the environmental sector since 2015. She holds a Level 4 FISC.

1.5 STATUTORY BIODIVERSITY METRIC

The Statutory Biodiversity Metric uses habitat as a proxy for overall biodiversity within different habitat types. Habitats are assigned a value based on their intrinsic biodiversity value or 'distinctiveness', which is predefined for each habitat within the metric. This value is then multiplied based on the size, condition, and geographical location of the habitat in order to ascertain its absolute value in 'biodiversity units'. Separate calculations are used within the metric for area-based habitats, linear habitats (such as hedgerows) and watercourses (including ditches and streams). These units are non-transferable and must therefore be considered individually for each project or development. Hereafter they will be referred to as "habitat units", "hedgerow units" and "river units" respectively. Collectively, they will be referred to as "biodiversity units".

Natural England provides a Calculation Tool with all calculations built in to aid in the assessment process. This report should be read in conjunction with the Calculation Tool provided for the assessment of this Site.

Underlying this assessment process are a key set of principles which explain the intended use of the Metric. They are as follows:

- Principle 1 – The metric assessment should be completed by a competent person.
- Principle 2 – The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands.

- Principle 3 – This biodiversity metric should be used in accordance with established good practice guidance and professional codes.
- Principle 4 – This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.
- Principle 5 – Biodiversity units are a proxy for biodiversity and should be treated as relative values.
- Principle 6 – This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.
- Principle 7 – Habitat interventions need to be realistic and deliverable within a relevant project timeframe.
- Principle 8 – Created and enhanced habitats should be, where practical and reasonable, local to any impact and deliver strategically important outcomes for nature conservation.
- Principle 9 – This biodiversity metric does not enforce a minimum habitat size ratio for compensation of losses. Proposals should aim to:
 - Maintain habitat extent - supporting more, bigger, better and more joined up ecological networks;
 - Ensure that proposed or retained habitat parcels are of sufficient size for ecological function.

During the process of undertaking a biodiversity net gain assessment using the Statutory Biodiversity Metric, the following rules must be followed to ensure its proper use:

- Rule 1 – The trading rules of this biodiversity metric must be followed.
- Rule 2 – Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit.
- Rule 3 – To accurately apply the biodiversity metric formula, you must use the biodiversity metric calculation tool or small sites biodiversity metric tool (SSM) for small sites. The tools remove the need for a user to manually calculate the change in biodiversity value. The tool will summarise the results of the calculation and inform a user whether the biodiversity net gain objective has been met.
- Rule 4 – In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority.

1.5.1 Significant On-Site Enhancements

A significant on-site enhancement occurs where habitat enhancement has contributed significantly to the proposed development's BNG, relative to the biodiversity value before development. This varies with the scale of the development but usually include the following:

- Habitats of medium or higher distinctiveness in the biodiversity metric.
- Habitats of low distinctiveness which create a large number of biodiversity units relative to the biodiversity value of the site before development.
- Habitat creation or enhancement where distinctiveness is increased relative to the distinctiveness of the habitat before development.
- Areas of habitat creation or enhancement which are significant in area relative to the size of the development.
- Enhancements to habitat condition, for example from poor or moderate to good.

Where there are significant enhancements, they must be secured with a legal agreement (planning obligation or conservation covenant) or planning condition for 30 years in the same way as off-site gains e.g. a Habitat Management and Monitoring Plan (HMMP). Local Planning Authorities (LPAs) will consider the most appropriate mechanism. The above mechanisms can also be applied by the LPA for plans that are not 'significant enhancements' where they contribute to locally important species or ecological networks.

1.5.2 Non-Significant Enhancements

A non-significant enhancement are habitat enhancements whose loss will not significantly decrease the biodiversity value for example private gardens or container planting. These enhancements do not normally require maintenance provisions e.g. an HMMP, legal agreement or commitment to maintain them for 30 years.

1.6 LEGISLATION AND POLICY

The legislation and national and local planning policies which are relevant to this assessment are provided in Appendix A to this report.

Figure 1: Site Location Red Line Boundary Plan and Context of Site



2 METHODOLOGY

2.1 HABITAT CLASSIFICATION AND CONDITION ASSESSMENT

2.1.1 UKHab Survey

An updated UKHab survey of the Site was undertaken on 25 April 2025 by experienced ecologist Ellie Brine BSc (Hons) from Johns Associates Ltd. The weather was dry and sunny with good visibility. The weather was dry and sunny with good visibility. This survey was completed in accordance with the UK Habitat Classification (UKHab) v2.0 (2023) Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and BS 42020:2013 Biodiversity - Code of practice for planning and development (British Standards Institute, 2013).

