

Atom Valley Innovation Centre, Kingsway Business Park, Plot R2

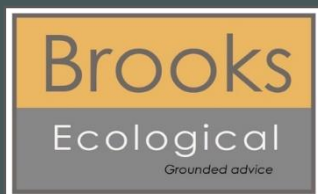


Biodiversity Net Gain Assessment

Report Ref. ER-6649-03A

25/04/2024

DLA Landscape



Report reference	ER-6649-03A - Biodiversity Net Gain Assessment (Post-Development)
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Report duration	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.



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Introduction

1. Brooks Ecological Ltd was commissioned by DLA Landscape to carry out a Biodiversity Net Gain (BNG) Assessment of the proposed development Site at Atom Valley Innovation Centre, Kingsway Business Park, Plot R2.
2. The assessment applies to the parcel of land shown in Figure 1 opposite.
3. The assessment is informed by a Preliminary Ecological Appraisal Survey of the Site detailed in our report ER-6649-01.
4. At this time Brooks Ecological also carried out an assessment of the baseline value of the Site in relation to BNG, and presented this alongside advice on achieving the best BNG position in our report ER-6649-02. This current report supersedes ER-6649-02 and reproduces the relevant information on the Site's baseline.
5. Biodiversity Accounting metrics are used to quantify the value of a site in Biodiversity Units. This helps in assessing the ecological impacts of the proposed development and can help to inform avoidance, or on-Site mitigation levels required; or as a last resort can translate to a direct monetary value where compensation (off-Site) is required.
6. For the purposes of metric calculations, the Site area has been measured using GIS against the provided red line boundary as 1.09Ha.
7. Our assessment has made use of the Statutory Biodiversity Metric Calculation Tool, and extracts from this have been used throughout the report. The full spreadsheet has been provided digitally as file BM-6649-01, and should be submitted as part of the application.

Figure 1 Extent of BNG assessment (red line boundary).



Part 1

Pre-development baseline

Habitats Identified

8. Habitats present on-Site are outlined in Table 1, opposite. These are shown in relation to location and extent in Figure 2 overleaf.

Condition Assessment

9. Habitat condition has been assessed as part of the Preliminary Ecological Appraisal of the Site.
10. Information on condition assessments is provided in the Excel spreadsheet CA-6649-01 provided alongside this report.

Strategic Significance

11. None of the habitats on-Site fall within or close to a designated wildlife habitat network, and so all are mapped as 'area/compensation not in local strategy/ no local strategy'.

Irreplaceable Habitat

12. Irreplaceable habitats have not been found on-Site.

Habitat Degradation

13. There is no evidence on Site or in aerial mapping of the Site which suggests that it has been deliberately degraded.

Biodiversity Metric

14. Habitat types, conditions, and areas have been entered into the Statutory Biodiversity Metric

Calculation Tool, alongside information on their strategic significance.

15. The Statutory Biodiversity Metric Calculation Tool is provided alongside this assessment, in Excel spreadsheet BM-6649-01, and may be useful in investigating design options for the Site.

Table 1 Habitat Types.

Habitat	Irreplaceable?	Distinctiveness	Condition	See Condition Assessment sheet
Artificial unvegetated unsealed surface	No	Very Low	N/a	N/a
Developed Land: sealed surface	No	Very Low	N/a	N/a
Modified Grassland	No	Low	Poor	5a
Other Neutral Grassland	No	Medium	Poor	6a

Figure 2 The Site's habitats assigned to types used in the Biodiversity Metric.

Figure 3 Extract from the Statutory Biodiversity Metric Calculation Tool showing entered information and resultant Biodiversity Units¹.

Project Name: Map Reference:

A-1 On-Site Habitat Baseline

Condense / Show Columns

Main Menu

Condense / Show Rows

Area habitat summary

Total Net Unit Change	-1.96
Total Net % Change	-54.46%
Trading Rules Satisfied	No - check trading summaries ▲

Ref	Broad Habitat	Existing area habitats		Area (hectares)	Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline
		Habitat Type	Irreplaceable habitat		Distinctiveness	Condition	Strategic significance		Total habitat units
1	Grassland	Modified grassland	No	0.2987	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.60
2	Grassland	Other neutral grassland	No	0.7482	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	2.99
3	Urban	Artificial unvegetated, unsealed surface	No	0.0089	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00
4	Urban	Developed land; sealed surface	No	0.0357	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00
5									
6									
7									
8									
9									
Total habitat area				1.09					3.59
Site Area (Excluding area of individual trees, green walls, intertidal hard structures)				1.09					

¹ Our report provides an estimate of the Site's value in Biodiversity Units. This is based on thorough assessment at the time of survey and using the information available at this time. In this assessment we have used the Statutory Biodiversity Metric Calculation Tool, the UK Habitats Classification, and relevant guidance. This assessment requires subjective judgments to be made in terms of habitat type and condition and could be open to other interpretations. Reliance on the Unit Score, or conversion of this into a monetary value, would be at the developer's own risk. Where conversion to monetary value is required, it is always advisable to get calculations checked independently.

