



Biodiversity Net Gain Strategy

Dee Park
Rannoch St
Reading
Berkshire
RG30 4EP

Version 3
17/04/2026



Contract Details

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Landscape Architect	HTA Design LLP	
Report Reference	Biodiversity Net Gain Strategy_Deep Park_Reading Borough Council_April 2026	
Associated Reports	BNG Validation Statement_ Deep Park_Reading Borough Council_April 2026 BNG Condition Assessment_ Deep Park_Reading Borough Council_April 2026 Statutory Biodiversity Net Gain Metric_ Deep Park_Reading Borough Council_April 2026	
Date of Survey	17/04/2026	
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Date/version	V2 - 2025	V1 - 2024
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Comments on revision	Updated plans	Updated plans



Declaration of compliance

BS 42020:2013

This study has been undertaken in accordance with British Standard 42020:2013 Biodiversity, Code of practice for planning and development and British Standard 8683: 2021 Process for designing and implementing Biodiversity Net Gain.

Code of Professional Conduct

The information which we have prepared is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.



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1. Introduction

Ecological Surveys Ltd has been commissioned to complete a Biodiversity Net Gain strategy for a Local Authority infrastructure development at Dee Park in Reading.

This report accompanies the Biodiversity Net Gain (BNG) calculation using the Statutory Biodiversity Metric and is based on a remote survey (to determine baseline habitats) and a proposed site layout (to determine post-development habitats).

N.B. All Statutory Metric resources used or referenced in relation to this project, including guidance, the metric and condition sheets, can be found online at <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>, most recently accessed on 17/04/2026.

2. Methodology

The Biodiversity Net Gain Assessment was undertaken by Maddy James BSc (Hons), on the 17th April, 2026 as an update to the previous assessment undertaken by Ecological Surveys Ltd on 22nd May 2025. The baseline habitat map (Figure 3.1) is included in section 3.1 below, with habitat images in Appendix 2.

2.1. Classification of habitats

Habitats have been classified using UK Habitats Classification v2 (UKHab Ltd, 2023) and plant species were identified according to Stace (2019).

Taking into account the habitat type and management (as evidenced by Google Earth Pro) and the species found, the timing of the survey is not considered to be a constraint with respect to classification of habitat in this instance.

2.2. Mapping and condition of baseline habitats

Habitats were mapped and conditions assessed using QGIS and **Statutory Metric** Condition Assessments during the field survey. Professional judgement was used to make condition assessments of habitats, when applicable. Condition assessments are provided under a separate cover.

2.3. Mapping and condition of post-development habitats

Post-development habitats were derived from the proposed Hardworks General Arrangement and Softworks general Arrangement produced by HTA Designs LLP and presented in Appendix 3. Target conditions have been assigned, where required, to the post-development habitats. These target conditions take into account the land use and are deemed to be practical and achievable within the 30-year BNG timeframe.

2.4. Strategic significance of on-site habitats

Strategic significance is the local significance of the habitat based on its location and habitat type (DEFRA, 2025). The strategic significance of each individual habitat parcel, both at baseline and post-development, needs to be assessed with reference to the relevant Local Nature Recovery Strategy (LNRS). The strategic significance of a habitat parcel can be assigned one of three categories:

- formally identified in local strategy



- location ecologically desirable but not in local strategy
- area/compensation not in local strategy/no local strategy.

In this case, the Berkshire Local Nature Recovery Strategy has been used (website and interactive map accessed on 17/04/2026).

2.5. Biodiversity Net Gain calculation

This calculation uses the Statutory Biodiversity Metric utilising the guidance, technical supplements and habitat condition assessment sheets provided by Natural England and following *Biodiversity Net Gain: Good practice principles for development* (CIEEM, 2016) and *Mandatory Biodiversity Net Gain in England: A Guide* (Durkin and Baker, 2024). Areas are measured in hectares (ha) and lengths in kilometres (km).



3. Biodiversity net gain calculation

3.1. On-site baseline biodiversity value

The on-site baseline habitats, their area/length, condition, strategic significance and habitat units they contribute, are set out in Table 3.1 below, with Figure 3.1 showing the habitats mapped.

There are no irreplaceable habitats on-site and therefore none are being lost.