Each habitat parcel is assessed on its condition via a series of relevant criteria as per the Statutory Biodiversity Metric User Guide (Defra July 2024). Information recorded including species abundance, presence of non-native species, undesirable species, management, habitat structure, human impacts and age of habitats were recorded using the Statutory Biodiversity Metric Condition Assessments in the field which are appended to this report.

A Juniper Systems GEODE GPS/GNSS was used to provide sub-meter accuracy on the survey alongside a tape measure. This ensured that the resolution of the mapped habitat features was at the detailed level. This additional granularity of detail support the robust assessment of change in habitats and the associated BNG assessment.

The on-Site and off-Site (where accessible) habitats were classified following the UK Habitat Classification (UKHab) Version 2.0 (2023) guidelines, which provides a more detailed interpretation of baseline habitat survey data than previous habitat classifications systems, such as Phase 1 Habitat Assessments. The professional edition of UKHab “UK Habitat Classification –Professional Edition1” (UKHab-P) was used which includes Priority Habitat Types, all Annex 1 Habitats and the habitats listed in EUNIS.

The classification of primary habitats is hierarchical with five levels with a list of Secondary Codes, the latter is sub- divided into Essential codes and Additional codes. It is mandator that each recorded habitat parcel is allocated single primary Habitat Code and to record the presence of all Essential Secondary Code features associated with that habitat parcel. Additional Secondary Codes can also be associated with habitat parcels, where it is relevant to the whole parcel. Up to six Secondary Codes can be allocated to a single habitat.

UKHab v2.0 has a total of 268 Secondary Codes, sub-divided into 15 major groupings. Secondary codes are added to habitat parcels to:

- Confirm the identity of habitat mosaic and complexes.
- Add information about habitat origin and modifications.
- Add information on environmental context, management and land use in a consistent manner.

Essential Secondary Codes are identified as 2-digit numbers (10 – 90). Additional Secondary Codes (100 – 853) are 3-digit numbers and cover features including land management, land use (incorporating green infrastructure), environmental qualifiers, species features and hydrological regime descriptors. The UK Habitat Classification v2.0 Secondary Code Groupings are provided in Table 1.

Table 1: The UK Habitat Classification v2.0 Secondary Code Groupings

UKHab v2.0 Secondary Code Grouping	Description	UKHab v2.0 Codes
Secondary Essentials – Grasslands and Heathland	Habitat mosaic types and complexes that occur in the grassland, heathlands, hedgerows and scrub habitat	10 – 19

Secondary Essentials – Woodlands and Trees	Habitat complexes, origins and mosaic types that principally occur in woods associated with trees	25 – 34
Secondary Essentials – Freshwater	Habitat complexes and origins that principally occur in freshwater habitats	40 – 51
Secondary Essentials – Wetlands	Habitat complexes and environmental qualifiers that principally occur in wetlands	55 – 57
Secondary Essentials – All habitats	Habitat descriptors that can occur on any habitat	60 – 63
Secondary Essentials – Coast	Habitat complexes that principally occur on the coast	70 – 77
Secondary Essentials – Built environment	Habitat complexes, mosaics, land uses and green infrastructure principally associated with the built environment	80 – 90
Additional Secondary Codes – Grasslands and Heathlands	Habitat management, land use, environmental qualifier and species features principally associated with grassland, heathlands, hedgerows and scrub habitat	100 – 131
Additional Secondary Codes – Woodlands and Trees	Habitat management, land use, environmental qualifiers and species features principally associated with woods and trees	200 – 217
Additional Secondary Codes – Freshwater	Habitat management, land use, environmental qualifiers and species features principally associated with freshwater habitats	300 – 323
Additional Secondary Codes – Wetlands	Hydrological regime, habitat management and species features principally associated with wetlands	400 – 425
Additional Secondary Codes – All habitats	Additional habitat descriptors that can occur on any habitat	500 – 532
Additional Secondary Codes – Farming	Habitat management and land uses principally associated with farmlands	600 – 618
Additional Secondary Codes – Coast	Land use and environmental qualifiers principally associated with coastal areas	700 – 703
Additional Secondary Codes – Built environment	Land use and green infrastructure descriptors principally associated with the built environment	800 – 853

Where appropriate, maps were supplemented with target notes which provided specific information on habitats present that were too limited in extent to map at the scale at which data is presented, or the presence of species and habitats of ecological interest.

