

LAND AT QUARRY WALK PARK,
STAFFORDSHIRE MOORLANDS

BIODIVERSITY NET GAIN ASSESSMENT

JANUARY 29, 2025

project ecology

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1 Executive Summary

- 1.1.1 The site, located within Quarry Walk Park, Alton, Staffordshire, is the subject of an application for a Lawful Development Certificate for the erection of 10 glamping pods for holiday accommodation and a biomass building at Quarry Walk Park.
- 1.1.2 The retrospective baseline habitats, pre-development, are judged to consist of broadleaved woodland, unsealed surfaces and bare ground.
- 1.1.3 The site is predicted to result in a net gain of >10% in habitat units, largely due to the retention and enhancement of woodland on and off-site. These habitats will be subject to a 30-year management plan and will require formal registration with Natural England as a BNG mitigation site.

2 Introduction

2.1 Site Location

- 2.1.1 The site is located within Quarry Walk Park, Alton, Staffordshire (OS grid reference SK 04413 40354).



Figure 1: Site Location Courtesy of Bing Maps

2.2 Background

- 2.2.1 The landowner is to submit an application for a Lawful Development Certificate for the erection of 10 glamping pods for holiday accommodation and a biomass building at Quarry Walk Park.

2.3 Scope of Work

- 2.3.1 Quarry Walk Park Ltd commissioned Project Ecology to:
- Conduct a retrospective BNG Assessment for the application site.

2.4 Aims and Objectives

- 2.4.1 Retrospectively establish a habitat baseline for the habitats.
- 2.4.2 Calculate the retrospective baseline and post-development biodiversity units.

- 2.4.3 Provide mitigation to comply with current planning policy relating to Biodiversity Net Gain.

2.5 Site Visit

- 2.5.1 As the site proposals have already been carried out, a site visit would not provide any relevant data to assess the sites baseline conditions, therefore was not conducted.
- 2.5.2 This assessment has been conducted by Ben Crossthwaite MCIEEM. Ben has 9 years' professional experience of undertaking JNCC Phase 1 Habitat Surveys, UK Habitat Classification surveys across the UK and Biodiversity Net Gain (BNG) Assessments.

3 Survey Methodology

3.1 Desktop Survey

- 3.1.1 An Extended Phase 1 Habitat Survey was conducted on an adjacent area of land of very similar habitat in 2018 by Rachel Hacking Ecology¹. This report has been used as an aid to assess the baseline of this application site, as well as professional judgement, resulting in a subjective verdict.

3.2 Biodiversity Net Gain

- 3.2.1 Habitat data including type, area (or length), condition and strategic location were uploaded to the Defra Statutory Biodiversity Metric Calculator spreadsheet to determine the baseline value of the site.
- 3.2.2 The post-development masterplan was interrogated to determine areas of buildings, and associated infrastructure. New habitats were classified and allocated a target condition, based on habitat type, location and management input. This information was uploaded to the metric spreadsheet to obtain a post-development value.
The pre- and post-development values were compared to determine whether the yield of biodiversity units achieved a deficit or gain.

3.3 Survey Limitations and Constraints

- 3.3.1 As this assessment is being undertaken retrospectively, a thorough characterisation of the sites baseline habitats prior to the installation of the pods could not be undertaken.
- 3.3.2 The baseline habitat conditions have been taken from the habitat survey methodology described in this section.

¹ Rachel Hacking Ecology, 2018 – Extended Phase 1 Habitat Survey of Land at Quarry Walk Park, Staffordshire.

4 Results

- 4.1.1 The habitat maps can be seen in Appendix B. Target notes and photographs and historic images are contained in Appendix C.

Broadleaved Woodland

- 4.1.2 The application site is dominated by plantation broadleaved woodland. The woodland has a long history of being used for camping, prior to the installation of the pods, with the understorey likely to have been dominated by bare earth as a result of high levels of disturbance over a prolonged period of time. Sporadic areas of shrub and field layer vegetation are likely to have been present between clustered trees, similar to current conditions.

- 4.1.3 This would have/has resulted in a dominant canopy layer consisting of tree species of a similar age, form and structure.

- 4.1.4 It is difficult to determine species from the available data. However, the Rachel Hacking Ecology, 2018, documents dominant species as Silver Birch *Betula pendula*, Pediculate Oak *Quercus robur*, Scots Pine *Pinus sylvestris*, Rowan *Sorbus aucuparia*, Holly *Ilex aquifolium* and Sycamore *Acer pseudoplatanus*.

Artificial Unvegetated, Unsealed Surface

- 4.1.5 The access track on site comprises a permeable, compact crush-and-run surface, which has been present for many years.

