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Report prepared for: Steve Connell

For the Site of: 1 Field Cottage Road, Eaton Socon, PE19 8HA

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Cherryfield Ecology has prepared this report for the named clients' use only.

Ecological reports are limited in shelf life, usually 12 months for baseline surveys and for BNG as and when plans change. Information is believed to be accurate at the time of the survey; recommendations are made without bias based on good practice guidelines within the industry. However, species presence and ecological parameters can change over time.

Sarah Kennard BSc (Hons)

GCN level 1

sarahk@cherryfieldecology.co.uk

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Biodiversity Net Gain (BNG)/Biological Impact Assessment (BIA)

0.0 Non-Technical Summary

0.1 Background

The client commissioned Cherryfield Ecology to undertake a Biodiversity Net gain (BNG)/Biodiversity Impact Assessment (BIA) for the site of **1 Field Cottage Road, Eaton Socon, PE19 8HA**, to determine the biological impact of the proposed development.

Biodiversity Net Gain (BNG) is an approach to development that leaves biodiversity in a better state than it was before. The process relies on the mitigation hierarchy, which sets out that everything possible must be done to firstly avoid, secondly, 3inimize and thirdly restore and rehabilitate losses of biodiversity on site.

This report uses the Statutory Biodiversity Metric (DEFRA 2024), to quantify the biodiversity baseline for the site and calculate the post-development biodiversity unit for the proposed scheme following the best practice guidelines as set down by CIRIA (2019).

0.2 Results and Findings

- A summary of the change in Biodiversity Net Gain on site is given in Table 1.

Table 1: Change in Biodiversity Net Gain (BNG) on site

BIA Units	Total Net Unit Change	Total Net % change
Habitat Units	-0.07	-66.52%
Hedgerow Units	+0.02	+13.31%
River Units	0.00	0.00

0.3 Impact Assessment and Recommendations

A 10% increase for each unit type present is required to meet the minimum statutory requirement.

The proposed development will result in a **-66.52% net loss** in Habitat Units and a **+13.31% net gain** in Hedgerow Units on site and, therefore, does not meet this requirement for Habitat Units.

As such, in order to meet the required 10% net gain for Habitat Units, a further **0.07 Habitat Units** will need to be achieved. To satisfy the trading rules, the habitat units can be of any distinctiveness.

In addition, no net loss in watercourse units has been achieved due to the adjacent watercourse, as a result, **0.02 watercourse units** are required.

This is not possible on-site and off-site compensation will be required.

1.0 Introduction

1.1 Aim

The client, Steve Connell, has commissioned Cherryfield Ecology to undertake a BNG/BIA for the site of 1 Field Cottage Road, Eaton Socon, PE19 8HA.

The aim of this report is to determine the Biodiversity Net Gain for the proposed scheme and, where necessary, make recommendations for increasing net gain in order to comply with the statutory requirements.

1.2 Site Information

The baseline habitat on site consists of modified grassland, developed land; sealed surface and line of trees. The proposed development includes for or the erection of a single-storey three-bedroom dwelling with associated landscaping.

1.3 Study Area

The site is 0.043 Ha in size. The national grid coordinates for the center of the site are TL 17070 59509.

1.4 Suitably Qualified Ecologist

This report has been completed by Sarah Kennard and checked by Heather Stuckey and Martin O'Connor. Sarah, Heather and Martin all meet the criteria for a suitably qualified Ecologist as defined in BS 8683:2021

2.0 Methods

Biodiversity Net Gain is assessed through the use of biodiversity calculators to assess the biodiversity value of habitats pre- and post-development based on habitat type, distinctiveness and condition.

A biodiversity index is derived from the baseline and the proposed development and net gain is achieved where an increase in value is delivered either on-site (or through offsite compensation), where lower value habitat is replaced with one of higher value.

This report uses the Statutory Biodiversity Metric (DEFRA 2024), to quantify the biodiversity baseline for the site and calculate the post-development biodiversity unit for the proposed scheme following the best practice guidelines as set down by CIRIA (2019).

2.2 Limitations

It is important to note that a scheme-wide biodiversity net gain or no net loss cannot be achieved for the scheme as a whole if there are negative impacts on irreplaceable habitats.