An annotated habitat map together with descriptions of the recorded habitat types was produced, which was subsequently digitised using a geographical information system (ArcGIS). The survey also included identification of any non-native invasive plant species. Flora taxonomy follows the nomenclature detailed in New Flora of the British Isles (4th Edition) (Stace C., 2019). Flora, where appropriate, are given a descriptive score of abundance using the DAFOR scale, as follows:

- D – Dominant
- A – Abundant
- F – Frequent
- O – Occasional

- R – Rare
- L – Locally (to be used as a prefix for any of the above)
- V – Very (to be used as a prefix for any of the above)

2.1.2 ArcGIS Symbology

At the time of production, a complete symbology for all habitats in the UK Habitat Classification Professional Edition (UKHab-P) was not available. The UK Habitat Classification Basic Edition (UKHab-B) symbology has therefore been used, and where necessary to add in habitats not included in UKHab-B we have designed our own hatching system within the Level 2 colours for those habitats – following the guidance provided in the UK Habitat Classification Basic Edition: Suggested Symbology for Maps document (UKHab, 2020).

2.1.3 Minimum Mapping Units

UKHab guidance indicated that UKHab has 3 Minimal Mapping Units (MMU's):

- 25 m² and 5 m length for urban and small-scale development projects, fine scale mapping of designated sites
- 400 m² and 20 m length for landscape scale surveys
- 2500 m² for larger unenclosed upland habitats.

Large scale, simple habitats or feasibility surveys should use a larger MMU. For this project, given the size of the site and the scale of the map the 25 m² and 5 m length MMU has been applied. This will allow all habitats to be clearly visible on the map whilst enabling enough fine detail to remain to clearly show all habitats present.

2.1.4 Strategic Significance

As part of the BNG assessment, habitats are afforded different levels of strategic significance, which describes the local significance of the habitat based on its location and the habitat type. In the absence of Wiltshire Council having a published Local Nature Recovery Strategy, habitats were assigned a strategic significance value using a data search on MAGIC Map for priority and statutory wildlife/habitat designations. The strategic significance is assigned as being high, moderate or low. 'High' strategic value is assigned to biodiversity opportunity areas, core statutory sites, core non-statutory sites and network opportunity areas, 'medium' to habitats that provide connectivity or ecological function to high strategic habitats and 'low' to habitats that do not fall within the above categories.

2.1.5 Distinctiveness

For the purpose of the metric assessment, distinctiveness refers to the relative scarcity of the habitat and its importance for nature conservation. The actual values assigned to each habitat type used in the metric are given in the Technical Supplement. These are automatically applied by the calculator tool based on the habitat type.

2.1.6 Mitigation Hierarchy

Projects should first seek to avoid and minimise effects upon biodiversity, compensation must be justified and as a last resort. Projects should also achieve gains in biodiversity at every stage of the mitigation hierarchy. Avoidance of biodiversity loss should be priority which enables biodiversity gain simpler and more cost-efficient than if biodiversity losses occur. Table 2 provides the application of the mitigation hierarchy in accordance with the BNG Good practice Principles for Development, A Practical Guide, produced by CIEEM, IEMA and Ciria, Baker *et al* 2019.

Table 2: Applying the Mitigation Hierarchy (Biodiversity Net Gain: Good Practice Principles for Development' (Baker et al., 2019)).

Stage	In Practice
1. Avoidance	This first stage is to avoid harm to biodiversity, for example by locating to an alternative site. It is the most important stage and can ease the consent process, whereas missing this stage can lead to criticism, objections and refusal of permission for the development.
2. Minimisation	If avoiding all adverse effects is not possible, action is taken to minimise these effects, such as those in the CIEEM EclA guidelines (CIEEM, 2018), which include timing works to avoid sensitive periods.
3. Compensation	Addressing residual adverse effects is the final stage, only considered after all possibility for avoiding and minimising the effects have been implemented. Compensation does not prevent the effects, rather it involves measures to make up for residual effects that cannot be prevented. Offsetting is a form of compensation that trades losses of biodiversity in one location with measurable gains in another – biodiversity offsets have a formal requirement for measurable outcomes. Offsetting losses of biodiversity with gains elsewhere can be within or outside of the development footprint.

2.2 LIMITATIONS, CONSTRAINTS AND ASSUMPTIONS

The findings of this report are valid at the time of survey. Should there be delays after August 2024 to the project timetable and/or implementation of the proposed development, updated desk study and/or site survey work may be required. In this instance, advice should be sought to ensure the data, recommendations and conclusions set out in this report remain valid.

No limitations or constraints with regard to the field survey or desk study were encountered and therefore the BNG calculations are considered valid.