The total baseline area habitat units are 0.17

3.2. On-site post-development biodiversity value

The on-site post-development habitats, their area/length, target condition, strategic significance and habitat units they contribute, are set out in Table 3.2 below, with Figure 3.2 showing the habitats mapped.

The total on-site post-development area habitat units are 0.22

3.3. BNG headline results

The headline results from the Statutory Biodiversity Metric are given in Figure 3.3 below.

Table 3.1 Baseline habitats

Habitat category/type	Area (ha)/ length (km)	Condition assessment	Strategic significance	Units lost	Comments
On-site area habitat					
Artificial unvegetated, unsealed surface	0.043ha	N/A - Other	Area/compensation not in local strategy/ no local strategy	0	Location and habitat type not in LNRS
Developed land; sealed surface	0.088ha	N/A - Other	Area/compensation not in local strategy/ no local strategy	0	Location and habitat type not in LNRS
Introduced shrub	0.001ha	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.01	Location and habitat type not in LNRS
Modified grassland	0.006ha	Moderate	Area/compensation not in local strategy/ no local strategy	0.06	Location and habitat type not in LNRS
Modified grassland	0.044ha	Poor	Area/compensation not in local strategy/ no local strategy	0.03	Location and habitat type not in LNRS
Ruderal/ephemeral	0.003	Poor	Area/compensation not in local strategy/ no local strategy	0.01	Location and habitat type not in LNRS
Individual tree	0.0122ha	Poor	Area/compensation not in local strategy/ no local strategy	0.05	Location and habitat type not in LNRS



Figure 3.1 On-site baseline BNG habitat plan

Dee Park Baseline Map





Table 3.2 On-site post-development habitats

Habitat category/type	Area (ha)/ length (km)	Target condition	Strategic significance	Predicted units delivered through enhancement/creation	Comments
On-site area habitats: creation					
New introduced shrub	0.032ha	Poor	Area/compensation not in local strategy/ no local strategy	0.06	Location and habitat type not in LNRS.
New developed land; sealed surface	0.03ha	Moderate	Area/compensation not in local strategy/ no local strategy	0	Location and habitat type not in LNRS.
New modified grassland	0.001ha	N/A	Area/compensation not in local strategy/ no local strategy	0	Location and habitat type not in LNRS.
New artificial unvegetated, unsealed surface	0.123ha	N/A	Area/compensation not in local strategy/ no local strategy	0	Location and habitat type not in LNRS.
New individual urban tree	0.0489ha	N/A	Area/compensation not in local strategy/ no local strategy	0.15	Location and habitat type not in LNRS.



New individual urban tree	0.0041ha	Moderate	Area/compensation not in local strategy/ no local strategy	0.01	Location and habitat type not in LNRS.
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Figure 3.2 On-site post-development BNG habitat plan