Bare Ground

- 4.1.6 Much of the woodland understorey is likely to have consisted bare earth as a result of the high disturbance levels associated with camping pitches. The pods were installed on previous camping pitches consisting of bare earth. This has been mapped and measured as the same areas of the installed pod footprints.

Priority Habitats

The woodland on site forms part of a recognised Priority Habitat of deciduous woodland with a unique ID of PHID40414424_034025657.

- 4.1.7 The woodland appears likely to be species-poor, with the understorey dominated by bare earth. No ancient woodland indicator species were recorded in the Rachel Hacking Ecology, 2018 report, nor a typical woodland ground-flora.

- 4.1.8 The results of the Biodiversity Net Gain Assessment should be read in conjunction with the Statutory Metric Calculation Tool and Condition Assessment documents².

- 4.1.9 A condition assessment of each habitat was attempted; however, it was difficult to undertake a robust assessment due to the retrospective nature and limited photographic evidence. The conditions of the habitats were informed by historic photographs, the report conducted by Rachel Hacking Ecology, 2018 and concluded on professional judgement.

- 4.1.10 A summary of the baseline unit scores for the habitats on site can be seen in Table 1.

² Documents will be provided separately.

Habitat	Area/Length	Unit Type (Habitat, Hedgerow, River)	Unit Total
Broadleaved Woodland	0.2686ha	Habitat	1.07
Artificial Unvegetated Unsealed Surface	0.0787ha	Habitat	Zero
Bare Ground	0.0245ha	Habitat	0.05
			Total 1.12

Table 1 showing the base unit totals for each unit/habitat type on site

5 Evaluation

5.1 Development Context

- 5.1.1 As specified above, the pods have been installed within the woodland, on areas of bare ground formally used for camping.
- 5.1.2 The assessment of the baseline habitats has been challenging given the retrospective nature and limited photographic evidence of the site pre-clearance.
- 5.1.3 However, the baseline habitats have been identified as accurately as possible given the limited data. This includes conjecture, relating to the boundary broadleaved woodland and understorey areas. This is of course subjective, and the decision on what the final baseline position of the site is, may be decided following further discussions with the LPA and/or their ecological consultee.
- 5.1.4 The post-development site map can be seen in Appendix B.
Broadleaved Woodland
This comprises the retained areas of broadleaved woodland.
Artificial Unvegetated, Unsealed Surface
- 5.1.5 This habitat comprises the retained access track.
Sealed Surface - Building
- 5.1.6 This consists the footprints of the glamping pods and biomass building.
- 5.1.7 Within the application site the baseline habitat units are judged to be 1.12 units.
- 5.1.8 The post-development calculations for each unit category are summarised in Table 2.

Habitat	Area/Length	Unit Type (Habitat, Hedgerow, River)	Unit Total
Broadleaved Woodland – (retained)	0.2686ha	Habitat	1.07
Artificial Unvegetated Unsealed Surface – (retained)	0.0787ha	Habitat	Zero
Sealed Surface - Buildings	0.0245ha	Habitat	zero
			Total 1.07

Table 2 showing a summary of post-development biodiversity net gain calculations

- 5.1.9 The net change in habitat units is – 0.05 (-4.36%).
- 5.1.10 For the proposals to provide 10% net gain and satisfy the trading rules, off-site mitigation on land legally owned by the client, adjacent to the application site, is to be created, managed and monitored for a minimum of 30 years.
- 5.1.11 The off-site baseline habitats are listed and described below.

Broadleaved Woodland

- 5.1.12 This habitat is located adjacent to the application site and forms part of a wider woodland.
- 5.1.13 The off-site baseline calculations for each unit category are summarised in Table 3.

Habitat	Area/length	Unit Total
Habitat Units		
Broadleaved Woodland	0.06ha	0.48
Total Habitat Units		0.48

Table 3 showing a summary of off-site, pre-development biodiversity net gain calculations

- 5.1.14 The off-site proposed habitats are listed and described below.
- Broadleaved Woodland
- 5.1.15 This habitat comprises the enhanced area of broadleaved woodland achieved by thinning and other management changes to create opening and light to allow field and shrub layers to establish naturally.
- 5.1.16 The off-site, post-development calculations for each unit category are summarised in Table 4.

Habitat	Area/length	Unit Total
Habitat Units		
Broadleaved Woodland – (enhanced)	0.06ha	0.65
Total Habitat Units		0.65

Table 4 showing a summary of the off-site, post-development biodiversity net gain calculations

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- 5.1.17 The net change in off-site habitat units is +0.17 (35.01%).
- 5.1.18 The final results of the BNG assessment result in a total net change in habitat units of +0.12 (10.6%).
- 5.1.19 An extract of the headline results, from the Statutory Defra Metric Calculation Tool, can be seen in Appendix C.
- 5.1.20 The trading rules have been satisfied within the metric calculation.