3 BIODIVERSITY NET GAIN

3.1 STRATEGIC SIGNIFICANCE

The Site is located within an area of Woodpasture and Parkland Priority Habitat, part of the Stourhead Estate and therefore habitats of medium distinctiveness and above have been categorised as having 'high' strategic significance.

3.2 EXISTING UKHAB BASELINE HABITAT FINDINGS

The EclA Report Section 3.3 provides the full baseline habitats description. For the purpose of this project the habitats have been classified as those immediately adjacent (within 2m) to the path rather than the overarching habitat. This is due to the low impact of the works (ie: a loss of woodland would not be accurately representative if no trees were to be removed, however a loss of introduced shrub would be).

3.3 EXISTING BNG BASELINE HABITATS

The Existing UKHab Plan (Figure 2) and the baseline BNG habitat condition assessments (Appendix B) should be referred to throughout this section. Two Schedule 9 non-native invasive species were encountered during the survey including planted rhododendron that underwent extensive management and three-cornered leek *Allium triquetrum*. The Statutory BNG Metric Assessment spreadsheet is submitted separately to this report and should be referred to for the areas of habitats and the baseline BNG unit values.

3.3.1 Habitat Distinctiveness

Overall, the majority of the habitats within the Site boundary are of very low to medium distinctiveness and this has been quantified from the Statutory Metric trading summary for each habitat type (Table 3). The wider Site has scope to provide biodiversity net gain to offset the loss in the on-site habitats. Looking at the distinctiveness of each habitat it is possible to highlight areas for potential habitat creation and enhancement. Habitats of low – medium distinctiveness would be suitable for the creation of higher value habitat or improved in terms of their overall habitat condition through the design and implementation of new and appropriate management strategies.

Table 3: Existing Habitat Type Distinctiveness

Habitat Type	Distinctiveness	Trading Rule
Habitats		
Developed land, sealed surface	Very low	Compensation not required
Artificial unvegetated, unsealed surface		
Modified grassland	Low	Same distinctiveness or better habitat required
Rhododendron scrub		
Introduced shrub		
Other neutral grassland	Medium	Same broad habitat or a higher distinctiveness habitat required

Figure 2: Baseline UKHab Habitat Plan



3.4 POST-DEVELOPMENT

3.4.1 On-Site Habitats

The post-development proposals for the Site comprise improvements to the garden footpath including narrowing and widening and the addition of benches with a hard standing footprint. Figure 3 provides the Post-Development UKHab Habitat Plan. Condition assessments for the proposed post-development habitats are provided in Appendix C. The following calculations are based on 13000-LUC-XX-XX-DR-L-01203 & 01204 General Arrangement Plans provided by Land Use Consultants. The majority of the other neutral grassland within the red line boundary will be retained with a loss in 0.04 ha. There is a loss of modified grassland of 0.03 ha, a loss of 0.016 ha of introduced shrub and a loss in 8.01 ha of artificial unvegetated, unsealed surface – sections of the path to be replaced with hardstanding.

The development will result in the creation of 0.009 ha other neutral grassland, 0.011 ha of modified grassland, 0.02 ha of introduced shrub and 0.811 ha of hardstanding (developed land, sealed surface). Habitat creation is only to occur where the path is to be narrowed and is therefore informed by the habitat immediately adjacent.

Figure 3: Post-Development UKHab Habitat Plan



3.4.2 Headline Results

As demonstrated in Table 4 below, the biodiversity net gain results show an overall net gain in habitats. The trading rules have been satisfied for habitats.

Table 4: Summary of Biodiversity Net Gain Assessment before Offsetting

Unit Type	Baseline Units	Post-development Units	Net Unit Change	% Change	Trading Rules Satisfied?
Habitat	3.39	3.81	0.42	12.27	Yes

3.4.3 Compensation and Enhancement Measures

Table 5 below details the requirements of the compensation and enhancement measures which will be implemented in order to achieve the net gain in habitat BNG habitat conditions for the post-development habitats. The enhancement of habitat within the Site is not significant relative to the baseline biodiversity value before development due to:

- Distinctiveness of habitat creation is not increased relative to the distinctiveness of the habitat before development.
- Areas of habitat creation or enhancement are not significant in area relative to the size of the development.
- There are no enhancements to habitat condition, for example from poor or moderate to good.

Due to the enhancement of habitat at the Site not being significant to the relative baseline biodiversity value before development, a Habitat Management and Monitoring Plan (HMMP) is not required to support the application and implementation of the enhancement and a document such as a Landscape Ecological Management Plan (LEMP) or Ecological Enhancement Strategy would be suitable to support the planning application or via planning condition.

