



PAUL HICKING ASSOCIATES

ARCHITECTURAL TECHNICIAN AND ECOLOGY

**PROPOSED RESIDENTIAL DEVELOPMENT
LOW ROAD
CROWLAND
PE6 0HZ**

BIODIVERSITY NET GAIN REPORT

(17th July 2026)

REPORT REF: 2678 - PHA



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1.0 INTRODUCTION

- 1.1 Paul Hicking Associates were commissioned by Cross Keys Homes Limited, to conduct a Biodiversity Net Gain (BNG) Assessment for the proposed residential development at Low Road, Crowland.

Site Description

1.2 Location

The survey site is located within the village of Crowland, Peterborough. This c0.32ha site comprises of an area of modified (former grazing pasture) and urban trees.

- 1.3 The proposals comprise of the construction of 8no. residential dwellings with associated hard and soft landscaping.

- 1.4 The survey site is located and centred at O.S. grid ref: TF 23328 09854.

- 1.5 Aerial and context photograph of the survey site.



2.0 METHODOLOGY

- 2.1 This section describes the methodology and gathered information used to enable the statutory metric calculation to be used.

Habitat Survey.

- 2.2 The terrestrial Habitat survey was carried out on the 19th June 2026 by experience surveyor and practical habitat manager Mr. P Hicking to determine the general ecological value of the habitats within the site. The surrounding area was also extensively walked to determine the sites connectivity to other adjacent habitats. A list of plant species was catalogued in accordance with habitat type and tested against Ratcliffe's Criteria. Habitats were mapped and classified in accordance with the Phase 1 Habitat Survey Methodology. UK Habitat Classification (ukhab, 2021 V2), version V2 was introduced in July 2023 and the survey data was referenced against this method of habitat classification. The data was then checked against the data obtained from the desktop study to determine how the study site sits within the local network of habitats and its potential contribution.
- 2.3 Invasive species – The site was thoroughly search for the presence of invasive species such as Japanese Knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

2.4 Weather Conditions.

Table 1:

Date	Weather Conditions
19/06/2026	20°C warm and sunny, calm breeze 0, 5% cloud cover.

2.5 Biodiversity Net Gain.

- 2.6 In order to assess the potential impact of the proposals the DEFRA statutory biodiversity metric auditing and accounting for biodiversity calculation tool 1.0.4 (published 10.07.2025), has been used to calculate the value of the habitats within the site pre- and post-development. The outcome of the proposals should aim to achieve a minimum of a 10% gain as required by the assessment within the development site.
- 2.7 Habitat condition assessment - condition assessments using the Statutory Biodiversity Metric Condition Assessments July 2025 sheets were completed for each habitat type where this is required and the outcome has been recorded either poor, moderate of good condition within this report. Moderate or good condition can only be assigned to a habitat where it meets the essential criteria for the habitat type.

- 2.8 Habitat creation – the site will contain new dwellings and therefore any new habitat associated with a new dwelling is restricted to ‘vegetated garden’ as management and retention of these habitats are not secured.
- 2.9 Hedgerows – there are no hedgerows within the survey site boundary. Any new hedgerow will therefore be calculated as additional habitat but without existing baseline value.
- 2.10 Watercourses – there are no water courses within the boundary or within 10m of the survey site.
- 2.11 Irreplaceable habitats – there are no irreplaceable habitats within the survey site.
- 2.12 Strategic significance – the habitats recorded within the site are of low strategic significance and is not located within the LPA local strategy or strategy planning and therefore Area/compensation not in local strategy/no local strategy has been used.
- 2.13 The survey site does not contain habitats associated with a designated site or non-designated site.
- 2.14 Modified grassland – the site contains modified grassland which comprises of a recently sown grassland of rye grass following the completion of the adjacent residential development and hence the grassland at this time is becoming established and lacking in diversity of plant species. A condition assessment is required for this habitat passing 5/7 criteria but failing essential criteria A lacking species richness and diversity of plant species and therefore only Poor condition can be applied to this habitat.
- 2.15 Urban Trees - Existing and newly planted trees are present within the grassland. A condition assessment is required for the trees. New tree planting is becoming established with a new tree which is currently supported through staking and bracing. The trees were assessed using BS 5837 : 2012 and a moderate condition has been assigned for all trees.

3.0 PLANNING AND NATURE CONSERVATION POLICY

Biodiversity Net Gain.

