

Our Ref: JBA 21/349 ECO01a SR (RevA)

25th February 2022

On behalf of Marden Homes

Indicative Biodiversity Net Gain Calculation for The Gables, Kelvedon Road, Tiptree, Essex.

James Blake Associates Ltd. (JBA) was commissioned by Marden Homes to provide a biodiversity net gain calculation for the proposed development on land located south of Kelvedon Road (B1023) on the outskirts of the town of Tiptree, Essex (Colchester Borough Council).

As the development layout and landscaping is not yet finalise, this statement is an indication only and explains how the net gain calculation was carried out, the assumptions made and the conclusions from the calculation. Only habitats/linear features currently and proposed within the site boundary have been included within the calculations. The Landscape Masterplan is provided in Appendix A.

Background

A biodiversity net gain calculation has been carried out using Defra Biodiversity Metric 3.0 (updated July 2021). For more information on the metric, please see [here](#).

Defra's Biodiversity Metric 3.0 provides a way of measuring and accounting for biodiversity losses and gains resulting from development or land management change. The metric encompasses both area (e.g. grasslands) and linear habitats (such as hedgerows, rivers and streams). Note that 'material' enhancements for species, such as bat/bird boxes, reptile hibernacula, hedgehog 'highways' etc. cannot currently be factored into the calculation.

The habitats and linear features currently present within the site boundary are used to calculate the baseline biodiversity units; the percentage gain that the proposed development can potentially deliver is estimated using the Landscape Masterplan for the development and assumptions made by the assessor (Appendix A).

At present, national policy states '*opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity*' (NPPF, 2021). The figure of 10% net gain is sometimes regarded as the minimum but this has now been highlighted as mandatory with the emerging Environment Bill.

Methodology and Rationale

The baseline figures for the metric calculation were based on the Ecological Assessment undertaken by Eco Planning UK in 2019, and later updated in 2020. Various site visits have been undertaken by JBA in 2021 and 2022 which also validate the information within the 2019/2020 reports and have contributed to the baseline data and habitat conditions. The area measurement for each of the baseline

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habitat types was made using Defra's MAGIC map: for more information about MAGIC, please see [here](#).

Baseline habitats consist of mainly horse-grazed pastures with an area of ruderal vegetation and scrub. An area of trees mixed with hedgerows is present at the centre of the site and most boundaries are hedgerows. Two ponds are present at the northern section of the site, along with buildings and hardstanding.

The site is surrounded by native hedgerows, including a mixture of native species-rich, native species-poor and ornamental.

The strategic significance of the location was checked against the 'Local Plan' of Tiptree. The location did not appear to be in or near to a locality mentioned in the Strategy. However, this category can be amended accordingly if required.

The areas for habitat to be retained and/or created were taken from the Landscape Masterplan drawing prepared Liz Lake Associates (2022) (Appendix A).

None of the pasture habitats will be retained; however, the development will provide new habitats in the Public Open Space (POS) area. POS areas will be seeded with wildflower grassland and tussocky grassland, with approximately 95 urban street trees. It is assumed that amenity grassland will also be used within the POS areas for recreational use, and gardens in the residential area will be turfed. Tree planting will also add biodiversity value to the scheme. Native plant species should be used as much as possible.

Majority of the boundary hedgerows, particularly to the south, west and east, will be retained and existing gaps used for access. The tree and hedgerow area at the centre of the site will also be retained and enhanced to improved its current condition, with additional tree planting; this area has been translated in 'mixed woodland' within the metric. Native hedgerow will be proposed at suitable locations throughout the development. A number of ornamental shrubs will likely be used in the residential areas also.

In terms of habitat creation, landscape planting schemes do not always translate directly into ecologically relevant habitat types, so the best fit for the landscape plans was selected from the draw-down menu in the metric.