Table 5: Summary of Proposed Compensation and Enhancement Measures

Habitat Type	Proposed Compensation or Enhancement Measure	Target Condition	Delivery Details
Grassland	Creation of modified grassland	Moderate	In order to satisfy the criteria for moderate condition as per the Statutory Metric, the following are achievable and must apply: - There must be 6-8 vascular plant species per m²; - No bracken or scrub encroachment should be allowed to establish; - No invasive non-native species should be present.
	Creation of other neutral grassland	Poor	In order to be classified as other neutral grassland as per UKHab, three of the four following criteria must apply: - >20% cover of broadleaved herbs and sedges; - >8 species per m² (including forbs, grasses, sedges and rushes, and excluding bryophytes); - ≥ 1 grass species that is not generally sown for intensive agricultural production (ie. Rye-grasses <i>Lolium spp.</i>, Timothy <i>Phleum pratense</i>, Cock's-foot <i>Dactylis glomerata</i>, Meadow fescue <i>Festuca pratensis</i>) is at least abundant; - Cover of Rye-grasses <i>Lolium spp.</i> and White Clover <i>Trifolium repens</i>, where present, is <30%. In order to satisfy the criteria for poor condition as per the Statutory Biodiversity Metric, the following are achievable and must apply: - The sward height must be varied with at least 20% of the sward >7cm in height, and 20% <7cm; - No bracken or scrub encroachment should be allowed to establish;

3.4.4 BNG Good Practice Principals for Development

In accordance with the BNG Good practice Principles for Development, A Practical Guide, produced by CIEEM, IEMA and Ciria, Baker et al 2019. Table 6 provides the Good Practice Principles that have been applied to the BNG assessment.

Table 6: Accordance with 'Biodiversity Net Gain: Good Practice Principles for Development' (Baker et al., 2019).

Principle	In Practice
1. Apply the mitigation hierarchy	Designs decisions have been documented within the prepared EcIA due consideration for the CIEEM Guidelines for Ecological Impact Assessment (EcIA) (CIEEM, 2018) including mitigation hierarchy. Trading rules have been accorded with in the prepared metric and ecologically justified decisions have been taken in respect of proposed habitats. Avoidance of loss of habitat is not possible within the development footprint, however full compensation of the loss of habitats within the development footprint has been provided.
2. Avoid losing biodiversity that cannot be offset elsewhere	There are no irreplaceable habitats within the red line boundary. Impacts on irreplaceable habitats adjacent have been avoided and the proposals have an overall positive impact on habitats such as veteran trees through the realignment of the path to avoid root protection zones.
3. Be inclusive and equitable	Design decisions taken have considered wider stakeholders including the local population and the end users of the Site. This includes improving accessibility across the Site through the resurfacing of the path.
4. Address risk	A precautionary approach has been taken to creation of new habitat types and condition for biodiversity gain provision, with all habitats included with a predicted poor/moderate condition.
5. Make a measurable net gain contribution	The Statutory Biodiversity Metric has been used to demonstrate a clear and quantified calculation of the net effect of development upon biodiversity, using habitat as a proxy for wider biodiversity. The statutory 10% BNG is achieved.
6. Achieve the best outcomes for biodiversity	The decisions for design proposals have been subject to an iterative process with ecologists to ensure biodiversity is considered from an early stage and the best outcomes for biodiversity are achieved.
7. Be additional	Habitat creation has been included as a betterment to the habitat at the Site, and not as compensation for protected species.
8. Create a net gain legacy	All habitats will be managed for at least 30 years to support long term benefits with interest of both nature and the site users in mind. A LEMP will be produced for the habitats which will outline designing for climate change, adaptive management and the funding mechanisms for the long-term management of the habitats.
9. Optimise sustainability	The habitats are designed to be low maintenance to reduce costs and the need for any pesticides.
10. Be transparent	An iterative approach has been used to inform the biodiversity net gain throughout the design of the Site. Inputs from stakeholders will be used to refine the approach as necessary through the planning process.

4 CONCLUSIONS

Provided that the recommendations for creation and management of habitats can be adhered to, it is predicted that the proposed development will achieve a net gain of 12.27% (0.42 Units). A no net loss has been achieved through footpath narrowing accommodating for adjacent habitat and the required 10% gain has been achieved through the enhancement of poor condition modified grassland to moderate condition modified grassland. The habitat Trading Rules have been met.

