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Biodiversity Assessment

16 Glebe Road Rainham RM13 9LH

April 2025

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Project: 16 Glebe Road Rainham RM13 9LH

Date: 29/04/2025

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Quality Control

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This Biodiversity Net Gain report contains recommendations on measures for achieving Biodiversity Net Gain. These recommendations do not constitute a design for Biodiversity Net Gain. In submitting these recommendations, the ecology team has no Design Liability associated with these recommendations for Biodiversity Net Gain.

Table of Contents

1. Executive Summary

2. Introduction

Purpose of the Report

General Description

Development Proposal

Planning Status

Aims and Objectives

Planning Policy and Legislation

3. Methodology

Assessor's Qualifications and Competence

Desk Study

Habitat Survey

Condition Assessment

Calculating Biodiversity Units

Assumptions and Limitations

4. Results

Pre-Development Assessment

Baseline Biodiversity Assessment

Predicted Post-intervention Assessment

5. Conclusion and Recommendation

Biodiversity Assessment

1. Executive Summary

1.1. Biodiversity Net Gain (BNG) is a specific, measurable outcome of project activities deliver demonstrable and quantifiable benefits to biodiversity compared to the baseline situation. Defra's Small Sites Metric¹ uses habitats to proxy for the broader biodiversity types scored according to their relative biodiversity potential.

1.2. The proposed post-intervention biodiversity score indicates that the Biodiversity Net Gain target has been met by adding +0.0766 habitat units (Small Sites Metric). No additional habitat units need to be purchased from a biodiversity offsetting provider.

1.3. The proposed development site contains local habitats with no irreplaceable, notable, statutory, non-statutory, or priority habitats.

Site Name		16 Glebe Road Rainham RM13 9LH	
Sheet Name		Headline Results	
Headline Results			
Headline		BNG Targets Met ✓	
Trading Rules		Trading Rules Satisfied ✓	
Next steps		Check for input errors/rule breaks present in the metric ⚠	
Baseline Units	Habitat units	0.7183	
	Hedgerow units	Zero Units Baseline	
	Watercourse units	Zero Units Baseline	
Post-development Units	Habitat units	0.7949	
	Hedgerow units	0.0000	
	Watercourse units	0.0000	
Total net unit change	Habitat units	0.0766 ✓	
	Hedgerow units	0.0000	
	Watercourse units	0.0000	
Total net % change	Habitat units	10.66% ✓	
	Hedgerow units	% target not appropriate	
	Watercourse units	% target not appropriate	
Habitats units required to meet target		0.0000	
Hedgerow units required to meet target		0.0000	
Watercourse units required to meet target		0.0000	

¹ Defra (2024). *The Small Sites Metric (Statutory Biodiversity Metric) User Guide*. Natural England, Department for Environment Food and Rural Affairs.

2. Introduction

Purpose of the Report

- 2.1. The report aims to provide a clear and consistent document with which the developer can demonstrate their Biodiversity Net Gain. In addition, the planning authority can check whether the proposals meet the Biodiversity Net Gain objective. The developer is committed to achieving the project's positive Biodiversity Net Gain.
- 2.2. The report's scope addresses the feasibility of demonstrating Biodiversity Net Gain by calculating the predicted changes in biodiversity value with the proposed development. A Biodiversity Impact Assessment is required to provide a measurable calculation of the biodiversity units on the site before and after the proposed development. In addition, the report audits the land's biodiversity value and calculates the losses and gains in biodiversity value from changes and actions that affect biodiversity.
- 2.3. The Small Sites Biodiversity Metric does not explicitly include species and uses habitat as a proxy for broader biodiversity. Different habitats are scored according to their relative biodiversity potential, maintaining the same levels of species protection.
- 2.4. As the British Standard BS 42020:2013² advised, a suitably professional ecologist is appraised to ensure a rigorous and thorough independent review.

General Description

- 2.5. The land at 16 Glebe Road Rainham RM13 9LH.

Development Proposal

- 2.6. The proposal is for one residential building, with an associated vegetated garden, access and parking.

Planning Status

- 2.7. The developer will submit a planning application.

Aims and Objectives

² British Standard (2013). *Biodiversity: Code of Practice for Planning and Development*, BS 42020:2013.

2.8. This report addresses the following purposes:

- To determine the predicted post-intervention percent net change in biodiversity value as calculated using the latest Defra calculation tool (Main Sites Metric).

Planning Policy and Legislation

2.9. National Planning Policy Framework policy states that planning should provide Biodiversity Net Gains. National Planning Policy Framework³ (NPPF) paragraphs 192(b), 193(d), and the Natural Environment Planning Practice Guidance (PPG) refer to this policy requirement.