Trading Rules

- 16. As part of delivering a Net Gain for biodiversity, the BNG process requires that trading rules are complied with, such that loss of habitats is compensated for in a like-for-like or like-for-better fashion. This is based on habitat distinctiveness.
- 17. Once trading rules are complied with, the ‘gain’ component can come from any distinctiveness category.

Habitat Unit Score

- 18. The Site has been assessed as having a baseline score of 3.59 Habitat Units. These break down as shown in Table 2, below.

Table 2 Habitat Units broken down by distinctiveness at this Site.

Distinctiveness	Units	Approach to compensation if lost
Very Low	0	No compensation required.
Low	0.60	Losses must be replaced with area habitat units of the same or higher distinctiveness.
Medium	2.99	Losses must be replaced by area habitat units of either medium distinctiveness habitats within the same broad habitat type, or any habitat from a higher distinctiveness from any broad habitat type.
High	0	Losses must be replaced with area habitat units of the same habitat type.
Very High	0	Priority should be given to replacing losses with area habitat units of the same habitat type.
Irreplaceable	0	Cannot be compensated for.

Planning your development

Mitigation Hierarchy

- 19. To engage with the Biodiversity Gain process, a project must be able to demonstrate that it has complied with the Mitigation Hierarchy of Avoid - Mitigate - Compensate. Its relevance to this Site is set out in Table 3 below.

Table 3 Mitigation hierarchy summary.

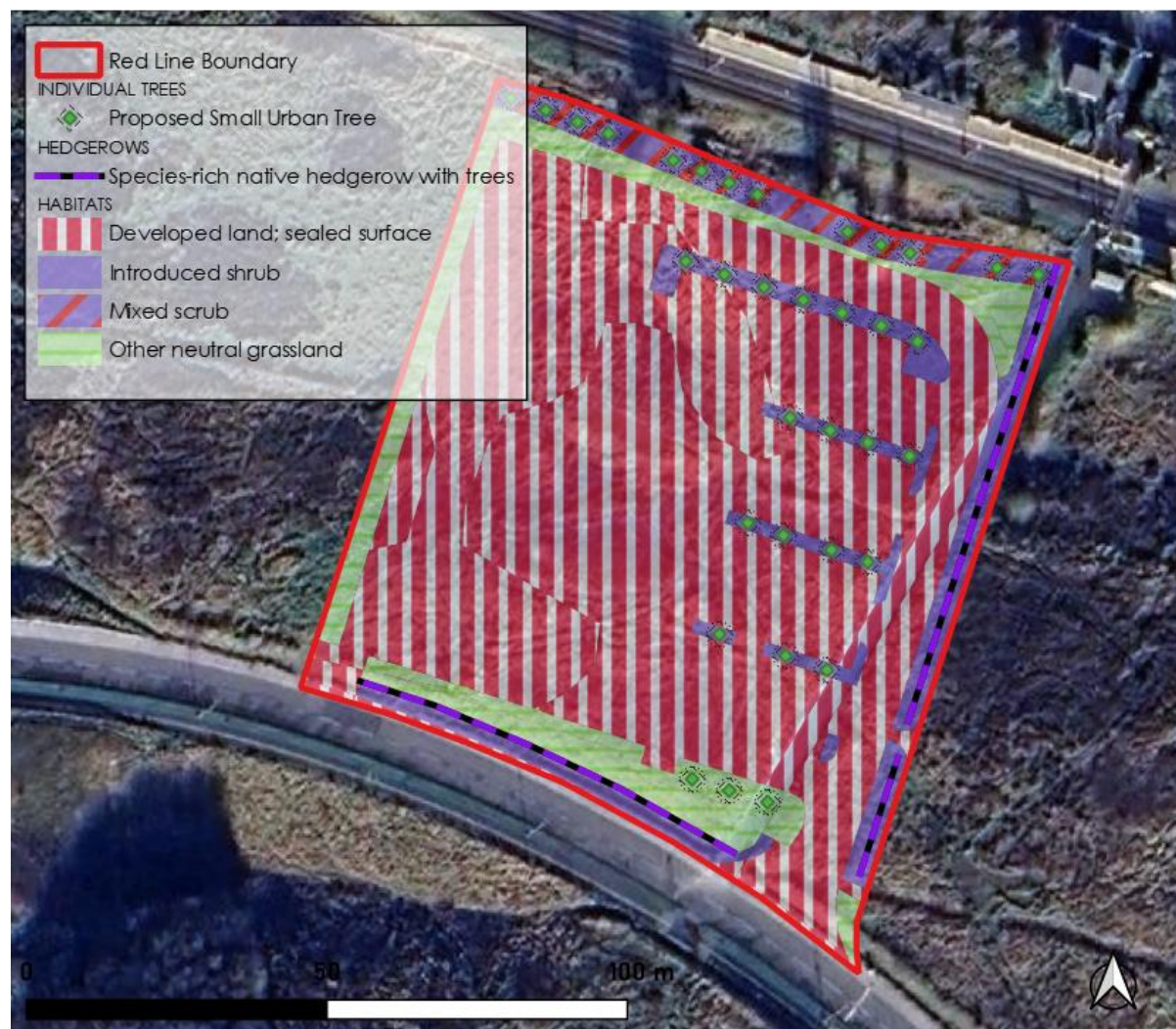
Level of Hierarchy	Requirement at this Site
<i>First</i> Avoid	The PEA has established that there are no High or Very High distinctiveness habitats. Of the Medium distinctiveness habitats present, retention is not considered possible in order to achieve site levels so avoidance has not been possible in this instance.
<i>then</i> Mitigate	This loss could be mitigated in part by designing in structured landscaping with native species rich wildflower grassland to mitigate loss of other existing other neutral grassland areas. Tree planting or other semi natural habitats such as native species rich scrub planting may also be helpful in helping to increase the post development habitat unit score of the Site and mitigate losses of lower distinctiveness habitats though it will not mitigate losses of habitat units associated with medium distinctiveness grassland.
<i>then</i> Compensate	Any residual loss would need to be compensated off-Site. It will not be possible to deliver a Net Gain on-Site alongside development here, so this element will be required.