Figure 3 Provides the post development UKHab Plan and the Statutory Biodiversity Metric BNG spreadsheet has been submitted separately within this planning application.

It is recommended that a CEMP be produced in order to set out avoidance and mitigation measures during construction, particularly in relation to retained habitats, and root protection zones of trees and woodland in proximity to the footpath.

Due to the site not being 'significantly enhanced', a HMMP will not be required. The habitat and landscape proposals should be included in a LEMP or Method Statement document.

Should any significant changes to the proposals shown in Figure 3 occur, a reassessment of the potential impacts will be required.

5 REFERENCES

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APPENDIX A – LEGISLATION AND PLANNING POLICY

LEGISLATION

Environment Act 2021 and Town and Country Planning Act 1990.

Under the Environment Act 2021, all planning permissions granted in England (with a few exemptions) except for small sites will have to deliver at least 10% biodiversity net gain from 12 February 2024. BNG will be required for small sites from 2 April 2024. BNG will be measured using Defra's biodiversity metric and all off-site and significant on-site habitats will need to be secured for at least 30 years. This sits alongside:

- A strengthened legal duty for public bodies to conserve and enhance biodiversity,
- New biodiversity reporting requirements for local authorities, and
- Mandatory spatial strategies for nature: Local Nature Recovery Strategies or 'LNRS'.

Schedule 7A Biodiversity Gain in England – Part 1 states:

1 (1) This Schedule makes provision for grants of planning permission in England to be subject to a condition to secure that the biodiversity gain objective is met.

(2) Paragraphs 2 to 12 have effect for the purposes of this Schedule.

Biodiversity gain objective

2 (1) The biodiversity gain objective is met in relation to development for which planning permission is granted if the biodiversity value attributable to the development exceeds the pre-development biodiversity value of the onsite habitat by at least the relevant percentage.

(2) The biodiversity value attributable to the development is the total of—

- (a) the post-development biodiversity value of the onsite habitat,
- (b) the biodiversity value, in relation to the development, of any registered offsite biodiversity gain allocated to the development, and
- (c) the biodiversity value of any biodiversity credits purchased for the development.

(3) The relevant percentage is 10%.

(4) The Secretary of State may by regulations amend this paragraph so as to change the relevant percentage.

Biodiversity value and the biodiversity metric

3 References to the biodiversity value of any habitat or habitat enhancement are to its value as calculated in accordance with the biodiversity metric.

4 (1) The biodiversity metric is a document for measuring, for the purposes of this Schedule, the biodiversity value or relative biodiversity value of habitat or habitat enhancement.

(2) The biodiversity metric is to be produced and published by the Secretary of State.

(3) The Secretary of State may from time to time revise and republish the biodiversity metric.

(4) Before publishing or republishing the biodiversity metric the Secretary of State must consult such persons as the Secretary of State considers appropriate.

(5) The Secretary of State may by regulations make transitional provision in relation to the revision and republication of the biodiversity metric.

(6) The Secretary of State must lay the biodiversity metric, and any revised biodiversity metric, before Parliament.

Pre-development biodiversity value

5 (1) In relation to any development for which planning permission is granted, the pre-development biodiversity value of the onsite habitat is the biodiversity value of the onsite habitat on the relevant date.

(2) The relevant date is—

(a) in a case in which planning permission is granted on application, the date of the application, and

(b) in any other case, the date on which the planning permission is granted.

(3) But the person submitting the biodiversity gain plan for approval and the planning authority may agree that the relevant date is to be a date earlier than that specified in sub-paragraph (2)(a) or (b) (but not a date which is before the day on which this Schedule comes into force in relation to the development).

(4) This paragraph is subject to paragraphs 6 and 7.

6 If—

(a) a person carries on activities on land on or after 30 January 2020 otherwise than in accordance with—

(i) planning permission, or

(ii) any other permission of a kind specified by the Secretary of State by regulations, and

(b) as a result of the activities the biodiversity value of the onsite habitat referred to in paragraph 5(1) is lower on the relevant date than it would otherwise have been, the pre-development biodiversity value of the onsite habitat is to be taken to be its biodiversity value immediately before the carrying on of the activities.

7 Where planning permission is granted in respect of land which is registered in the biodiversity gain site register under section 100 of the Environment Act 2021, the pre-development biodiversity value of the land is the total of—

(a) the biodiversity value of the onsite habitat on the relevant date, and

(b) to the extent that it is not included within that value, the biodiversity value of the habitat enhancement which is, on that date, recorded in the register as habitat enhancement to be achieved on the land.