Any compensation offered to address impacts on irreplaceable habitats should be agreed directly with Natural England (NE). The baseline habitat which is identified for such compensation and the biodiversity units resulting from this compensation should also be excluded from biodiversity unit calculations.

Following Defra guidance, impacts on irreplaceable habitats and their compensation have been excluded from this biodiversity unit calculation.

Biodiversity Impact Assessment only deals with habitat and as such this report does not cover any of the requirements of the proposed development arising from potential impacts on protected species and designated sites.

3.0 Site Context

3.1 MAGiC

The following statutory sites and Natural England Protected Species (NEPS) have been located within the 2km search area (Figure 1).

Table 2: MAGiC search results

Receptor	Distance and Direction to Nearest (m/km)	Description
Statutory sites	~1,549.9m north-east	St. Neot's Common SSSI The site is actively managed through cattle grazing and weed topping under the existing CSS agreement. West of site holds the main interest features for the site, generally in the wetter flood meadow grassland. There is a high cover of sedges and grasses, and occasional high herb cover. Marsh stitchwort and early marsh orchid are present.
Granted protected species licenses	n/a	n/a
Priority habitat	~317m east	Coastal and floodplain grazing marsh
	~388m south-east	Deciduous woodland
	~989.6m south-east	Lowland fens
	~1,590.7m north-east	Good quality semi-improved grassland

MAGiC

Magic Map

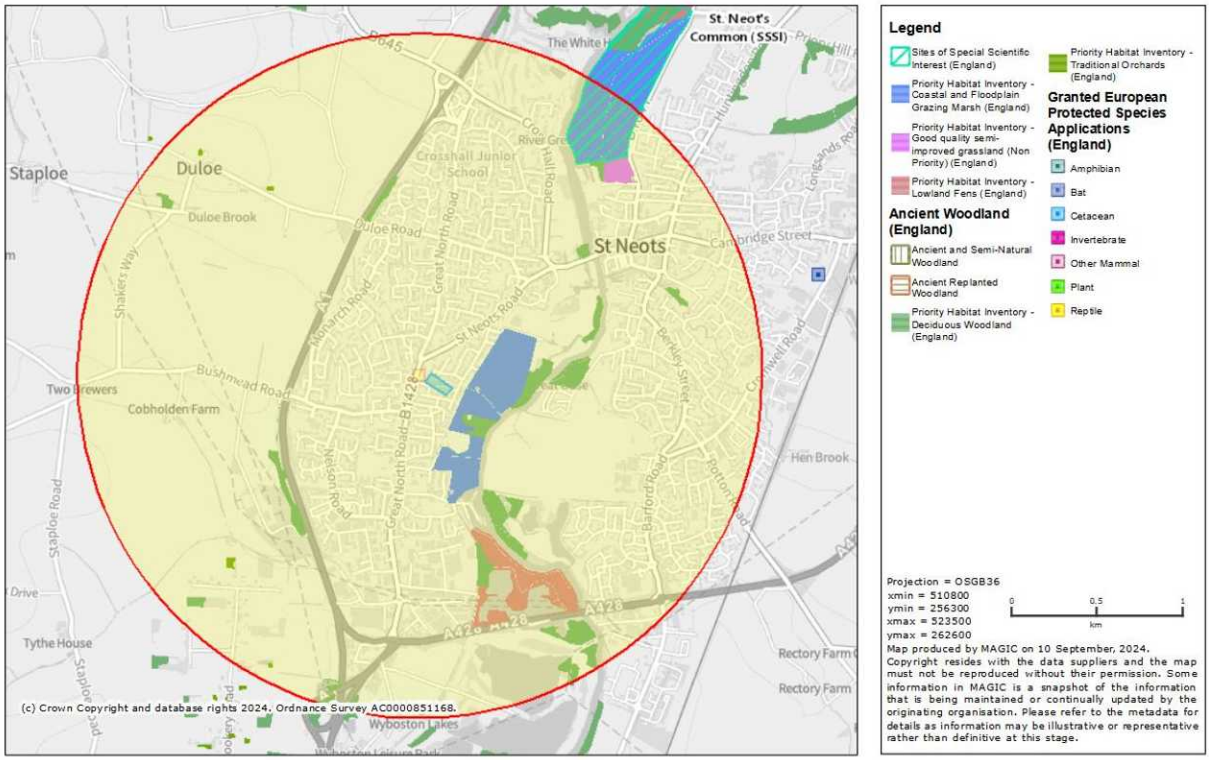


Figure 1: MAGiC

3.2 Strategic Significance

Based on St Neots Conservation Area Character Assessment and St Neots Neighbourhood Plan there is no LRNS for the area, and based on biodiversity opportunity areas the site is not located in an area of strategic significance.

