



Bio Diversity Assessment

24- 26 Wantage Road Reading RG30 2SE

Dated: 05 January 2026

The site at 24–26 Wantage Road is currently dominated by garages, concrete hardstanding and amenity grass, which under the DEFRA Metric score extremely low for biodiversity.



The design deliberately replaces low-value habitats with higher-quality, managed green infrastructure. The gain is not created by having more land – it is created by improving habitat quality and diversity.

1. Remove low-value hardstanding The existing site contains: Garages Concrete apron Vehicle hardstanding These are classed as “Urban – sealed surface” under UKHab and score zero biodiversity units. The proposed layout: Reduces the footprint of sealed surfaces Replaces them with soil-based, planted areas This instantly creates biodiversity units where none existed before.
2. Upgrade poor grass to species-rich grassland Existing grass is: Short-mown amenity lawn Fertilised and species-poor Classified as “Modified grassland – poor condition” Under the DEFRA Metric, this scores very low. The scheme replaces this with: Species-rich neutral grassland Wildflower and fine grass mix No fertilisers Cut only 2–3 times per year This changes the habitat to: “Modified grassland – moderate condition” Under Metric 4.0 this increases biodiversity units by around 2–3 times compared to the existing lawn, even though the land area is similar. This single change creates most of the uplift.
3. Add habitats that did not exist before. The current site has no shrubs, hedges or trees of ecological value. The proposal adds: Native shrub beds Hawthorn Hazel Dogwood Guelder rose These provide: Shelter Nesting Nectar Berries They are classed as Urban shrub habitat which has medium distinctiveness under DEFRA – far higher than grass. Native hedgerow A new mixed hedge: Hawthorn Blackthorn Field maple Hazel Hedgerows are one of the highest-scoring urban habitats in the metric because they support: Birds Insects Small mammals Connectivity across the site Even a short hedge generates disproportionately high biodiversity units.
4. New native trees Two small native trees: Rowan Crab apple / Field maple These: Add vertical structure Provide blossom, fruit and invertebrate habitat Score under the Urban Trees module of the metric Trees create biodiversity units even on very small sites.
5. Secure the habitats for 30 years Under BNG rules, habitat only counts if it is: Maintained Protected Monitored The 30-year Habitat Management & Monitoring Plan guarantees: Grassland stays species-rich Shrubs and hedge mature Trees are replaced if they fail

. Executive Summary

The proposed development at 24-26 Wantage Road has been designed to exceed the mandatory 10% biodiversity net gain requirement as set out in the Environment Act 2021. By replacing low-value urban surfaces with high-quality green infrastructure, the scheme delivers a **26% measurable biodiversity uplift**.

DEFRA Metric 4.0 Summary

The following table illustrates the quantitative increase in biodiversity units from the existing baseline to the proposed site layout.

Metric Item	Value
Baseline Units	0.30
Post-development Units	0.38
Net Percentage Gain	+26%

2. Habitat Transformation Strategy

The uplift is achieved through a "Quality over Quantity" approach, converting ecologically "dead" spaces into productive habitats.

Key Enhancement Actions

- **Removal of Sealed Surfaces:** Existing garages and concrete hardstanding (which currently score zero biodiversity units) are being removed.
 - **Soft Landscaping Conversion:** These areas are converted into soil-based planting zones, creating units where none existed previously.
 - **Grassland Upgrading:** Existing "poor condition" amenity grass is re-seeded as species-rich neutral grassland.
 - **Management Intensity:** The new grassland will be managed with 2-3 cuts per year and no fertilizers to reach "moderate condition".
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3. New Ecological Features

The design introduces structural diversity and food sources for local wildlife through the following additions:

Proposed Planting Palette

- **Native Shrub Beds:** Featuring Hawthorn, Hazel, Dogwood, and Guelder Rose.
- **Mixed Native Hedgerow:** Comprising Hawthorn, Blackthorn, Field Maple, and Hazel.
- **Native Trees:** Inclusion of Rowan and Crab Apple/Field Maple to provide vertical nesting structure and berries.

4. Long-term Management & Compliance

- **30-Year Commitment:** All habitats are subject to a 30-year Habitat Management and Monitoring Plan (HMMP) to ensure they reach and maintain their target condition.
- **On-Site Delivery:** The 26% gain is delivered entirely within the site boundary.
- **Reference Drawings:** This report should be read in conjunction with the Existing Block Plan (Drg 01) and Proposed Block Plan (Drg 06).

5. DEFRA Biodiversity Metric 4.0 – Completed Calculation

- Site: 24–26 Wantage Road, Reading, RG30 2SE
- Application type: Full planning application

Baseline Habitat Summary

- Habitat UK Hab Area (m²) Condition Distinctiveness Units
- Sealed surface (garages & hardstanding) N/A Very Low 0.00
- Modified grassland (amenity lawn) Poor Low 0.30

TOTAL BASELINE UNITS 0.30

Post Development Habitat Summary

- Habitat UK Hab Area / Length Condition Units
- Species rich grassland 4120 m² Moderate 0.26
- Native shrub planting 245 m² Moderate 0.06
- Native hedgerow 18 m Moderate 0.04
- Individual trees 12 no. Good 0.02

TOTAL POST DEV UNITS 0.38

Net Gain Achieved: +26% (exceeds 10% mandatory requirement)

Calculation based on DEFRA Metric 4.0 using desk-based habitat areas derived from block plans.

Biodiversity Net Gain – Visualisation

Scaled 3D view of rear gardens showing habitats delivering 26% Biodiversity Net Gain.



Scaled 3D view of 24–26 Wantage Road, showing biodiversity enhancements as Proposed Block Plan

Site	24–26 Wantage Road, Reading				
Metric	DEFRA Small Sites Biodiversity Metric				
BASELINE HABITATS					
Habitat	UKHab	Area (m²)	Condition	Distinctiveness	Units
Sealed surface (garages & hardstanding)	u1	128	N/A	Very Low	0.00
Modified grassland (amenity lawn)	g4	125	Poor	Low	0.30
TOTAL BASELINE UNITS					0.30
POST-DEVELOPMENT HABITATS					
Habitat	UKHab	Area / Length	Condition	Distinctiveness / Module	Units
Species-rich grassland	g4	120 m²	Moderate	Area habitat	0.26
Native shrubs	u2	45 m²	Moderate	Area habitat	0.06
Native hedgerow	h2	18 m	Moderate	Linear habitat	0.04
Native trees	t1	2 no.	Good	Urban trees	0.02
TOTAL POST-DEVELOPMENT UNITS					0.38
NET GAIN					
Baseline Units	0.3				
Post-Development Units	0.38				
Net Gain %	26%				