Dee Park Post Development Map

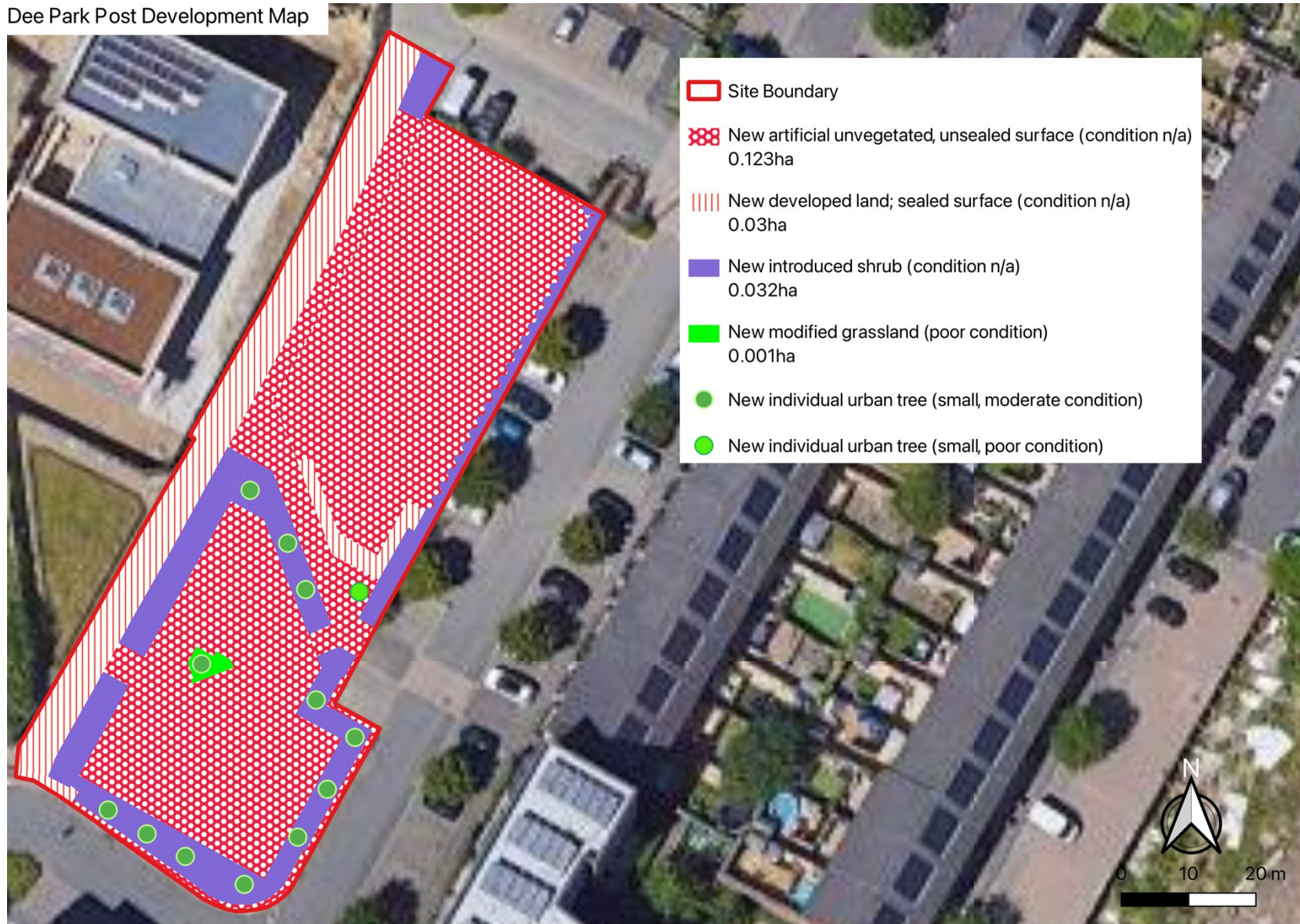




Figure 3.3 Headline results from the Biodiversity Metric

Dee Park

Headline Results

Scroll down for final results

Return to results menu

On-site baseline	Area habitat units	0.17	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	0.22	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site net change (units & percentage)	Area habitat units	0.06	33.10%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Off-site baseline	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Area 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)	Area habitat units	0.06	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Area 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)	Area habitat units	0.06
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	33.10%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	0.17	0.19	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional area habitat units required to meet target ✓

No additional hedgerow units required to meet target ✓

No additional watercourse units required to meet target ✓

The onsite baseline score for habitat units is 0.017, with the score increasing to 0.22 following the development (a total net unit change of + 0.06). This post-development score takes into the habitats retained, enhanced and created onsite. This equates to a **gain of 33.10% in area habitat units**.

All trading rules have been satisfied.

Therefore, the proposed development is likely to result in a biodiversity net gain greater than 10% in habitat units.

3.4. Principles of Biodiversity Net Gain

Ten principles setting out good practice for achieving Biodiversity Net Gain¹ have been applied as detailed in Table 3.3.

