

Kingsway, Rochdale

Biodiversity Impact Assessment

2023

REV.B



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Client	Euro Garages
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Executive Summary

Development Details

The client is proposing commercial development at Kingsway, Rochdale, hereafter referred to as the 'site'.

This report assesses the predicted changes in biodiversity units resulting from the proposed development.

Biodiversity Impact Assessment

Baseline habitats score 4.72 units. Post-development habitats score 12.51 units. This represents a gain of 7.79 units (+165.07%).

Baseline hedgerows score 0.10 units. Post-development hedgerows score 0.86 units. This represents a gain of 0.76 units (+768.96%).

Outcomes

The proposed development at Kingsway is predicted to result in a net gain of biodiversity units and demonstrates compliance with current planning policy relating to Biodiversity Net Gain.



1. Introduction

1.1 Project Brief

- 1.1.1 Rachel Hacking Ecology Limited was commissioned in 2023 by Euro Garages to carry out a Biodiversity Impact Assessment of at land at Kingsway in Rochdale (O.S. grid reference: SD 91246 12311 – see Figure 1).



Figure 1. Map showing the location of the site courtesy of Google Maps

- 1.1.2 The site comprises a plot of semi-improved and marshy grassland with scattered scrub and immature trees. The site is in an urban location, surrounded by residential and commercial development.

Description of Development

- 1.1.3 The site will be the subject of a planning application for the construction of retail units with associated parking.

1.2 Scope of Work

- 1.2.1 The Client commissioned Rachel Hacking Ecology to calculate the baseline and predicted post-development biodiversity units.
- 1.2.2 Following revisions to the layout, a revised BNG assessment was undertaken.

2. Methods

2.1 Extended Phase 1 Habitat Survey

- 2.1.1 An Extended Phase 1 Habitat Survey of the site was undertaken on 14th April 2023. The site was walked, and habitats were recorded and mapped. The survey was undertaken by Hollie Ainley (Ecologist).

2.2 Biodiversity Impact Assessment

- 2.2.1 DEFRA Metric 4.0 Auditing and Accounting for Biodiversity calculation tool was used to assess the predicted changes in habitat units resulting from the proposed development.
- The baseline habitats recorded during the Extended Phase 1 habitat Survey were measured using MapInfo GIS software.
 - The baseline habitats were translated into UKHab classification using the translation tool in the metric.
 - Habitat conditions were assessed using the Biodiversity Metric 4.0 Habitat Condition Assessment sheets.
 - The strategic significance of baseline habitats was assessed on whether they were formally identified in a local strategy or policy, or whether they were in an ecologically desirable location.
 - The proposed habitats, including any retained or enhanced habitats, were assessed based on information provided by DEP (areas of proposed habitats). No finalised landscaping plans were available, and calculations are based on indicative measurements of proposed planting which are subject to change.
- 2.2.2 The predicted change in biodiversity units was determined by calculating the difference between the baseline units and the post-development units.
- 2.2.3 Hollie Ainley BSc (Hons), PgCert carried out the initial calculations and assessment in July 2023. Hollie is an experienced ecologist and is trained in Biodiversity Impact Assessment. Dr Rachel Hacking undertook the revised assessment in October 2023.

3. Baseline Habitats

3.1.1 The baseline habitat units of the site are calculated to be 4.72.

Grassland – Modified Grassland

3.1.2 The modified grassland has a total measurement of 0.94ha. This habitat is of low distinctiveness and of low strategic significance. This habitat is in poor condition as it failed Condition 1 (see Table 1). The modified grassland provides 1.88 habitat units.

Table 1 showing the condition assessment of the modified grassland														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	TOTAL
Result	F	P	P	P	P	P	P	N/A	N/A	N/A	N/A	N/A	N/A	3
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	Criteria 1 is essential for achieving Moderate or Good – Not passed					Condition (Good/Moderate /Poor):				Poor				

Grassland – Other Neutral Grassland

3.1.3 Marshy grassland, including a small area of emergent vegetation is present onsite and covers 0.318ha. This is a habitat with medium importance and low distinctiveness. This habitat is in moderate condition as it failed Condition 6 (see Table 2). The neutral grassland provides 2.54 habitat units. The categorisation of Wetland – Purple moor grass and rush pasture was considered but deemed not applicable to the habitat on site.

Table 2 showing the condition assessment of the other neutral grassland														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	TOTAL
Result	P	P	P	P	P	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	Condition 1 is essential for achieving moderate condition – Yes Condition 6 is essential for achieving good condition - No					Condition (Good/Moderate /Poor):				Moderate				

Heathland and Shrub – Mixed Scrub

- 3.1.4 The mixed continuous scrub has a total measurement of 0.007ha. This habitat is of medium distinctiveness and of low strategic significance. This habitat is in poor condition as it passes 2 of the 5 criteria (see Table 3). The scrub provides 0.03 habitat units.

