

181 Havant Road
Hayling Island
Biodiversity Impact Assessment
2023



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Client Euro Garages
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Executive Summary

Development Details

The client is proposing a re-development at 181 Havant Road, Hayling Island, 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 5.14 habitat units. Post-development habitats score 4.4 habitat units. This represents a loss of 0.75 habitat units (-14.51%). A net gain of 0.22 hedgerow units is predicted.

Outcomes

Offsetting will be required if the proposed development is to achieve biodiversity net gain. The level and means of this will need to be agreed with the LPA.



1. Introduction

1.1 Project Brief

- 1.1.1 Rachel Hacking Ecology Limited was commissioned in 2023 by Euro Garages to undertake a Biodiversity Impact Assessment at 181 Havant Road, Hayling Island (hereafter referred to as the 'site').
- 1.1.2 The site currently comprises three retail buildings on an area of hardstanding, small areas of improved grassland and continuous scrub with scattered semi-mature trees and a dry ditch. The site is located with residential development to the east with scattered woodlands and agricultural land in the wider area. The Solent Maritime Special Area of Conservation (SAC) is located to the west of the site. The site is located at O.S. grid reference: SU 71794 03010 (see Figure 1).



Figure 1. Showing the site location

Description of Development

- 1.1.3 The site will be the subject of a planning application for the redevelopment of the site.

1.2 Scope of Work

- 1.2.1 The Client commissioned Rachel Hacking Ecology to undertake a Biodiversity Impact Assessment to quantify the predicted changes in habitats resulting from the proposed development.

2. Methods

2.1 Extended Phase 1 Habitat Survey

- 2.1.1 An Extended Phase 1 Habitat Survey of the site was undertaken on 13th December 2022. The site was walked, and habitats were recorded and mapped. The survey was undertaken by Mark Woods *MCIEEM, CEcol* (Principal 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 Square Yard Landscape Architecture.
- 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 Simon Holden BSc (Hons), *MCIEEM* (Associate Ecologist) carried out the calculations and assessment in May 2023. Simon is an experienced consultant ecologist and is trained in Biodiversity Impact Assessment.

3. Baseline Habitats

- 3.1.1 The baseline is calculated to be 5.14 habitat units. The breakdown of this is presented below.

Developed Land; Sealed Surface

- 3.1.2 Buildings and hardstanding extend to 0.21ha. This habitat is of very low distinctiveness and low strategic significance. Habitat condition is not applicable. This habitat scores zero units.

Mixed Scrub

- 3.1.3 Continuous/dense scrub extends to 0.61ha. This habitat is of moderate distinctiveness and low strategic significance. It is in moderate condition as it fails one of the five assessment criteria (see Table 1). The mixed scrub scores 4.88 units.

Table 1 showing the condition assessment of the Mixed Scrub														
Mixed scrub with dense Bramble and occasional Elder and Hawthorn. Ground layer comprises Common Nettle and Ivy. Scattered semi-mature broadleaved trees occur at the north end of this habitat.														
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	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	N/A					Condition (Good/Moderate /Poor):				Moderate				

Ruderal/Ephemeral

- 3.1.4 Tall ruderal herb and ephemeral perennial vegetation extend to 0.001ha. This habitat is of low distinctiveness and low strategic significance. It is in good condition as it passes all three criteria (see Table 2). The ruderal/ephemeral habitat scores 0.01 units.

Table 2 showing the condition assessment of the Ruderal/Ephemeral habitat
A bank is present to the west of the site which comprises Bramble and tall ruderals such as Docks, Thistles and Hemlock. Elsewhere there is a variety of ruderals on flat ground including Bristly Ox-



Table 2 showing the condition assessment of the Ruderal/Ephemeral habitat														
tongue, Mugwort, Black Medick, Common Mallow, Scentless Mayweed, Wild Liquorice, Smooth Sow-thistle, Canadian Fleabane, Creeping Cinquefoil, Docks, Thistles and Common Nettle.														
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	N/A	N/A	N/A	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):				Good				

Modified Grassland

- 3.1.5 Amenity-managed (Modified) grassland extends to 0.03ha. This habitat is of low distinctiveness and low strategic significance. It is in poor condition as it fails two criteria, including criterion 1 (at least 6 species per m²) (see Table 3). The modified grassland scores 0.06 units.