- 3.1 *"Biodiversity Net Gain requires developments to leave the natural environment in a measurably better condition".*
- 3.2 *"Biodiversity Net Gain (BNG) is a way of creating and improving natural habitats. BNG makes sure development has a measurably positive impact ('net gain') on biodiversity, compared to what was there before development".*
- 3.3 In accordance with Somerset Council planning policy, all development should aim to achieve a minimum of a 20% net gain within the confines of the development through such means as the protection, retention and enhancement of existing habitats along with the provision of new additional habitats. Where this cannot be achieved the proposals may be required to seek an off-site contribution using a recognised credits scheme.

4.0 BIODIVERSITY NET GAIN

4.1 On-site Baseline.

4.2 Table 2: The development site comprises of the following habitats;

On-Site Habitat Baseline	Size ha.	Condition	Retained and enhanced
Modified grassland	0.3236	Poor	0.0629 ret + 0.075 enhanced
Urban Tree	0.0122	Moderate	0.0122 retained

4.3 Total site area of 0.32ha with a biodiversity unit value of 0.74 habitat units.

4.4 Fig. 1 Baseline habitat map.

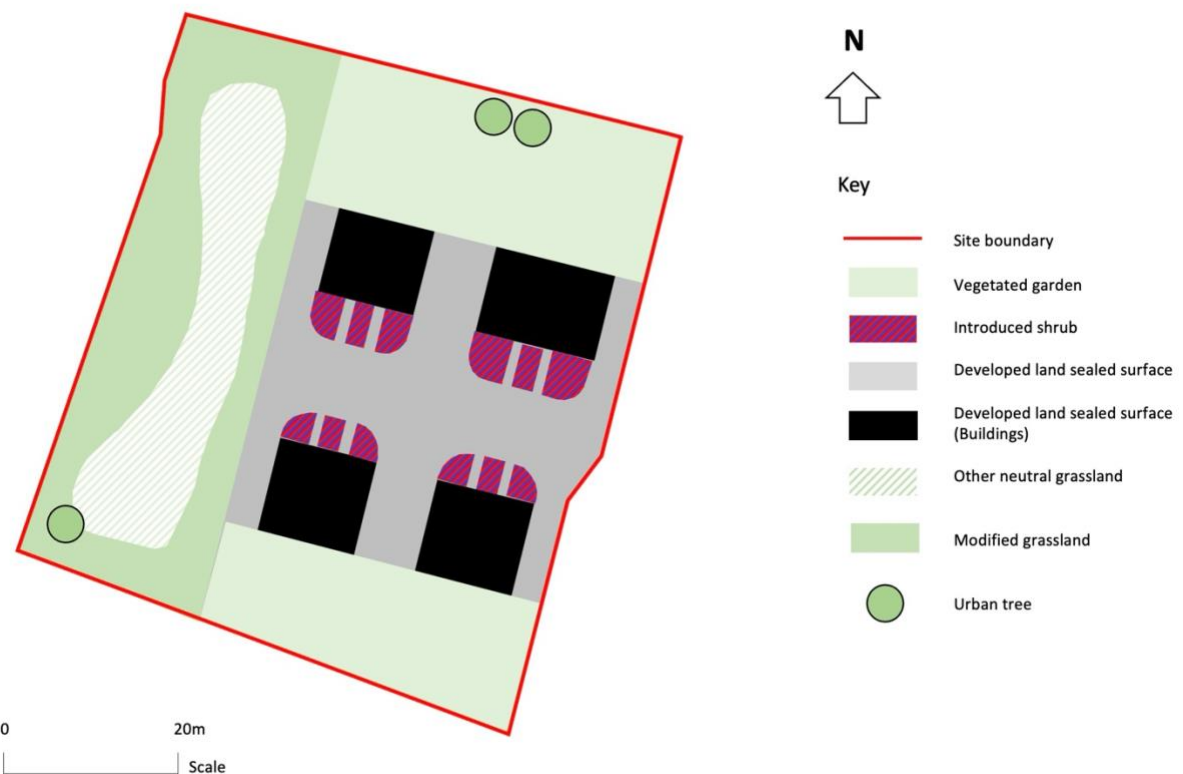


4.5 On-site habitat creation.

4.6 Table 3: Predicted post-development habitats.

Habitat Type	Size ha.	Condition	Comments
Developed land sealed surface	0.117	N/A - Other	New dwellings and landscaping
Urban – vegetated garden	0.0616	Assessment n/a	New garden habitats
Introduced shrub	0.0094	Assessment n/a	New front garden habitats

4.7 Fig 2 – On-site habitat creation. Habitats mapped using JGA drawing No. 24015 -001-P01



4.8 Results.

4.9 This section states the results of the Biodiversity Metric Calculation.

Table 4: Headline results of Biodiversity Metric Calculation;

On-site baseline	Habitats Units	0.74
	Hedgerow Units	0
	River units	0
On-site post-intervention (including habitat retention, creation & enhancement)	Habitats Units	0.83
	Hedgerow Units	0
	River units	0
On-site net %change (including habitat retention, creation & enhancement)	Habitats Units	10.84%
	Hedgerow Units	0
	River units	0
Trading rules Satisfied?		Yes.