Table 3 showing the condition assessment of the mixed scrub														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	TOTAL
Result	F	F	P	P	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2
Are any criteria non-negotiable? (Y/N) If Yes are they passed?			N/A				Condition (Good/Moderate /Poor):			Poor				

Urban – Introduced Shrub

- 3.1.5 The shrub beds cover 0.003ha. This is a habitat with low importance and low distinctiveness. A condition assessment is not applicable for this habitat classification. The introduced shrub scores 0.01 habitat units.

Developed Land – Sealed Surface

- 3.1.6 Hardstanding runs through the middle of the site and covers 0.086ha. This is a habitat with no strategic importance and very low distinctiveness. A condition assessment is not applicable for this habitat classification. The developed land scores 0.00 habitat units.

Individual Trees – Urban Trees

- 3.1.7 Eight individual trees are located on site. The small trees were input into the calculator giving an equivalent total area of 0.0326ha. This habitat is of medium distinctiveness and low strategic significance. The trees are in moderate condition as they pass 3 of the 6 criteria (see Table 4). The scattered trees score 0.26 habitat units.

Table 4 showing the condition assessment of the urban trees														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	TOTAL
Result	P	F	F	P	F	P	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3
Are any criteria non-negotiable? (Y/N) If Yes are they passed?			N/A				Condition (Good/Moderate /Poor):			Moderate				

Baseline Hedgerow Units

- 3.1.8 A 0.043m Hawthorn hedgerow is present along the eastern site boundary. This is a habitat of low distinctiveness and low strategic significance. The habitat is assessed as being in poor condition as it fails both attributes in function group C (see Table 6 below for the condition assessment). The hedgerow scores 0.10 hedgerow units. Most will be retained.

Table 6 Showing the condition assessment of the native hedgerow														
The scores below show pass 'P' or fail 'F' for each criterion or 'NA' for any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.														
Criterion	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	C11	C12	C13	TOTAL
Result	P	P	P	P	F	F	P	P	N/A	N/A	N/A	N/A	N/A	6
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	N/A						Condition (Good/Moderate /Poor):			Poor				

Baseline River Units

- 3.1.9 There are no aquatic habitats on site, therefore no river units exist.

4. Proposed Habitats

4.1 Retained Habitats

- 4.1.1 No habitats are to be retained on site as part of the proposals.

4.2 Created Habitats

Habitat Units

- 4.2.1 Habitats that are being created within the landscape scheme as part of the proposals collectively provide 12.51 habitat units.

Urban - Developed land - Sealed Surface

- 4.2.2 This habitat includes the new buildings and hardstanding as part of the development. This equates to a total habitat area of 0.835ha. This habitat does not provide any habitat units.

Heathland and Shrub – Mixed Scrub

- 4.2.3 Native woodland mix is designed for the edges of the site. The mix of species means it correlates more with scrub than woodland. This habitat has a total measurement of 0.307ha. It has a target condition of 'moderate' which will take five years to achieve. This habitat will provide 2.06 habitat units.

Urban – Introduced Shrub

- 4.2.4 This habitat will consist of shrub beds and has a total measurement of 0.011ha. This habitat is automatically assigned poor condition and provides 0.02 habitat units.

Grassland – Modified Grassland

- 4.2.5 Amenity grassland will be planted across the site and has a total combined area of 0.238ha. It has a target condition of 'moderate' which will take four years to achieve. This habitat will provide 1.59 habitat units.

Individual Trees – Urban Tree

- 4.2.6 A total of 110 trees are proposed across the site, covering an area of 0.238ha, as per the Tree Helper in the DEFRA 4.0 Metric. The proposed final condition for this habitat is targeted as 'moderate', which will take 27 years and will provide 8.84 habitat units.

Created Hedgerow Units

- 4.2.7 Native hedgerow will be created on the site totalling 0.4km. The hedgerow will take one year to achieve poor condition and scores 0.77 hedgerow units.



5. Assessment

Habitats

- 5.1.1 The baseline habitats are calculated to provide 4.72 units. The proposed habitats are calculated to provide 12.51 units. The Biodiversity Impact Assessment shows a net gain of 7.79 units (+165.07%).
- 5.1.2 The trading rules have not been satisfied. This is due to the loss of a medium distinctive habitat (other neutral grassland) being replaced with habitats of a lower distinctiveness, or habitats of the same distinctiveness but a smaller area of land. It has been attempted to solve this by inputting entirely wildflower grassland into the metric in place of native mixed scrub (woodland planting). However, this still leaves a deficit. It can be argued that the creation of dense scrub / small trees is a highly valuable habitat for wildlife and the mixture of this and wildflower grassland creates a valuable mosaic of habitats on site. The grassland to be lost is species-poor and holistically, is being replaced with a scheme of higher ecological value.

