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Biodiversity Net Gain Report

Survey site:

32-36 Bournemouth Road, Chandler's Ford, Eastleigh, SO53 3ZL

Client:

Portakabin Ltd.

Report date:

21/10/2025

Project:

This report has been produced to support a planning application with Eastleigh Borough Council. The proposal is described as: *'demolition of an existing office building and replacement with associated landscaping.'*

Status	Issue	Name	Date
Final	1.0	Laurence Wills ACIEEM BSc (Hons), Senior Ecologist	25/07/2025
Amended	2.0	Laurence Wills ACIEEM BSc (Hons), Senior Ecologist	21/10/2025

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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.
> This approach is enshrined in Government planning guidance, for example, paragraph 185 of the National Planning Policy Framework for England.
> 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 Ltd was instructed by Portakabin Ltd. to undertake a Biodiversity Net Gain (BNG) Assessment for a proposed development at 32-36 Bournemouth Road, Chandler's Ford, Eastleigh, SO53 3ZL (hereafter referred to as "the site"). The proposed works involve the *'demolition of an existing office building and replacement with associated landscaping'* (hereafter referred to as "the proposed development").

- The development is anticipated to result in a **+10% net gain** in area-based habitat units and linear-based hedgerow units. It is noted that watercourse units are not applicable to this assessment. A minimum 10% net gain for the site has been achieved, as such, the proposed development is considered to be compliant with current legislation (Environment Act 2021).

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1.0 Introduction and Context

1.1 Introduction

Arbtech Consulting Ltd was instructed by Portakabin Ltd. to undertake a Biodiversity Net Gain (BNG) Assessment for a proposed development at 32-36 Bournemouth Road, Chandler's Ford, Eastleigh, SO53 3ZL (hereafter referred to as "the site"). The proposed works involve the *'demolition of an existing office building and replacement with associated landscaping.'* (hereafter referred to as "the proposed development"). A plan showing the development is provided in **Appendix A**.

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

- PEA PRA - 32-36 Bournemouth Road, SO53 3ZL- v1-42298523- 25.07.25 (Arbtech Consulting, 2025).

1.2 Site Context

The site is located within an urban area of Chandlers Ford, Southampton (national grid reference: SU 43270 20364). The site comprises an office block and surrounding areas of hardstanding. Residential properties are located immediately to the south and east, with associated amenity gardens and scattered mature trees. Small pockets of woodland are situated further to the east, while industrial areas dominate the landscape to the north, west, and far south. Due to the surrounding urban infrastructure and limited on-site habitats, the local and wider environment is considered to hold low potential for supporting wildlife. A site location plan is provided in **Appendix B.**

1.3 BNG Informative

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

The legalised Environment Act (2021) requires developments in England to demonstrate a measurable net gain in biodiversity and sets a target of a minimum of +10% BNG for all developments. It also stipulates that a management plan with a minimum 30-year term should be adopted to ensure biodiversity net gain can be delivered. Biodiversity Net Gain became mandatory for new developments (non-exempt) on 12th February 2024.

The DEFRA Statutory Biodiversity Metric is the latest version of the metric 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 PRA - 32-36 Bournemouth Road, SO53 3ZL- v1-42298523- 25.07.25 (Arbtech Consulting, 2025) ecological report. A baseline habitat plan is provided in **Appendix C**. This report also identified any existing tree specifications and retention (if applicable).

Habitat Classification

The Preliminary Ecological Appraisal (PEA) classified the habitats on site according to UK Habitat Classification User Manual (UK Habitat Classification Working Group, 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 Condition Assessment Supplement (Natural England, 2024).

Strategic Significance

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

- Ecological value (based on the Ecology Report and Tree Survey Data);
- Function within the landscape (based on a review of Google and OS imagery); and
- Any site or habitat allocations under the relevant Local Planning Policy and Biodiversity Action Plan.

2.2 Post Development Biodiversity Value

The post development BNG Calculation was informed by 1297-MP-01 2025-10-08 (Indigo Landscape Architects Ltd, 2025), which shows the broad landscape proposals. The Proposed Site Plan is provided in **Appendix A.** Habitat coverage anticipated post-development is illustrated on the plan in **Appendix D**.

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, 2023).

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

Habitat condition was assessed using the relevant condition assessment sheets found in the Statutory Biodiversity Metric Condition Assessment Supplement (Natural England, 2024). 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 (based on the development plans and professional judgement);
- Function within the landscape (based on the location of the proposed habitats and a review of Google and OS imagery); and
- Any site or habitat allocations under the relevant Local Planning Policy and Biodiversity Action Plan.

2.3 Limitations

None recorded.

3.0 Results and Evaluation

3.1 Baseline Habitats

Table 1 details the baseline habitats present within the site along with their area/length, condition, and strategic significance:

Table 1: Baseline Biodiversity Value

Habitat	***Area (ha)/ Length(km)***	***Area Retained or Enhanced***	***Description***	***Condition Assessment***	***Strategic Significance***
Area-based habitats					
Urban: Developed land; sealed surface	0.5863 ha	**None**	A large two storey office block within the northern section of the site. Multiple temporary storage containers/staffing facilities are also present within the southwest section of the site. Areas of hardstanding consisting of parking areas and turning spaces also make up the majority of the site.	Habitat condition pre-determined as **'N/A'** as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance Not included within local strategy.

3.2 Post Development Habitats

Table 2 details the post development habitats present within the site along with their area/length, condition, and strategic significance.