5.2 Mitigation Hierarchy

- 5.2.1 The mitigation hierarchy is a widely used tool that guides users towards limiting as far as possible the negative impacts on biodiversity from development projects.
- 5.2.2 The mitigation hierarchy steps are as follows:
- Avoid - Project proposals must give the highest priority to 'avoidance' strategies in accordance with the mitigation hierarchy.
 - Minimise - Where avoidance is not feasible, it is essential to minimise negative impact by modifying the project design/strategy. All sensitive habitats must be avoided at all costs.
 - Mitigate - All non-avoidable ecological damage must be compensated.
 - Offset - Final resort after all options have been exhausted: the most expensive, complex, and high-risk approach.
- 5.2.3 As the planning application and BNG assessment has been carried out retrospectively, it is a fair assumption that the mitigation hierarchy has not been considered. However, the glamping pods have been sighted on areas previously used for camping, with no additional impacts to broadleaved woodland, such as tree loss or the laying/creating of formal access paths and tracks.

6 Conclusion and Recommendations

6.1 Further Survey Work

- 6.1.1 Due to the retrospective nature of this application and report, further survey work is not possible or required.

6.2 Mitigation and Enhancement Measures

- 6.2.1 The site proposals, onsite and off-site mitigation has demonstrated that impacts will result in >10% net gain. This complies with the current requirements of the NPPF (2024) and local policy which states that development should deliver a minimum net gain of 10% in biodiversity.
- 6.2.2 The woodland retention and enhancements forming mitigation for the site proposals are to be the subject to a 30-year Habitat Management and Monitoring Plan and be formally registered with Natural England as a BNG mitigation site. This can be dealt with via a suitably worded condition on the planning decision notice.

7 Appendix A: Planning Policy and Legislation

National Policy

The National Planning Policy Framework (NPPF 2024) describes the Government's planning policy for England and how it should be applied. Within this framework, the requirements in relation to biodiversity are included within several policies. The two most relevant to individual planning decisions are Paragraphs 187 and 193, shown below:

- 187. Planning policies and decisions should contribute to and enhance the natural and local environment by:
 - protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - a. recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - b. maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - c. minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;
 - d. preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - e. remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- 193. When determining planning applications, local planning authorities should apply the following principles:
 - 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;
 - a. 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;

- b. 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
- c. 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.

Legislation

The Wildlife and Countryside Act 1981 (as amended by the CRow Act 2000) includes the notification and confirmation of Sites of Special Scientific Interest (SSSIs). SSSIs can be notified for their floral, faunal, geological, or physiographical features. Protection against damaging operations and management of SSSIs is also included within the Act. Impact Risk Zones (IRZs) are zones around an SSSI account for the particular sensitivities of the features for which it is notified and identify development proposal which could have adverse impacts.

The Wildlife and Countryside Act 1981 (as amended by the CRow Act 2000) protects native animals, plants and habitats. Under the Act it is an offence to intentionally kill, injure or take any wild animal listed on Schedule 5 and it is an offence to interfere with places used for shelter or protection, or intentionally disturb animals occupying such places. The Act prohibits picking, uprooting or destroy any wild plant (or any attached seed or spore) listed in Schedule 8.

The Environment Bill 2021 makes it mandatory for housing and development, subject to some narrow exemptions, to achieve at least a 10% net gain in value for biodiversity – a requirement that habitats for wildlife must be left in a measurably better state than before the development. Developers must submit a 'biodiversity gain plan' alongside usual planning application documents. The local authority must assess whether the 10% net gain requirement is met in order to approve the biodiversity gain plan.

The Environment Bill 2021 strengthens the duty on public authorities (NERC Act, 2006) to have regard to the conservation of biodiversity.

The Environment Bill 2021 amends the Wildlife and Countryside Act 1981 to introduce an additional purpose for granting a protected species licence in relation to development, 'for reasons of overriding public interest', and two additional tests for the granting of such licences: that there is 'no other satisfactory solution' and that granting the licence is 'not detrimental to the survival of any the population of the species concerned'. These changes will reduce the scope for unlicensed activities to provide clear safeguards before licences can be granted, providing legal certainty and clarity to developers about their environmental obligations.

8 Appendix B: Retrospective Baseline Map



Appendix B: Post-development Map



9 Appendix C: Calculation Tool, Headline Results Extract

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.12
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	10.60%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	1.12	1.24	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional area habitat units required to meet target ✓

No additional hedgerow units required to meet target ✓

No additional watercourse units required to meet target ✓