

UKHab 2.0 Survey Report & BNG

Subject	8 Water Road, Reading, RG30 2NN	Date	17/03/25
Ref	5389.3	Previous versions:	5389.2
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Introduction

In December 2024 Daniel Ahern Ecology were instructed by Muhammad Bilsafe to complete a UKHab 2.0 survey of a site at 8 Water Road in Reading, where it is proposed to build a new residential building in the rear of an existing garden.

Method

A UKHab 2.0 survey of the site was undertaken with reference to the Chartered Institute of Ecology and Environmental Management's Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017).

The survey was conducted on the 19th of December 2024 by Joseph Dean.

The weather conditions were clear with an average temperature of 6°C.

During the survey, dominant plant species were recorded, and habitats were classified according to their vegetation types, as identified in the UKHab 2.0 user's handbook. Target notes (TN) were taken to denote species and habitats of conservation interest and to describe the vegetation in areas that were too small to map. Evidence or habitat suitable for any legally protected species was recorded, where appropriate.

The presence of any Category 9 invasive non-native plant species was recorded.

Results

The following habitat type were recorded during the survey:

- h2 - hedgerow
- h3 (secondary code 13) - scattered dwarf shrubs
- u1b – built-up areas and vegetative gardens
- u1b5 – buildings

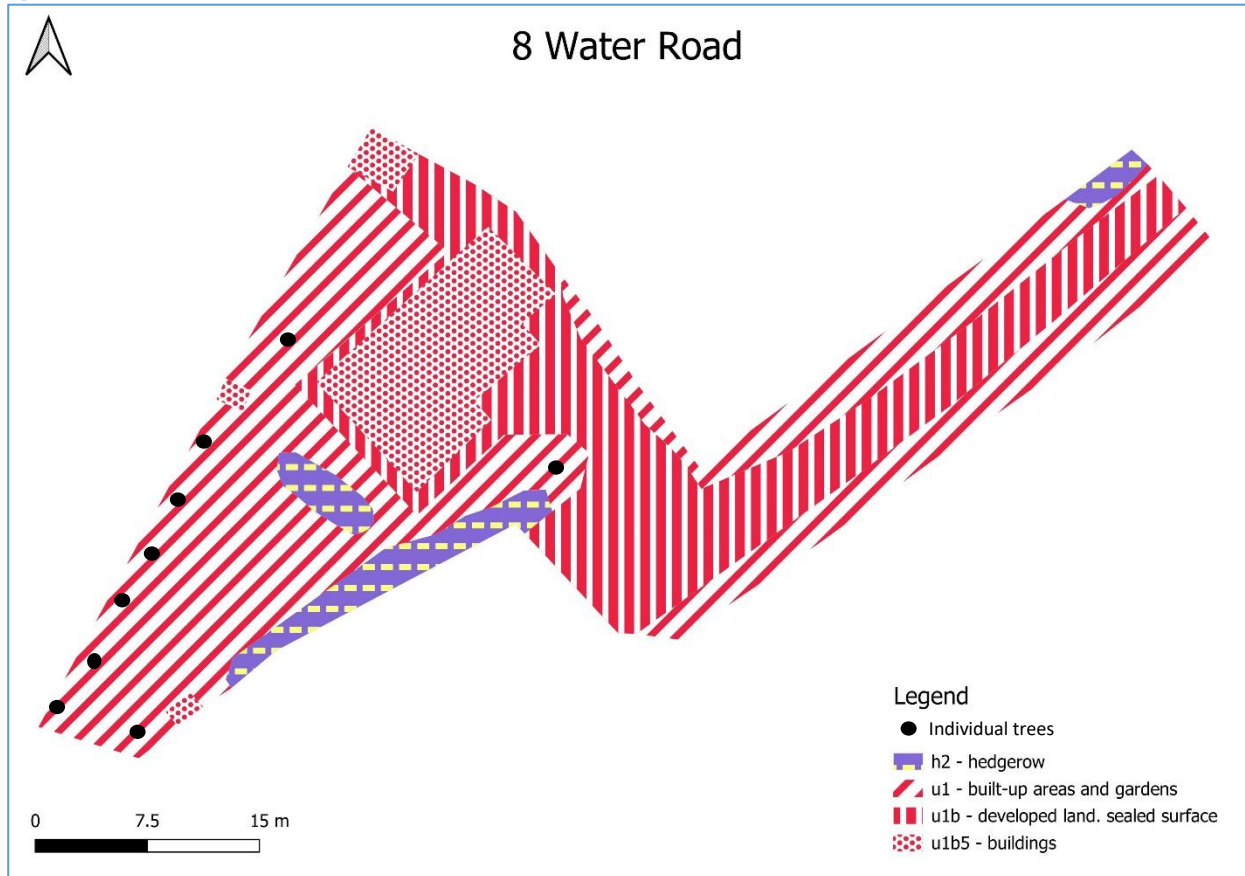
Species lists for the habitats recorded are set out in Table 1, below.

Table 1. Species list for the habitats recorded on site.

Habitat type	Species recorded	Percentage present
h2 - hedgerow	Alder buckthorn - <i>Frangula alnus</i>	10%
	Western red cedar – <i>Thuja plicata</i>	70%
	Firethorn - <i>Pyracantha</i>	10%
	Holly - <i>Ilex</i>	10%
u1b – built-up areas and vegetative gardens	Variety of common garden species	n/a
u1b5 - buildings	n/a	n/a

The results are presented in a UKHab 2.0 map (see Figure 1).