Post-development biodiversity value

8 (1) In relation to any development for which planning permission is granted, the post-development biodiversity value of the onsite habitat is the projected value of the onsite habitat as at the time the development is completed.

(2) That value is to be calculated by taking the pre-development biodiversity value and—

(a) if at the time the development is completed the development will, taken as a whole, have increased the biodiversity value of the onsite habitat, adding the amount of that increase, or

(b) if at the time the development is completed the development will, taken as a whole, have decreased the biodiversity value of the onsite habitat, subtracting the amount of that decrease. This is subject to paragraph 9.

9 (1) This paragraph applies in relation to any development for which planning permission is granted where—

(a) the person submitting the biodiversity gain plan for approval proposes to carry out works in the course of the development that increase the biodiversity value of the onsite habitat, and

(b) the planning authority considers that the increase is significant in relation to the pre-development biodiversity value.

(2) The increase in biodiversity value referred to in sub-paragraph (1) is to be taken into account in calculating the post-development biodiversity value of the onsite habitat only if the planning authority is satisfied that the condition in sub-paragraph (3) is met.

(3) The condition is that any habitat enhancement resulting from the works referred to in sub-paragraph (1)(a) will, by virtue of—

(a) a condition subject to which the planning permission is granted,

(b) a planning obligation, or

(c) a conservation covenant, be maintained for at least 30 years after the development is completed.

(4) The Secretary of State may by regulations amend sub-paragraph (3) so as to substitute for the period for the time being specified there a different period of at least 30 years.

Registered offsite biodiversity gains

10(1) “Registered offsite biodiversity gain” means any habitat enhancement, where—

(a) the enhancement is required to be carried out under a conservation covenant or planning obligation, and

(b) the enhancement is recorded in the biodiversity gain site register (as to which, see section 100 of the Environment Act 2021).

(2) References to the allocation of registered offsite biodiversity gain are to its allocation in accordance with the terms of the conservation covenant or planning obligation referred to in sub-paragraph (1)(a).

(3) The biodiversity value of registered offsite biodiversity gain is measured, under the biodiversity metric, in relation to development to which it is allocated.

Biodiversity credits

11 “Biodiversity credits” means credits under section 101 of the Environment Act 2021.

General

12 (1) In relation to development for which planning permission is granted—

“onsite habitat” means habitat on the land to which the planning permission relates;

“planning authority” means the local planning authority, except that—

(a) in a case where the planning permission is granted by Mayoral development order under section 61DB, “planning authority” means such of the Mayor of London or the local planning authority as may be specified in the order;

(b) in a case where the planning permission is granted by the Secretary of State under section 62A, 76A or 77, “planning authority” means such of the Secretary of State or the local planning authority as the Secretary of State may determine;

(c) in a case where the planning permission is granted on an appeal under section 78, “planning authority” means such of the person determining the appeal or the local planning authority as that person may direct.

(2) “Habitat enhancement” means enhancement of the biodiversity of habitat.

(3) References to the grant of planning permission include the deemed grant of planning permission.

NATIONAL PLANNING POLICY

NPPE

There are numerous national and local planning policies associated with flora and fauna (also referred to as biodiversity) that need to be addressed as part of the planning process. The Government has issued its National Planning Policy Framework (NPPF) December 2024, which requires impacts to biodiversity to be minimised. Paragraph 194 of the NPPF applies the same protection to Ramsar sites as that conferred by the Habitats Regulations to SACs and SPAs, it also applies the same protection to sites identified or required as compensatory measures for adverse effects on habitat sites.

To protect and enhance biodiversity plans should:

- 192a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation;
- 192b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

The NPPF requires development to apply the following principles (Paragraph 193):

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁷⁰ and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Planning authorities should follow key principles to ensure that the potential impacts of planning decisions on biodiversity conservation are considered. Circular 06/05: Biodiversity and Geological Conservation provides guidance on the application of the law relating to planning and nature conservation and complements the NPPF.

The Natural Environment Paper

“The Natural Choice: Securing the Value of Nature” outlines the Governments approach and vision for nature in the UK including protecting and improving our natural environment, growing a green economy and reconnecting people and nature.

Biodiversity 2020

A strategy for England's wildlife and ecosystem services, are the country level strategies for England and builds on the natural Environment White Paper. It sets out the strategic direction for biodiversity policy for the next decade on land (including rivers and lakes) and at sea. The proprieties for action include a more integrated large-scale approach to conservation, putting people at the heart of biodiversity policy, reducing environmental pressure and improving knowledge.