Post-development habitats

Habitat Score

26. The Site has been assessed as having a post-development score of 1.64 Habitat Units and 1.42 Hedgerow Units.
27. This score is based on our interpretation of the Landscape Masterplan, as shown in Figure 5 opposite.
28. Calculations for the change in Habitat Units have been based on the entire Site being cleared of existing habitats and land reprofiled, which results in the loss of all 3.59 Habitat Units present pre-development. There are no Hedgerow Units present pre-development.
29. Post-development calculations include Habitat Units gained through the creation of areas of flowering lawn, wildflower grassland, shrub planting, tree planting and native scrub creation.
30. Roads, carpark and buildings have all been mapped as *developed land; sealed surface*, which contribute no Habitat Units to the post-development score.
31. New hedgerows are to be planted and are classed here as *native species rich hedgerows with trees* in Moderate condition. As no hedgerows are present on-Site currently, this satisfies the Metric in terms of Hedgerow Units.
32. The loss of Low-distinctiveness *modified grassland*, as well as Medium-distinctiveness *other neutral grassland* is not fully compensated for by the creation of new habitats on-Site. This means that the trading rule cannot be satisfied. Explanation of this and the implications in terms of Units required is set out overleaf.

Figure 5 Post-development habitats.



Habitat Retention

33. The plan opposite shows the areas of the Site which it will be possible to retain without impact. This information allows us to see which areas can be identified as retained or enhanced in the metric calculations.
34. No retention is shown on the plan opposite; it has not been possible to identify retained / enhanced areas and the metric calculations assume the loss and replacement of all habitat from the Site.

Figure 6 Habitat retention



DEFRA Metric² (Post-development)

35. This metric sets out the predicted score for the Site following the completion of development. This is based on the Landscape Masterplan provided by the client.

Figure 7 On-Site habitat creation

Project Name: Map Reference:

A-2 On-Site Habitat Creation

Condense / Show Columns

Condense / Show Rows

Main Menu

Area habitat summary

Total Net Unit Change

-1.96

Total Net % Change

-54.46%

Trading Rules Satisfied

No - check trading summaries ▲

Area Check

Area Acceptable ✓

Post intervention habitats											
Ref	Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness	Condition	Strategic significance	Temporal multiplier	Difficulty		Habitat units delivered	
				Distinctiveness	Condition	Strategic significance	Standard or adjusted time to target condition	Final time to target condition (years)	Final difficulty of creation		
1	Grassland	Other neutral grassland	0.0811	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	5	Low	0.54	
2	Grassland	Other neutral grassland	0.043	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	2	Low	0.16	
3	Heathland and shrub	Mixed scrub	0.0482	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	5	Low	0.32	
4	Urban	Developed land, sealed surface	0.8044	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	0	Low	0.00	
5	Urban	Introduced shrub	0.1148	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	1	Low	0.22	
6	Individual trees	Urban tree	0.1384	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	10	Low	0.39	
7											
8											
9											
10											
11											
Total habitat area			1.23								1.64

² Our report provides an estimate of the Site's value in Biodiversity Units. This is based on thorough assessment at the time of survey and using the information available at this time. In this assessment we have used the Statutory Biodiversity Metric Calculation Tool, the UK Habitats Classification, and relevant guidance. This assessment requires subjective judgments to be made in terms of habitat type and condition and could be open to other interpretations. Reliance on the Unit Score, or conversion of this into a monetary value, would be at the developer's own risk. Where conversion to monetary value is required, it is always advisable to get calculations checked independently.