4.0 Baseline Units

The UK Hab survey map used to assess the baseline is provided in Figure 2. Please refer to the PEA report (2024) for full site details.

The following table details the condition assessments for all habitat and linear features on-site as assessed during the ecological assessment. Please see separate Excel sheet for full condition assessments.

Table 3: Biodiversity Net Gain Condition Assessments/Scores

Habitat (UKHabs)	Condition Score
Developed Land; Sealed Surface	Set score
Modified Grassland	Good- There are six species per m2, the sward height is unvaried, with an absence of scrub and bare ground. Poor- There are less than six species per m2, sward height is unvaried and scrub covers more than 5% of the area.
Line of Trees	Moderate
Other Rivers & Streams	Fairly Poor



Figure 2: Baseline Habitats Site Plan

Table 4: Baseline Habitat Units.

UKHab Category	Area (Ha)	Habitats Units Delivered
Modified Grassland (Poor Condition)	0.037	0.07
Modified Grassland (Good Condition)	0.004	0.02
Developed Land; Sealed Surface	0.002	0.00
	Total Biodiversity Units	**0.10**

Table 5: Baseline Linear Units

UKHab Category	Length (km)	Linear Units Delivered
Line of Trees	0.029	0.12
	Total Linear Units	**0.12**

Table 6: Baseline Watercourse Units

UKHab Category	Length (km)	Linear Units Delivered

Other Rivers and Streams	0.025	0.17
	Total Linear Units	**0.17**

5.0 Post-Development Units

Proposed site plans "JLG ASC.22.662 (2D) - No.1 Field Cottage Road, Eaton Socon (Topographical Survey)-01B Site Layout A2P Sheet" were provided by the Client and used to calculate the Biodiversity Units post-development. It has been assumed that with appropriate management the proposed habitats on site can achieve the following conditions. Please see the separate Excel sheet for full condition assessments.

Table 7: Condition of Habitats on-site Post-Development.

UKHab Category	Condition
Vegetated Garden	n/a
Developed Land; Sealed Surface	n/a
Line of Trees	Moderate
Native Hedgerow	Poor
Other Rivers and Streams	Fairly Poor



Figure 3: Proposed Habitats Site Plan

The Habitat Units and Linear Units for the site post-development have been calculated using georeferenced GIS software (Table 8 and Table 9).

Table 8: Summary of Habitat Units Post-Development

UKHab Category	Area (ha)	Habitats Units Delivered
Vegetated Garden	0.017	0.03
Developed Land; Sealed Surface	0.029	0.00
	Total Biodiversity Units	**0.03**

Table 9: Summary of Linear Units Post-Development

UKHab Category	Length (Km)	Habitats Units Delivered
Line of Trees (Retained)	0.029	0.12
Native Hedgerow	0.008	0.02
	Total Biodiversity Units	**0.14**

Table 10: Summary of Watercourse Units Post-Development

UKHab Category	Length (Km)	Habitats Units Delivered
Other Rivers and Streams (Retained)	0.025	0.17
	Total Biodiversity Units	**0.17**

6.0 Results

The change in broad habitat types on site for the proposed development are outlined in Table 11.

Table 11: Summary of change in Biodiversity Units on-site

Broad Habitat Type	Existing Value	Proposed Value	On-site Unit Change
Grassland	0.10	0.00	-0.10
Urban	0.00	0.03	+0.03
Native Hedgerow	0.00	0.02	+0.02
Line of Trees	0.12	0.12	0.00
Other Rivers and Streams	0.17	0.17	0.00

The proposed development will result in a **-66.52% net loss** in Habitat Units and a **+13.31% net gain** in Hedgerow Units on site. No net loss in watercourse units will be achieved.