A value of 'fairly good' has been ascribed to the potential condition that could be achieved by wildflower grassland (categorised as 'other neutral grassland' in the metric). 'Other neutral grassland' is described in UKHab (2020) classification as species-rich, semi-improved neutral grassland. A condition score of 'fairly good' has been ascribed as there is likely to be minor differences between the created grassland and what is described in the relevant habitat classification for priority grassland habitat.

Evaluation

The overall score is a potential gain of 20.34% for habitat units and a 24.93% gain for hedgerows/linear. It is worth noting that these gains are purely from habitats/hedgerows and therefore 'material' enhancements are not included in this calculation. Although, it is recommended the proposed development includes the following enhancements;

- Bird and bat boxes to be erected onto new dwellings and retained mature trees (where possible)
- Hedgehog gaps (13cm x 13cm) to be created in garden fences to ensure small mammal movement is maintained throughout the site.
- In addition, hibernacula to benefit reptiles, amphibians etc.

Note that the final location of enhancements should be determined during construction by an Ecological Clerk of Works (ECoW).

Conclusions

Based on the Landscape Masterplan and assessor assumptions, it is concluded that the development can potentially deliver an overall gain of 20.34% for habitat units and a 24.93% gain for hedgerows/linear features. The development is expected to deliver more of a gain when 'material' enhancements are included such as bird and bat boxes. Landscape and ecological management plans may be required to secure the potential benefits for biodiversity in perpetuity.

Yours sincerely,

Sam Rigg ACIEEM

Ecologist

James Blake Associates Ltd.

References

Eco Planning UK (2019) *Ecological Assessment, Presence – Absence of Land to rear of Tower End, Kelvedon Road, Tiptree, Colchester, Essex.*

Eco Planning UK (2020) *Ecological Assessment, Presence – Absence Updated 2020 of Land to rear of Tower End, Kelvedon Road, Tiptree, Colchester, Essex.*

Liz Lakes Associates (2022) *Landscape Masterplan of Land at kelvedon Road, Tiptree.* On behalf of Marden Homes.

Appendix A. Landscape Masterplan



LEGEND

Red line boundary

Soft Landscape

- Existing trees
- Proposed boundary trees
- Proposed street trees
- Proposed fruit trees to rear gardens
- Proposed trees to POS
- Proposed specimen trees
- Proposed native hedgerows
- Proposed scrub planting
- Proposed planting to plot frontages
- Proposed grass to rear gardens
- Proposed amenity grass
- Proposed long grass
- Proposed wildflower meadow
- Proposed SuDS
- Proposed wildlife pond
- Proposed play space (PS - Informal play space with active play equipment)
- Proposed dog-walking route
- BE - Proposed bench
- DB - Proposed dog bin

Hard Landscape

- Proposed tarmac for primary road
- Proposed permeable tarmac to shared surface
- Proposed block paving to private drives
- Proposed block paving to parking
- Proposed grey block paving to pavement
- Proposed permeable no-dig gravel path

Ecological Enhancement Notes:

- RH - Retained hedges to be strengthened and gapped up where possible
- WS - Existing wooded strip to be retained and enhanced with new trees, scrub and native hedge planting
- NB - New native buffer mix with retained vegetation and new scrub planting along site boundary
- SD - Enhanced SuDS/ditch along retained wooded strip to maximise ecological value
- P - Replacement wildlife pond designed to improve wildlife movement and habitat
- TG - Tussocky grassland introduced to facilitate reptile translocation
- H - New native hedge to garden and street frontage
- SC - Areas with native scrub planting
- WM - New wildflower meadow area with mown edges to POS
- AG - Amenity grass area to POS
- HB - Hedgehog friendly gravel boards within fences throughout the rear gardens

Rev:	Date:	Description:
	08/02/2022	First issue

Title:	Landscape Masterplan
Project:	Land at Kelvedon Road, Tiptree
Client:	Marden Homes
Date:	February 2022
Scale:	1:500 @ A1
Drawing No:	2268 001
Rev:	

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