Table 2: Post Development Biodiversity Value

Habitat (UK Habs)	***Area (ha)/ Length(km)***	***Description***	***Target Condition***	***Strategic Significance***
Area-based habitats				
Heathland and Shrub: Mixed scrub	0.0098 ha	Areas of mixed scrub will be created within the central area of the site to form a barrier towards the residential properties off site to the south. The habitat will also create a boundary for the amenity area within the centre of the site.	The area will comprise a mix of a minimum of 80% native species, of which a minimum must be three woody species. No single species will comprise 75% of the area. The area will be rejuvenated in time to allow seedlings, saplings and young shrubs to be present among mature specimens. No invasive non-native species will be present. Due to the location and the exposed urban nature of the site, '**moderate'** condition is anticipated after 30 years.	**Low** Strategic Significance Not included within local strategy.
Urban: Developed land; sealed surface	0.5097 ha	Areas of hardstanding will be created comprising driveway access and parking spaces for the office building. Areas of hardstanding will be retained within the southwest of the site.	Habitat condition pre-determined as **'N/A'** as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance Not included within local strategy.
Urban: Introduced shrub	0.0634 ha	Areas of mixed ornamental planting will be created across the site. Large sections will be creating within the northeast with smaller sections within amenity areas located in the centre of the site.	Habitat condition pre-determined as '**N/A'** as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance Not included within local strategy.
Individual trees: Urban tree	0.0489 ha	12 individual trees will be planted and spaced out within the eastern area of the site. These will predominantly be placed within areas of introduced shrub.	Over the period of 30 years, the trees will be managed and encouraged to mature. Due to the location and the exposed urban nature of the site, **'poor'** condition is anticipated after 30 years. The species will be native, and they will be encouraged to allow natural ecological niches develop, rather than have the trees used for ornamental purposes.	**Low** Strategic Significance Not included within local strategy.

Urban: Facade-bound green wall	0.033 km	Three sections of a facade-bound green wall will be created on the proposed building. These will be on the northeast corner, southern elevation and western corner.	The vegetation structure will be varied and provide opportunities for invertebrates. Flowering species will be present offering nectar species at different times of the year. No invasive non-native species will be present. '**Good'** condition is anticipated after 30 years.	**Low** Strategic Significance Not included within local strategy.
Linear-based habitats				
Hedgerows: Non-native and ornamental hedgerow	0.143 km	Ornamental hedgerows will be created along the borders of the introduced shrubs and southern boundary of the site to the residential properties.	Habitat condition pre-determined as '**poor**' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance Not included within local strategy.

3.3 Change in Biodiversity Value of the Site

Full details are provided in the Defra Statutory Metric. The headline results (**Appendix E**) as described below.

- The baseline biodiversity unit score: **Area-Based Habitat Units**: 0.00; **Hedgerow Units:** 0.00; **Watercourse units:** N/A.
- The post-development biodiversity unit score: **Area-Based Habitat Units**: 0.44; **Hedgerow Units:** 0.14; **Watercourse units:** N/A.

This results in the following change in biodiversity value of the site:

- **Area Based Habitat Units: 0.44-unit increase.**
- **Hedgerow Units: 0.14-unit increase.**
- **Watercourse units:** N/A

4.0 Conclusions and Recommendations

4.1 Discussion

The development is anticipated to result in a **+10% net gain** in area-based habitat units and linear-based hedgerow units. It is noted that watercourse units are not applicable to this assessment. A minimum 10% net gain for the site has been achieved, and therefore the proposed development is considered to be compliant with the current legislation (Environment Act 2021).

4.2 30-Year Management Plan

A BNG HMMP must be produced for the site to comply with current guidance detailed within the Statutory Biodiversity Metric guidance documents. The management plan will provide best practice prescriptions for the implementation, management, and monitoring of the proposed landscaping for a minimum term of 30 years to ensure the site is developed in accordance with the BNG Assessment. It is anticipated that a BNG HMMP will be produced prior to any development activity that incorporates the selected option for biodiversity off-setting and subsequently demonstrates a compliant BNG.

5.0 Bibliography

- Arbtech Consulting (2025). PEA PRA - 32-36 Bournemouth Road, SO53 3ZL- v1-42298523- 25.07.25.
- 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.
- Google Earth. (2025).
- Indigo Landscape Architects Ltd (2025). 1297-MP-01 2025-10-08 (),
- Natural England (2024). The Statutory Biodiversity Metric User Guide. https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides.
- UK Habitat Classification Working Group (2023). UK Habitat Classification – Habitat Definitions V2.0.

Appendix A: Proposed Development Plan

Appendix B: Site Location Plan

Appendix C: Baseline Habitats

Appendix D: Post-Development Habitat Plan

Appendix E: Headline BNG Results

32-36 Bournemouth Road

Headline Results

Scroll down for final results ⚠

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On-site baseline	*Area habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Area habitat units*	0.44	
	Hedgerow units	0.14	
	Watercourse units	0.00	
On-site net change (units & percentage)	*Area habitat units*	0.44	N/A
	Hedgerow units	0.14	N/A
	Watercourse units	0.00	0.00%
Off-site baseline	*Area habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Area habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	*Area habitat units*	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	0.44	
	Hedgerow units	0.14	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	*Area habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	0.44	
	Hedgerow units	0.14	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	N/A	0 baseline units - % cannot be calculated
	Hedgerow units	N/A	0 baseline units - % cannot be calculated
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Area habitat units	10.00%	0.00	0.00	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	0.00	0.00	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