

Biodiversity Net Gain Assessment

Survey site:

1A West St, Worsbrough, Barnsley, South Yorkshire, S70 5PG

Client:

Tom Agus

Survey date:

10th November 2025

Project:

This report is prepared to inform a planning application with Barnsley Metropolitan Borough Council. The proposal is described as:
Demolition of existing domestic garage and formation of new driveway/parking, and outline permission for the erection of 4 houses within the residential garden.

BNG assessment methodology and legislation can be found in the Arbtech Supplement: **[BNG Methodology and Legislation – 2025](#)**.

The results and recommendations contained within this report are valid for 18 months. An updated site visit and BNG assessment may be required if the report is to be used any longer than 18 months after completion.

Version Control			
Status	Issue	Name	Date
Draft	0.1	Harry Brindle, BSc (Hons), Consultant Ecologist	10/11/2025
Final	1.0	Harry Brindle, BSc (Hons), Consultant Ecologist	10/11/2025
Updated	2.0	Harry Brindle, BSc (Hons), Consultant Ecologist	16/04/2026
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Site Location and Context

A baseline habitat map is provided in **Appendix 1**, a post development habitat map in **Appendix 2**, a proposed development plan in **Appendix 3**, headline BNG results in **Appendix 4**, and condition assessments in **Appendix 5**.

The survey site is centred on National Grid Reference SE 36141 03804 and has an area of approximately 0.11ha. The site comprises a garage and garden area, located within the grounds of a dwelling to the north of the site. The site is located within the village of Worsbrough, 3km south of the town of Barnsley. The site is bound by dwellings to the north-west, Station Road to the north-east, Edmunds Road to the south-east and an area of grassland to the south-west. The wider landscape comprises a mosaic, with significant areas of urban development to the north, and the Dearne Valley Wetlands SSSI and Worsborough Country Park LNR to the south, details of which are provided further in this report. The underlying geology for the site comprises mudstone, siltstone and sandstone (Pennine Middle Coal Measures Formation) which is overlaid by slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils, typical habitats of which include seasonally wet pastures and woodlands.

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

- ❖ Statutory BNG Metric - 1A West St, South Yorkshire, S70 5PG – v3 (Arbtech Consulting Ltd., 2026)
- ❖ Proposed Plan (White Agus, 2025)
- ❖ Preliminary Ecological Appraisal (PEA) - 1A West St, South Yorkshire, S70 5PG – v2 (Arbtech Consulting Ltd., 2026)

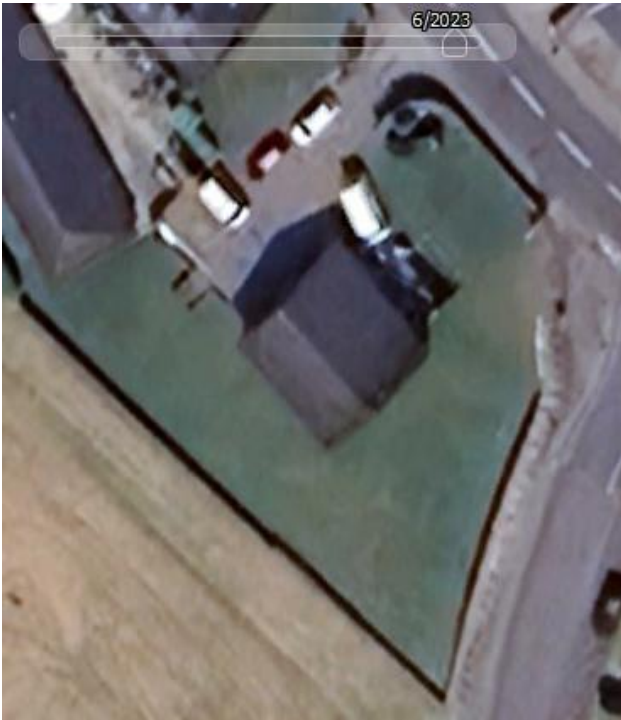
Executive Summary

The current landscaping proposal generates a net loss of area-based habitat units (-20.26%) but a net gain of linear-based habitat units (19.98%). In line with the Statutory Biodiversity Metric User Guide (2025), any loss of a habitat must be replaced on a like-for-like or like-for-better principle. With unmet trading conditions and a net loss, the proposal fails principal Rules 1 and 2 of BNG and is not compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2025).

In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 0.21 will need to be achieved. At present, there is a unit deficit of **0.06** units.

The residential constraints of the site force all vegetated habitats to be classified as vegetated gardens in line with the BNG user guidelines. There is not enough space on site to create the habitat necessary whilst keeping in line with BNG trading rules. Therefore offsite compensation will be required. The most suitable option for the number of units required will be the purchase of units from a habitat bank.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	24th October 2025
	The baseline biodiversity value of the site is derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2025). As evident in the screenshots of satellite imagery obtained from GoogleEarth dated April 2020 and June 2023, the site does not appear to have undergone any degradation. The habitats on site, and therefore biodiversity value of the site, is not considered to have undergone degradation since 30th January 2020.	
		
Irreplaceable Habitat Statement	No irreplaceable habitats as listed under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024) are currently present nor were present before 30 th January 2020.	

Metric Version & Publication Date	Statutory Biodiversity Metric Calculation Tool first published 29 th November 2023 with last updates to metric tools and user guides on 3 rd July 2025.
BNG Target Uplift	+10%
National Character Area (NCA)	38 - Nottinghamshire, Derbyshire and Yorkshire Coalfield
Strategic Significance	South Yorkshire Mayoral Combined Authority (SYMCA) is the Responsible Authority for preparing the South Yorkshire Local Nature Recovery Strategy (LNRS), which will cover Barnsley, Doncaster, Rotherham, and Sheffield. At present, the South Yorkshire LNRS is in draft preparation, being developed collaboratively by SYMCA, the South Yorkshire Local Nature Partnership (LNP), and the Wildlife Trust for Sheffield & Rotherham. Until the LNRS is adopted, Barnsley Metropolitan Borough Council advises applicants to determine strategic significance for Biodiversity Net Gain (BNG) assessments using its Local Plan policies, Green Infrastructure Strategy, and ecological evidence base.
Limitations	
There were no specific limitations to the assessment.	