Figure 8 On-Site hedgerow creation.

Project Name: Map Reference:				Hedgerow summary						
B-2 On-Site Hedge Creation				Total Net Unit Change		1.42				
				Total Net % Change		N/A				
				Trading Rules Satisfied		Yes ✓				
Condense / Show Columns				Condense / Show Rows						
Main Menu										
		Proposed habitats		Distinctiveness	Condition	Strategic significance	Temporal multiplier		Difficulty risk multipliers	Hedge units delivered
Ref	New hedge number	Habitat type	Length (km)	Distinctiveness	Condition	Strategic significance	Standard or adjusted time to target condition	Final time to target condition (years)	Final difficulty of creation	
1		Species-rich native hedgerow with trees	0.169	High	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	10	Low	1.42
2										
3										
4										
5										
6										
			0.17							1.42

Final Results

- 36. The Statutory Metric has been used to calculate the net unit change for the Site, which has been predicted an overall net loss of 1.96 Habitat Units (-54.46%) and a gain of 1.42 Hedgerow Units.
- 37. A copy of the Statutory Biodiversity Metric Calculation Tool Excel spreadsheet (ref. BM-6649-01) and Condition Assessment sheets (CA-6649-01) have been provided with this report and should be submitted digitally as part of the application.
- 38. There is a mandatory requirement for all developments to demonstrate at least a 10% net gain in each unit measurement, as well as to satisfy Trading rules. Notwithstanding Trading rules, the scheme will need to secure an additional 0.36 Habitat Units, on top of the current deficit of 1.96 Habitat Units, to demonstrate a 10% net gain (2.31 Habitat Units total).

Trading Rules

- 39. Habitat types are separated out into distinctiveness categories (Very low to Very High) which dictate what mitigation/ compensation is required for their loss. This assessment is separate to the ‘net unit change’ score quoted above.
- 40. To satisfy Trading Rules for this development, compensatory units will need to be generated from the following broad Habitat Types, as outline in the Table 4, opposite.
- 41. A total of 2.29 Habitat Units will need to be generated through offsetting. This figure is higher than that stipulated in the Final Results above.

Requirements for Planning

- 42. A standard planning condition will be imposed that will require the development to demonstrate (i) a minimum 10% net gain and (ii) that Trading rules have been satisfied. To achieve this, **2.29 Habitat Units** of Medium distinctiveness Grassland will need to be generated to satisfy Trading Rules (see Table 4), alongside an additional **0.02 Habitat Units** from any distinctiveness category to achieve an overall 10% Net Gain.
- 43. These Units will need to be secured through offsetting, with offsite land Registered with Natural England. Once this offsetting has been secured, the Biodiversity Metric will need to be finalised (ref. BM-6649-01) before submission to the LPA.

- 44. A Net Gain Plan and Habitat Monitoring and Management Plan will also be required in order to discharge the planning condition that will be imposed.

Figure 9 Biodiversity Metric Summary.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-1.96
	Hedgerow units	1.42
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-54.46%
	Hedgerow units	N/A
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Table 4 Trading rule summary

Distinctiveness	Broad Habitat Type	Habitat Units required
Medium*	Grassland	2.29
Total Units		2.29 Units

* Compensation for habitats of medium distinctiveness must be in the same broad habitat type, or any habitat type in a higher distinctiveness category.

References

Chartered Institute of Ecology and Environmental Management (CIEEM). 2019. *Advice note: on the lifespan of ecological reports and surveys*. Winchester: Chartered Institute of Ecology and Environmental Management. [Online]. Available from: <https://cieem.net/resource/advice-note-on-the-lifespan-of-ecological-reports-and-surveys/>

The Statutory Biodiversity Metric User Guide (draft). 2023. London: Department for Environment, Food and Rural Affairs (DEFRA). [Online]. Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

The Statutory Biodiversity Metric Calculation Tool (macro-enabled). 2023. London: Department for Environment, Food and Rural Affairs (DEFRA). [Online]. Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

The Statutory Biodiversity Metric Condition Assessments. 2023. London: Department for Environment, Food and Rural Affairs (DEFRA). [Online]. Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

Appendices

The following reports/digital documents have been provided alongside this report and should be read in conjunction with it:

- BM-6649-01 – Statutory Biodiversity Metric Calculation Tool
- CA-6649-01 – Statutory Biodiversity Metric Condition Assessments
- ER-6649-01 – Preliminary Ecological Appraisal