LOCAL PLANNING POLICY

As well as national policy, there is relevant biodiversity policy contained within Wiltshire Core Strategy adopted in January 2015. Core Policy 50 is relevant to the proposed application and is summarised below.

Core Policy 50 Biodiversity and Geodiversity

Protection

Development proposals must demonstrate how they protect features of nature conservation and geological value as part of the design rationale. There is an expectation that such features shall be retained, buffered, and managed favourably in order to maintain their ecological value, connectivity and functionality in the long-term. Where it has been demonstrated that such features cannot be retained, removal or damage shall only be acceptable in circumstances where the anticipated ecological impacts have been mitigated as far as possible and appropriate compensatory measures can be secured to ensure no net loss of the local biodiversity resource and secure the integrity of local ecological networks and provision of ecosystem services.

All development proposals shall incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats throughout the lifetime of the development.

Any development potentially affecting a Natura 2000 site must provide avoidance measures in accordance with the strategic plans or guidance set out in paragraphs 6.75-6.77 above where possible, otherwise bespoke measures must be provided to demonstrate that the proposals would have no adverse effect upon the Natura 2000 network. Any development that would have an adverse effect on the integrity of a European nature conservation site will not be in accordance with the Core Strategy.

Biodiversity enhancement

All development should seek opportunities to enhance biodiversity. Major development in particular must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services. Such enhancement measures will contribute to the objectives and targets of the Biodiversity Action Plan (BAP) or River Basin/Catchment Management Plan, particularly through landscape scale projects, and be relevant to the local landscape character.

Local sites

Sustainable development will avoid direct and indirect impacts upon local sites through sensitive site location and layout, and by maintaining sufficient buffers and ecological connectivity with the wider environment. Damage or disturbance to local sites will generally be unacceptable, other than in exceptional circumstances where it has been demonstrated that such impacts:

- i. cannot reasonably be avoided
- ii. are reduced as far as possible
- iii. are outweighed by other planning considerations in the public interest
- iv. where appropriate compensation measures can be secured through planning
- v. obligations or agreements.

Development proposals affecting local sites must make a reasonable contribution to their favourable management in the long-term

APPENDIX B BASELINE BNG CONDITION ASSESSMENTS

Grassland (low distinctiveness)		
Condition Assessment Criteria	Habitat parcel reference	
	8, 26, 27, 30, 31, 39, 41, 43, 49, 58, 59, 60, 61, 66, 74, 76, 78	36
A. 6-8 vascular plant species per m2 (essential criterion)	N	Y
B. Varied sward height	N	N
C. <20% scrub	Y	Y
D. <5% physical damage	Y	N
E. 1-10% bare ground	N	N
F. <20% bracken cover	Y	Y
G. Absence of schedule 9 INNS	Y	Y
Essential criterion achieved	N	Y
Number of criteria passed	4	4
Condition assessment score	Poor	Moderate

Grassland (medium, high and very high distinctiveness)		
Condition Assessment Criteria	Habitat parcel reference	
	51, 64	12, 13, 44, 52, 53, 55, 56, 57, 64, 68, 69, 85
A. Good representation of habitat type	F	Y
B. Varied sward height	Y	Y
C. 1-5% bare ground	F	Y
D. <20% bracken cover	Y	Y
E. <5% physical damage/species indicative of suboptimal condition, absence of INNS	Y	Y
F. ≥ 10 species per m ² (essential, non-acid grassland)	F	N
Essential criterion achieved	Y	N
Number of criteria passed	3	5
Condition assessment score	Poor	Moderate

APPENDIX C POST-DEVELOPMENT BNG CONDITION ASSESSMENTS

Grassland (low distinctiveness)	
Condition Assessment Criteria	Habitat parcel reference
	Post development
A. 6-8 vascular plant species per m ² (essential criterion)	Y
B. Varied sward height	N
C. <20% scrub	Y
D. <5% physical damage	N
E. 1-10% bare ground	N
F. <20% bracken cover	Y
G. Absence of schedule 9 INNS	Y
Essential criterion achieved	Y
Number of criteria passed	4
Condition assessment score	Moderate

Grassland (medium, high and very high distinctiveness)	
Condition Assessment Criteria	Habitat parcel reference
	Post development
A. Good representation of habitat type	N
B. Varied sward height	Y
C. 1-5% bare ground	Y
D. <20% bracken cover	Y
E. <5% physical damage/species indicative of suboptimal condition, absence of INNS	Y
F. ≥ 10 species per m ² (essential, non-acid grassland)	N
Essential criterion achieved	N
Number of criteria passed	4
Condition assessment score	Poor