Table 3 showing the condition assessment of the Grassland (low distinctiveness)														
Small areas of regularly mown improved grassland occur around the boundary of the site. The dominant grass species is Perennial Rye-grass. Commonly occurring herbaceous species include Yarrow, Spotted Medick, Dandelion <i>Taraxacum</i> agg. and Dove's-foot Crane's-bill.														
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	P	P	P	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?	C1 must be passed to achieve moderate condition (Fails)					Condition (Good/Moderate /Poor):				Poor				



Urban Trees

- 3.1.6 Six small Field Maple trees are present within the amenity grassland at the entrance and exit to the east of the site. Using the Tree Helper tool within the metric, these have an equivalent area of 0.0244ha. This habitat is of medium distinctiveness and low strategic significance. It is in moderate condition as it passes four out of the six criteria (see Table 4). The urban trees score 0.2 units.

Table 4 showing the condition assessment of the individual trees														
Six small Field Maples.														
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	P	P	P	N/A	N/A	N/A	N/A	N/A	N/A	4
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	N/A						Condition (Good/Moderate /Poor):			Moderate				

4. Proposed Habitats

4.1 Retained Habitats

Mixed Scrub

- 4.1.1 0.36ha of mixed scrub will be retained. This retains 2.88 habitat units.

Urban Trees

- 4.1.2 Three of the six small trees will be retained. This retains 0.1 habitat units.

4.2 Created Habitats

Developed Land; Sealed Surface

- 4.2.1 New buildings and hardstanding will extend to 0.42ha. This scores zero units.

Introduced Shrub

- 4.2.2 Ornamental shrub planting will cover 0.05ha. This habitat is of low distinctiveness and low strategic significance. Condition assessment is not applicable. The introduced shrub scores 0.1 habitat units.

Mixed Scrub

- 4.2.3 Native shrub planting will cover 0.03ha. This habitat is of medium distinctiveness and low strategic significance. Target condition is moderate, which will take five years to achieve. The mixed scrub scores 0.2 habitat units.

Urban Trees

- 4.2.4 Ten extra heavy standard trees will be planted. This habitat is of medium distinctiveness and low strategic significance. Using Tree Helper tool in the metric, these have an equivalent area of 0.3664ha. The target size is medium (30-90cm DBH) and target condition is moderate which will take 27 years to achieve. The urban trees score 1.12 habitat units.

Ornamental Hedgerow

- 4.2.5 A Beech hedgerow will be planted extending to 0.23km. This habitat is of very low distinctiveness and low strategic significance. Target condition is poor which will take one year to achieve. The native hedgerow scores 0.22 hedgerow units.

5. Assessment

- 5.1.1 The baseline habitats are calculated to provide 5.15 units. Some scattered trees and dense scrub will be retained, with a score of 2.98 habitat units.
- 5.1.2 The proposed habitats are calculated to provide 1.42 habitat units. A net gain of 0.22 hedgerow units is also predicted.
- 5.1.3 The Biodiversity Impact Assessment shows a net loss of 0.75 habitat units (-14.51%).