3. Methodology

Assessor's Qualifications and Competence

3.1. The Ecologist has over 25 years of conservation experience. Founder of a new conservation charity and previously worked as Head of Conservation for a Wildlife Trust, Director of Studies for the Field Studies Council and Course Director and Lecturer for the University of Essex and Cambridge.

3.2. The Ecologist is nationally respected and has been awarded various fellowships for his outstanding or significant contribution to these disciplines, including conservation and biodiversity, for delivering landscape-scale conservation projects.

3.3. The Ecologist is currently on the external advisory board for the University of Essex. In addition, he represents the Chartered Institute of Ecology and Environmental Management at the University of Southampton, judges national ecological projects, is an ecological expert for the Southwood Foundation and serves on the Professional Standards Sub-Committee, which develops biodiversity gain and accreditation/standards.

3.4. The assistant ecologist has a strong academic foundation in marine and environmental sciences, with a focus on ecological research and conservation. With a BSc Honours in Marine

³ Ministry of Housing, Communities and Local Government (2025). *National Planning Policy Framework*.

Biology, and extensive experience in conducting ecological fieldwork, including botanical and wildlife surveys, they have a proven ability to assess biodiversity and habitat quality across various environments. Their expertise includes evaluating ecological data, extensive scientifically robust report writing, and contributing to habitat management and restoration projects.

Desk Study

3.5. A desk study assesses the publicly available Open-Source Natural England datasets for Habitats of Principal Importance, irreplaceable habitats such as ancient woodland, and designated sites for nature conservation.

Habitat Survey

3.6. The vegetation and habitat types are classified according to the UK Habitat Classification. The Small-Scale Metric operates on the UK Habitat Classification system. The UK Habitat Classification (UKHab) is a comprehensive habitat classification system for the UK that provides outputs suitable for ecological impact assessment, habitat metrics, and better data integration between organisations.⁴

Condition Assessment

3.7. The condition of discrete habitat parcels was assessed using specific criteria from the latest Metric from Defra.

Calculating Biodiversity Units

3.8. Defra's Biodiversity Metric represents best practices for auditing the impact of development schemes upon habitats that may have a biodiversity interest. To ensure the proposed compensatory and enhancement measures are 'adequate' and help demonstrate 'no-net-loss' of biodiversity due to the proposed development. This approach is consistent with the National Planning Policy Framework.

⁴ Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2023). The UK Habitat Bank Classification User Manual Version 1.1. UKHab Ltd.

3.9. The biodiversity assessment measures are for habitats only and complement protected species surveys. The method uses metrics as surrogates to quantify the biodiversity value for a particular area. Biodiversity units result from various scores, including habitat distinctiveness, habitat condition and size.

3.10. Biodiversity values are for the pre-development baseline and predicted post-development habitat and conditions. Any losses or gains are determined as the difference between the two. The metric accounts for hedgerows and other linear habitats, such as watercourses, separately from different area-based habitat types. This is due to connectivity and other ecological functions, which must be commensurate with physical area cover. Linear habitats are compared before and after development. Habitat areas and linear features must not be summed.

Assumptions and Limitations

3.11. The metric is transparent and used to calculate the biodiversity value of an application site before and after development. It is a proxy measurement to determine whether the development will result in an on-site habitat biodiversity net loss or gain. The biodiversity metric is a tool to help inform design plans and decisions, incentivising actions that benefit biodiversity and discouraging activities that harm biodiversity.

4. Results

Pre-Development Assessment

4.1. The proposed development site contains local habitats with no irreplaceable, notable, statutory, non-statutory, or priority habitats.

Habitat Units:

Building and hard standings

4.2. An area of sealed surface for parking was present.

Vegetated Building

4.3. An area resembled a vegetated garden and planted areas. Two large trees were present.

Baseline Biodiversity Assessment

4.4. The baseline value of each specific habitat was measured, and a score corresponding to the criteria was assigned. The Habitat Condition Assessment categorised the functionality of these habitats.

Habitat Units

4.5. The on-site baseline biodiversity value is +0.7183 Area-based Habitat Units.

Predicted Post-Biodiversity Assessment

4.6. The predicted post-biodiversity assessment has been undertaken based on the proposed development design and existing ecological features. Natural England automatically assigns the predicted habitats enhanced a biodiversity value based on several risk factors, such as accounting for the time it takes the habitat to reach the prescribed distinctiveness, habitat condition, or full functionality.

Habitat Units

4.7. The proposed development will create a net gain of +0.0766 Area-based Habitat Units.

5. Conclusion and Recommendations

Biodiversity Assessment

- 5.1. The proposed post-intervention biodiversity score indicates that the Biodiversity Net Gain target has been met by adding +0.0766 habitat units (Small Sites Metric). No additional habitat units need to be purchased from a biodiversity offsetting provider.