¹ <https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf>

Table 3.3 Application of BNG Principles

Principle	Principle met?	Comments
Principle 1: Apply the Mitigation Hierarchy	Yes	No valued habitats to be lost.
Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere	Yes	There are no irreplaceable habitats on-site and therefore none are being lost.
Principle 3. Be inclusive and equitable	Yes	Landowners and the client have been involved; no other stakeholders.
Principle 4. Address risks	Yes	Difficulty, uncertainty and other risks to achieving BNG have been mitigated. Proposed habitats to be created have been selected due to their suitability to the location and will support the ecological functionality of adjacent habitats.
Principle 5. Make a measurable Net Gain contribution	Yes	Realistic potential for > 10% net gain in both area habitat and hedgerow units and will contribute to the LNRS. Purchase of off-site units from commercial provider for shortfall in area habitat units.
Principle 6. Achieve the best outcomes for biodiversity	Yes	Have used robust, credible evidence and local knowledge to make clearly-justified choices of habitats in order to achieve the best outcome for biodiversity. Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the



		location and timing of biodiversity losses. Enhancing existing or creating new habitat. Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity. Achieving BNG locally to the development through the purchase of local off-site area habitat units.
Principle 7. Be additional	Yes	Achieving biodiversity outcomes that demonstrably exceed existing obligations and would not have occurred without the proposed development.
Principle 8. Create a Net Gain legacy	Yes	Designing Net Gain for biodiversity to be resilient to external factors, especially climate change. Proposed habitats can realistically be managed over the required 30-year period.
Principle 9. Optimise sustainability	Yes	Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy through the creation of public open space and access to semi-natural habitats.
Principle 10. Be transparent	Yes	Have communicated all BNG activities in a transparent and timely manner,



		sharing the learning with all stakeholders.
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4. Conclusion

The baseline habitats on the proposed development site have been mapped and assessed and the post-development habitats obtained from the proposed site layout produced by HTA Designs LLP. The Statutory Biodiversity Metric has been used to calculate the BNG for the proposed development.

The Biodiversity Gain Hierarchy has been followed.

The Berkshire Local Nature Recovery Strategy was consulted with regard to determining strategic significance.

The proposal demonstrates an overall net gain in area habitat biodiversity units of 33.10%. Therefore, the minimum 10% biodiversity net gain in area habitat biodiversity units has been achieved. All trading rules have been satisfied.

of all purchases post planning consent and prior to commencing development on-site.

Post planning consent, it will be necessary to provide a Biodiversity Gain Plan to the local planning authority (LPA). This plan will set out how the mandatory BNG will be achieved for the development. A Habitat Management and Monitoring Plan (HMMP) will also need to be provided if the LPA deem the habitats to be enhanced and/or created on-site to be significant. The HMMP will detail the management and monitoring of habitats on-site over the lifetime of the 30-year Biodiversity Gain Plan.

5. References

CIEEM (2016) *Biodiversity Net Gain: Good practice principles for development*. CIEEM, IEMA and CIRIA.

DEFRA (2025) *The Statutory Biodiversity Metric User Guide*. First published: February 2024. Last updated: July 2025.

Durkin, F. and Baker, J. (2024) *Mandatory Biodiversity Net Gain in England: A Guide*. CIEEM, IEMA and CIRIA.

Institute of Environmental Assessment (IEA), 1995. *Guidelines for Baseline Ecological Assessment*, Institute of Environmental Assessment. E&FN Spon, aJn Imprint of Chapman and Hall. London.

Joint Nature Conservation Committee, 2010. *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit*. Reprinted by JNCC, Peterborough

Stace, C., 2019 *New Flora of the British Isles*. Fourth Edition. C & M Floristics, Suffolk.

UKHab Ltd (2023) *UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>).



Appendix 1: Legislation and policy associated with biodiversity net gain in the UK

Environment Act 2021

This act introduces a mandatory biodiversity net gain requirement of at least 10% for developments in England, to be maintained for at least 30 years.

National Planning Policy Framework (NPPF)

The NPPF sets out the government's planning policies for England and how these are expected to be applied, including policies for conserving and enhancing the natural environment and achieving biodiversity net gain.

Planning Practice Guidance (PPG)

This provides further details and guidance related to the NPPF, including ways to achieve biodiversity net gain through the planning system.

Local Nature Recovery Strategies (LNRS)

These strategies are part of the Environment Act 2021, aimed at establishing a more coordinated approach to nature recovery across England.

Biodiversity 2020

This strategy is a part of the broader commitment to halt overall biodiversity loss, support healthy well-functioning ecosystems, and establish coherent ecological networks.



Appendix 2: Habitat images



Modified grassland, looking northwest.



Small urban trees, looking southwest



Introduced shrub, looking south



Developed land; sealed surface, looking
northeast



Appendix 3: Proposed site layout