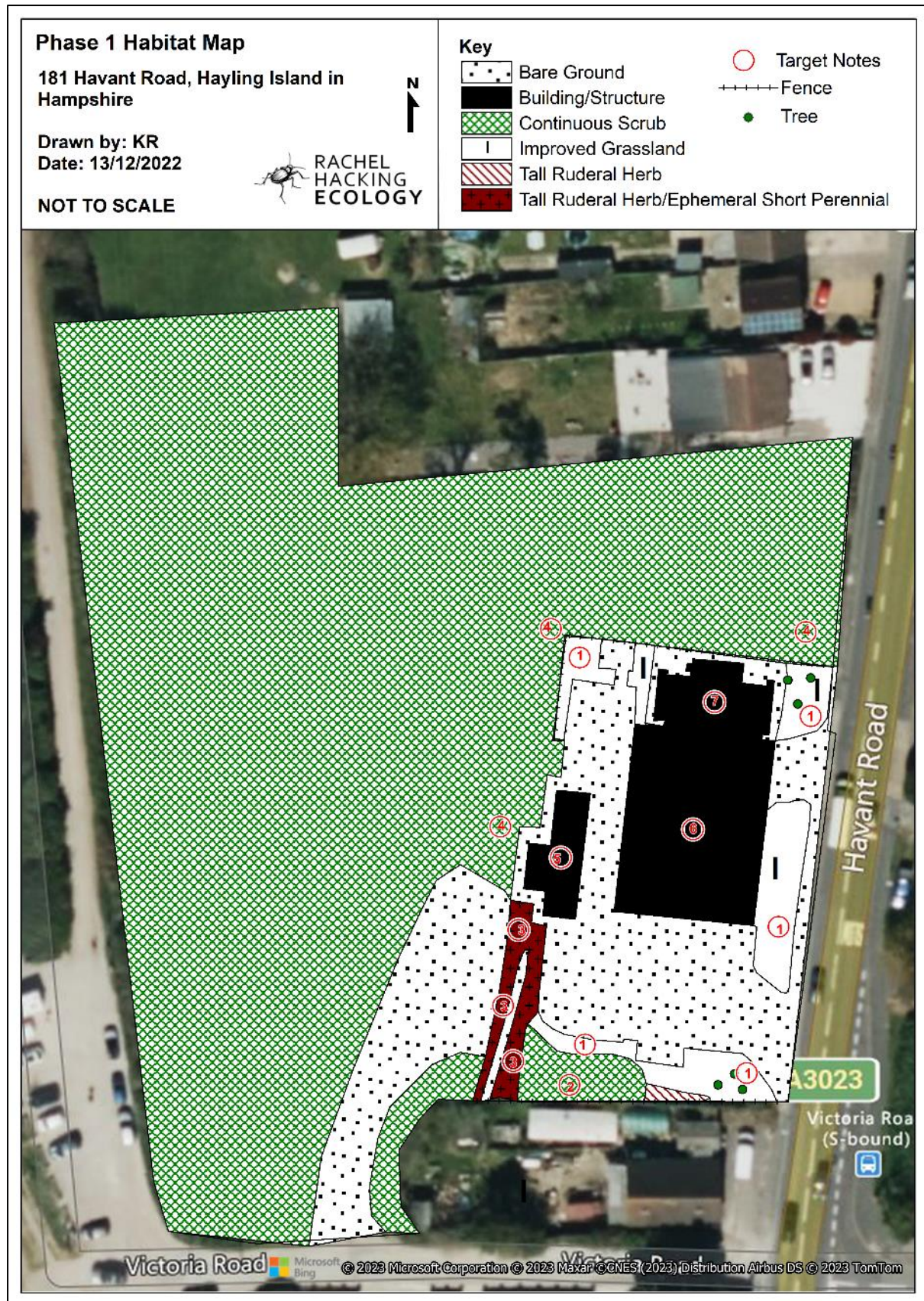
6. Summary

- 6.1.1 The proposed development is predicted to result in a net loss of biodiversity units. A net gain in hedgerow units is predicted.
- 6.1.2 For the proposed development to achieve Biodiversity Net Gain it will be necessary to seek mitigation or compensation for any shortfall in units, either by direct management of land by the applicant or the purchase of biodiversity units from a third party.
- 6.1.3 Scenario A is on-site mitigation, which will be required to achieve >0.514 units. If on-site mitigation is insufficient to deliver a post-development net gain for biodiversity, two other options are available:
- 6.1.4 Scenario B: the developer is unable to compensate all impacts on-site but is able to secure local compensatory habitat creation. This scenario is not modelled explicitly and would require making assumptions for what an individual development might look like.
- 6.1.5 Scenario C: the developer is unable to compensate on site and is unable to find local compensatory habitat in which to invest. Instead, they have to pay for their units through a biodiversity unit offsetting market. This could be The Environment Bank, the LPA or a third-party landowner. Current off-setting costs for a habitat unit is between £10k and £30k.



Appendix 1: Phase 1 Habitat Map





Appendix 2: Headline Results

On-site baseline	<i>Habitat units</i>	5.14	
	<i>Hedgerow units</i>	0.00	
	<i>Watercourse units</i>	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	<i>Habitat units</i>	4.40	
	<i>Hedgerow units</i>	0.22	
	<i>Watercourse units</i>	0.00	
On-site net change (units & percentage)	<i>Habitat units</i>	-0.75	-14.51%
	<i>Hedgerow units</i>	0.22	N/A
	<i>Watercourse units</i>	0.00	0.00%