6.1 Discussion

6.1.1 Mitigation Hierarchy

The mitigation hierarchy is the cornerstone of achieving net gain. It is a sequence of mitigation actions as described in Table 12.

Table 12: Mitigation hierarchy

Stage	In practice
Avoidance	This first stage is to avoid harm to biodiversity, for example locating to an alternative site. It is the most important stage and can ease the consent process, whereas missing this stage can lead to objections and refusal of permission to the development.
Minimise	If avoiding all adverse impacts is not possible, action is taken to minimize these affects.
Compensation	Addresses residual adverse effects, only considered after all possibilities for avoidance and minimising the effects have been implemented. Offsetting is a form of compensation that trades losses of biodiversity

	in one location with measurable gains in another. Offsetting losses of biodiversity with gains elsewhere can be within or outside of the development footprint.

Table 13 outlines how the mitigation hierarchy has been applied to this site.

Table 13: Application of the mitigation hierarchy

Hierarchy Level	Action	Habitat on site
Avoidance	Avoid	There are no priority habitats on site that would make avoidance necessary.
Minimise	Retain	The line of trees along the northern boundary will be retained.
	Enhance	As the site is comprised of private residential land which cannot be conditioned, the adjacent watercourse cannot be enhanced due to the lack of control over the potential enhancements.
Compensation	On-site creation	Vegetated garden and developed land; sealed surface will be created on site, with a short length of native hedgerow planted.
	Off-site creation	As the site consists of private residential land, any on-site enhancements cannot be conditioned. As such off-site compensation will be required to achieve the national guidelines for biodiversity net gain. (see Environment Bank https://environmentbank.com/ and Environmental Trading platform https://www.environmentaltradingplatform.com/ for available off-site units).

7.0 Conclusion

A 10% increase for each unit type present is required to meet the minimum statutory requirement.

The proposed development will result in a **-66.52% net loss** in Habitat Units and a **+13.31% net gain** in Hedgerow Units on site and, therefore, does not meet this requirement for Habitat Units.

As such, in order to meet the required 10% net gain for Habitat Units, a further **0.07 Habitat Units** will need to be achieved. To satisfy the trading rules, the habitat units can be of any distinctiveness.

In addition, no net loss in watercourse units has been achieved due to the adjacent watercourse, as a result, **0.02 watercourse units** are required.

This is not possible on-site and off-site compensation will be required.

7.1 Recommendations

In order to maximise the number of net gain units on site the following recommendation should be carried out:

Hedgerows

It is recommended that a diversity of hedgerow species is included in the proposed hedgerow on site. Suitable hedgerow species include:

- Hawthorn (*Crataegus monogyna*)
- Hazel (*Corylus avellana*)
- Holly (*Ilex europaeus*)
- Wild privet (*Ligustrum vulgare*)
- Field maple (*Acer campestre*)
- Blackthorn (*Prunus spinosa*)
- Guelder rose (*Viburnum opulus*)
- Wayfaring tree (*Vibrunum lantana*)

- Dog rose (*Rosa canina*)
- Spindle (*Euonymus europaea*)

Where possible no cutting should take place during peak bird nesting season, which runs from March to September inclusively. If it is necessary to cut the hedgerows during this period a suitable qualified person should check for nesting birds immediately prior to works being undertaken. Trimming hedges on a two or three year rotation, targeting different sections each year, will make sure there are always flowers for pollinators in spring and berries for birds in autumn. Hedges cut every three years can produce two and a half times as many blossoms as those cut annually. Rotational cutting can also save time and money that would be invested in annual cutting.

Watercourse

As the watercourse is not owned by the development and is located outside of the site boundary, enhancements to the watercourse are limited. The watercourse can be enhanced by increasing the natural vegetation structure along the bank top. This includes planting native shrub and tree species along the length of the watercourse, however, as the site will comprise of private garden, these cannot be conditioned for within the metric due to the lack of control.

8.0 References

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CIRIA (2020), Biodiversity Net Gain: good practice principles for development. [Online] https://cieem.net/wp-content/uploads/2019/02/C776a-Biodiversity-net-gain.-Good-practice-principles-for-development.-A-practical-guide-web.pdf (Accessed at time of report)

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