Figure 1. UKHab 2.0 habitat map of the site.



The results of this UKHab survey may be used to inform a Biodiversity Net Gain assessment.

Proposed development

It is proposed to build a new residential building on the existing garden to the rear of the site.

Existing habitats:

Hedgerow – 27m

Built-up areas and vegetated gardens – 620m²

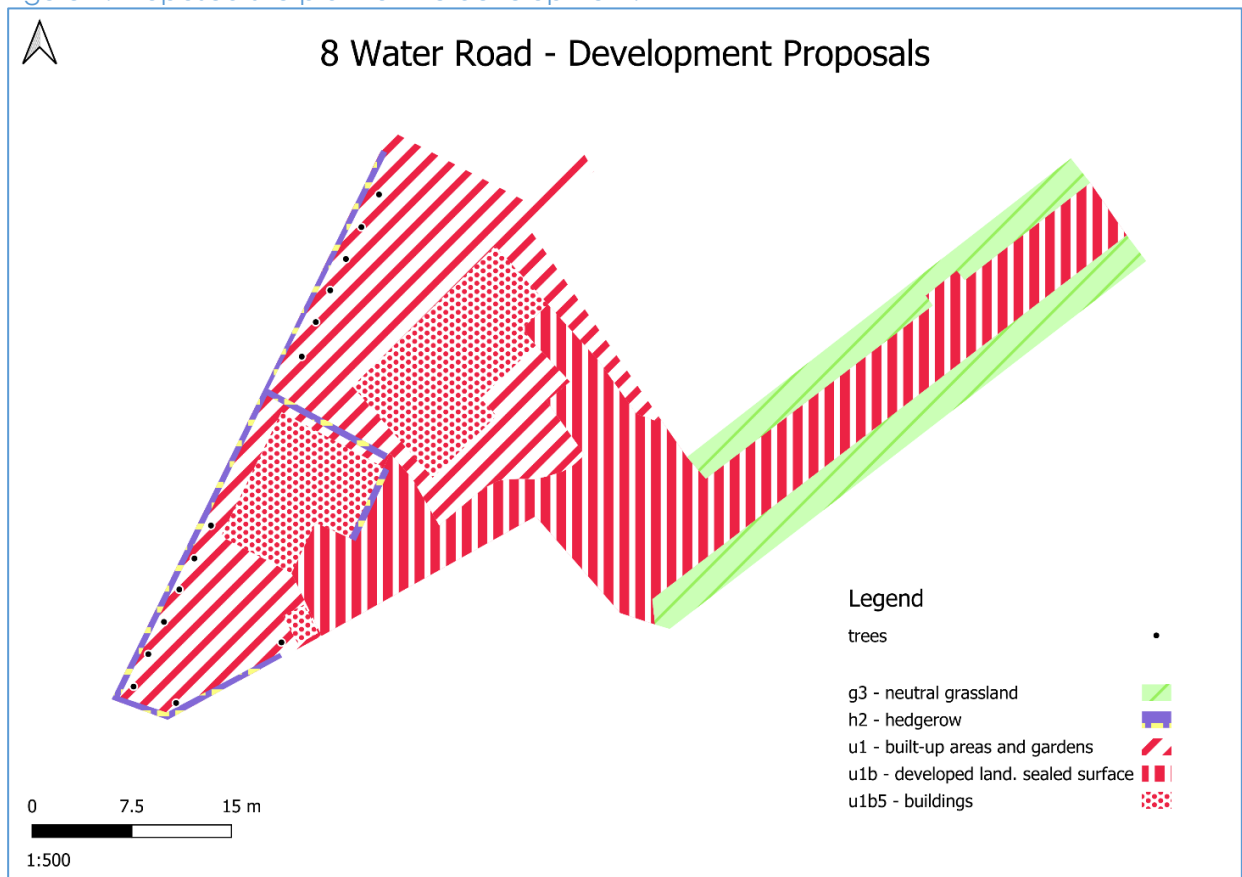
Buildings – 150m²

Developed land, sealed surface – 375m²

Individual trees - 9

Total area: ~1300m²

Figure 2. Proposed site plan for the development.



Proposed habitats:

Built-up areas and vegetated gardens – 360m²

Buildings – 200m²

Developed land, sealed surface – 360m²

Artificial, unsealed surface – 50m²

Unmanaged grassland - 230m²

Individual trees – 14

Hedgerow – 62m

Total site area: ~1300m²

Figure 3. The headline results of the BNG statutory metric for this development.

On-site baseline	Habitat units	0.20	
	Hedgerow units	0.03	
	Watercourse units	0.00	
On-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	0.24	
	Hedgerow units	0.06	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	0.05	24.98%
	Hedgerow units	0.04	129.63%
	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%
FINAL RESULTS			
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.05	
	Hedgerow units	0.04	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	24.98%	
	Hedgerow units	129.63%	
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	0.20	0.22	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	0.03	0.03	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 ✓

Based on this data the proposed development will result in a 24.98% increase in biodiversity onsite, with an extended hedgerow. See Figure 3 above.

No purchasing of habitat units is necessary.