4.10 Assessment and Conclusion.

4.11 The Biodiversity Metric Calculation indicates a potential net gain of 10.84% (+0.08) habitat units.

4.12 Therefore, the proposals will have potential to meet the required 10% on-site net gain. Trading rules are also satisfied.

4.13 Climate match - It is important that the sourcing of plants and trees for planting within the site are to be sourced from nurseries with climatic suitability in line with predicted climate change. The climate matching tool that uses UK climate projections from the Met Office Hadley centre has been used for the location of the development with a predicted Climate difference baseline score of 2.373 for the period of 2021-2030 and 4.274 for the period of 2031-2060. New habitat planting should therefore be selected from a local source with equal climate change scoring to ensure that they can become resistant to climate change.

4.14 Habitat Enhancements.

- 4.15 **Mammals Generally** – The site has the potential for the presence of small mammals such as Hedgehog (*Erinaceus europaeus*), 130 x 130mm gaps will be core drilled within the base of the concrete gravel boards to all fencing to allow access between properties and gardens. Hedgerows will provide a safe route between habitats. Hedgehog are able to access the site through existing hedgerows.



Holes within concrete gravel-board



Holes within plain timber fencing

- 4.16 **Birds** - New dwellings have the potential for the inclusion of new permanent nest features in accordance with BS : 42021 : 2022. 'Action for Swifts.' AfS nest chambers are recommended for installation within new external walls of all new dwellings on a 1:1 basis. Bricks are to be located directly below eaves or as high as possible within gable walls.



Installation

The S Brick is installed the same way as a normal brick:

- Installed high in a gable, under eaves or in a parapet wall
- A clear flyway in front
- A lintel is not required
- Higher is better, no less than 4 metres above ground (no maximum height)
- If space allows, spread them out - 1 metre spacing but can be closer
- The S Brick is secured by pointing with cement mortar
- In exposed situations a cavity tray can be fitted as shown below

Always adopt appropriate safety measures during installation at the recommended height

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 tel: 07535 270077
 email: actionforswifts@gmail.com
 web: www.actionforswifts.com

Action for Swifts Trading Limited is a company registered in England and Wales with company number 13945985.

- 4.17 **Bats** - The site can be further enhanced, where roosting features are not present, within the survey site by the introduction of bat bricks within all new dwellings on a 1:1 basis. AfS (Action for Swifts) bat bricks are recommended. Bricks are to be located directly below eaves or as high as possible within gable walls.

The premier solution for integral bat boxes

The AfS Bat Brick provides a home for a number of bat species occurring in the UK, without compromising the integrity or appearance of the building.

They incur minimal intrusion in the wall while at the same time providing adequate crevice space internally for bats. Out of the 18 species of bats living in the UK, 12 are known to roost and/or nest in bat boxes, including Pipistrelle, Natterers and Brown long-eared bats.

- Made from durable Galvanised Steel.
- Bat-friendly materials providing a cosy roosting chamber.
- Fireproof.
- Easy to install.
- Handmade with standard or custom brick facings to match the building.

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BAT BRICK
AfS Trading Ltd

AfS GALVANISED STEEL BAT BRICK

The Bat Brick comprises

- Galvanised steel chamber
- Cement fibreboard access ramp
- Grooved wooden interior walls
- Fireproof sealant
- Brick/stone or rendered facing

Colour and size options

- Bat Bricks are available in one size, which will work in any cavity wall
- All provide ample space for roosting bats
- Any brick facing can be matched or we can use your own bricks
- Render front option available

All AfS products are produced in the UK

Diagram labels: Galvanised steel housing, Grooved wood 5.5mm thick or other suitable material, 20mm x 15mm bottom, Brick slip 20mm thick, Entrance 20mm, 35mm, 235.0mm, 275.0mm, 85.0mm, 52.5mm, Screws to secure roof space, Tiles to support chalkboard, Chalkboard 5mm thick.

- 4.18 The design of external lighting should be carefully considered to avoid impact on existing trees and potential flight zones and is to be designed in accordance with the Bat Conservation Trust guidelines for external lighting.

5.0 PHOTOGRAPHS