Baseline

Baseline Biodiversity Value: On-Site

Area-Based Habitats (A-1)

Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Developed land; sealed surface	0.0303	There is one building present within the site that comprises a garage structure, associated with the dwelling to the north of the site.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Developed land; sealed surface	0.0415	Located in the western and central areas of the site are sections of hardstanding, utilised for access into the site and car parking. There is no associated vegetation and the areas of minimal ecological value.		
Vegetated garden	0.0972	Located in the eastern section of the site is a garden area, comprising an amenity lawn.		

Linear-Based Habitats (A-1)

Non-native and ornamental hedgerow	0.0483	Located along the northern boundary of the garden is a managed, non-native ornamental hedgerow, comprising a short section of cherry laurel (<i>Prunus laurocerasus</i>) to the west, transitioning into a Leyland cypress (<i>× Cuprocyparis leylandii</i>) hedge to the east.	Poor: As default in the BNG statutory metric	Low Strategic Significance
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Post-Development

Post-Development Biodiversity Value: On-Site

Area-Based Habitats

	Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Retained (A1)	Developed land; sealed surface	0.0183	Retained building to the north.	Habitat condition pre-determined as 'N/A' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Developed land; sealed surface	0.0155	Retained patio area to the north.		
	Vegetated garden	0.0089	Retained garden area to the north.		
Created (A-2)	Developed land; sealed surface	0.0152	Proposed buildings.	Habitat condition pre-determined as 'N/A' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	
	Developed land; sealed surface	0.0364	Proposed hardstanding for associated buildings including driveway and parking.		
	Vegetated garden	0.0711	Proposed garden areas adjacent to proposed buildings.		

Linear-Based Habitats

Retained (B-1)	Non-native and ornamental hedgerow	0.0483	Retained hedgerow.	Poor: As default in the BNG statutory metric	Low Strategic Significance
Created (B-2)	Non-native and ornamental hedgerow	0.01	Proposed ornamental hedgerow.		

Change of Biodiversity Value

		Biodiversity Units		
		Area-Based	Linear-Based	Watercourse-Based
On-Site	Baseline	0.19 units	0.05	N/A
	Post-Development	0.16 units	0.06	N/A
	Net Change	-0.04 units (-20.26%)	0.01 units (+19.98%)	N/A
Off-Site	Baseline	N/A	N/A	N/A
	Post-Development	N/A	N/A	N/A
	Net Change	N/A	N/A	N/A
Overall Net Change		-0.04 units (-20.26%)	0.01 units (+19.98%)	N/A

Results, Discussion, and Next Steps

BNG Informative	
Results	The current landscaping proposal generates a net loss of area-based habitat units (-20.26%) but a net gain of linear-based habitat units (19.98%). In line with the Statutory Biodiversity Metric User Guide (2025), any loss of a habitat must be replaced on a like-for-like or like-for-better principle. With unmet trading conditions and a net loss, the proposal fails principal Rules 1 and 2 of BNG and is not compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2025). In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 0.21 will need to be achieved. At present, there is a unit deficit of 0.06 units.
Recommendations and Next Steps	In order to achieve the required 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 achieve a net gain on site. The provisioning of additional landscaping should first be considered within the site boundary. The residential constraints of the site force all vegetated habits to be classified as vegetated gardens in line with the BNG user guidelines. This includes the planting of new trees which means the units required to replace the lost tree cannot be created on site. Additional legal contracts can be sought after, such as an s106 agreement with the local council to mitigate this issue if alternative habitat wants to be created onsite. However, the suggestions it that offsite enhancement are purchased from a habitat bank. Based on the proposed plans, it is unlikely that net gain will be achieved by ways of habitat creation/enhancement without significant changes to the proposals on site or require unfeasible commitments off-site. As such, a financial contribution to off-site ecological enhancements (i.e. purchasing biodiversity units) within an approved scheme is required to make up the +10% net gain for area-based habitat units. The mechanism for securing this off-setting will need to be proposed to and confirmed by the LPA and would be linked to the application through a planning obligation Section 106 (s106) agreement. The proposed habitat compensation must be of an appropriate distinctiveness to meet the trading rules of BNG.

	A summary as to what off-site units will be required is detailed in the table below.				
		Distinctiveness	Broad Habitat Group	Habitat	Units Required
		Low	Any	Any	0.06
		Total			0.06
Pre-Commencement	The habitats proposed on site include private garden, buildings and hardstanding, all of which are urban low value habitats which do not require long-term management, therefore post-development maintenance and management is not required, and a Biodiversity Net Gain Management Plan will not be needed for the site.				

Appendix 1: Baseline Habitat Plan



Appendix 2: Post-Development Habitat Plan



Appendix 3: Proposed Development Plan



Appendix 4: 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)			Area habitat units	-0.04
			Hedgerow units	0.01
			Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)			Area habitat units	-20.26%
			Hedgerow units	19.98%
			Watercourse units	0.00%
Trading rules satisfied?			No - Check Trading Summaries ▲	
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	0.19	0.21	0.06
Hedgerow units	10.00%	0.05	0.05	0.00
Watercourse units	10.00%	0.00	0.00	0.00

Appendix 5a: Baseline Habitat Condition Assessment Sheets

N/A for post development habitat

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

N/A for post development habitat