Hedgerows

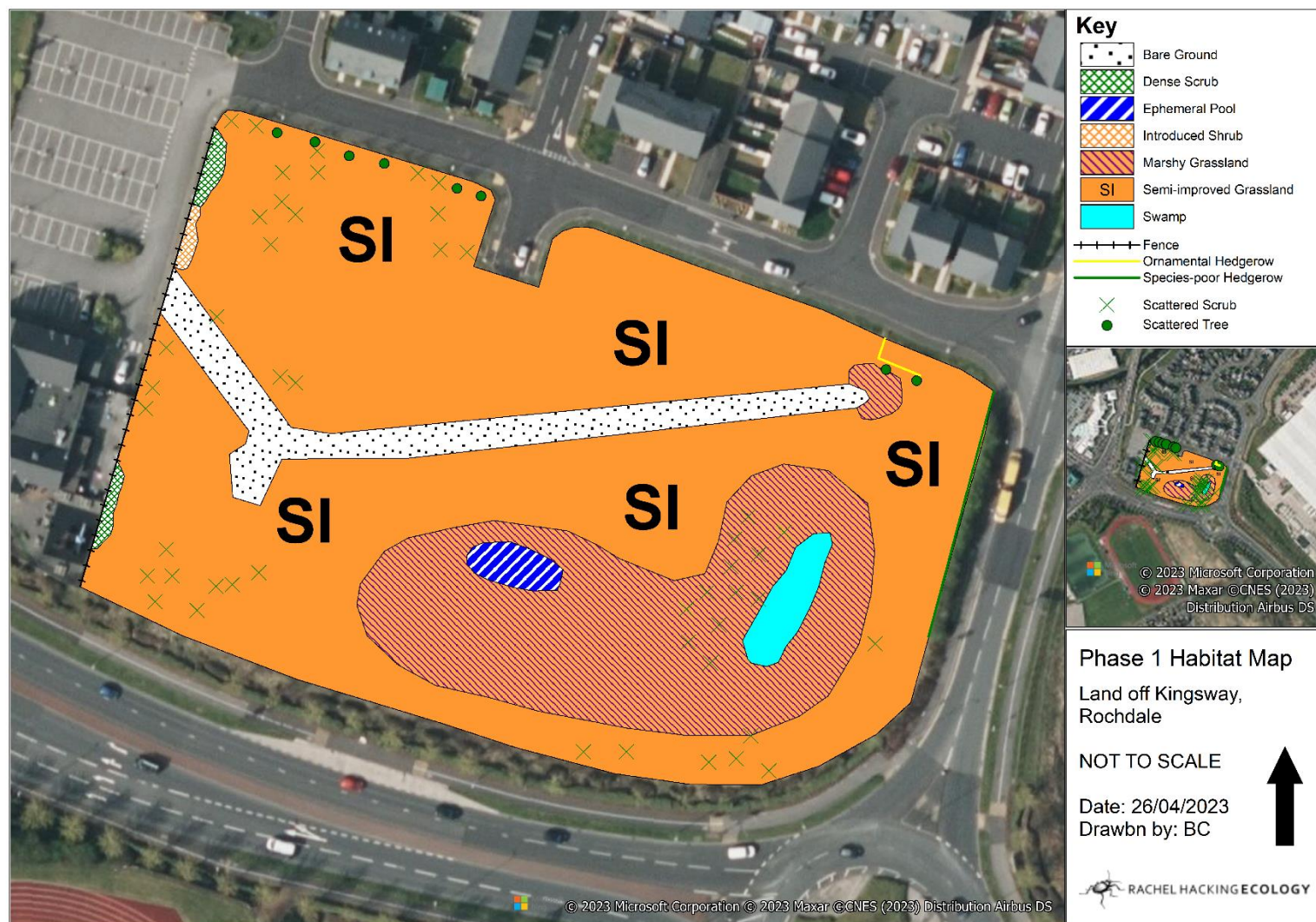
- 5.1.3 The baseline hedgerows are calculated to provide 0.10 units. The proposed hedgerows are calculated to provide 0.86 units. The Biodiversity Impact Assessment shows a net gain of 0.79 hedgerow units (+797.67%).

6. Summary

- 6.1.1 The proposed development at Kingsway in Rochdale is predicted to result in a net gain of habitat units and hedgerow units. This complies with current planning policy requirements. Habitats will be managed for 30 years via a Landscape and Ecology Management Plan (LEMP).



Appendix 1: Phase 1 Habitat Map



Appendix 2: Headline Results

On-site baseline	Habitat units	4.72	
	Hedgerow units	0.10	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	12.51	
	Hedgerow units	0.86	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	7.79	165.07%
	Hedgerow units	0.76	768.96%
	Watercourse units	0.00	0.00%
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	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)	Habitat units	7.79	
	Hedgerow units	0.76	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	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)	Habitat units	7.79	
	Hedgerow units	0.76	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	165.07%	
	Hedgerow units	768.96%	
	Watercourse units	0.00%	
Trading rules satisfied?	No - Check Trading Summaries		

