BIODIVERSITY NET GAIN ASSESSMENT
LAND AT 43 MILL LANE, GOSBERTON, LINCOLNSHIRE

May 2025

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LINCOLNSHIRE

Report to: Mr & Mrs Van Lier
                    43 Mill Lane
                    Gosberton
                    Lincs

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                    43 Mill Lane, Gosberton,

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1   INTRODUCTION

HS Ecology has been commissioned by Mr & Mrs Van Lier to undertake a Biodiversity Net Gain Assessment of an area of land at 43 Mill Lane, Gosberton in Lincolnshire. The survey is required in connection with plans to construct two detached bungalows with garages on the site.

The site was surveyed and assessed on the 28th April 2025 by Helen Scarborough (FISC level 4) and Sarah Vinters.

2   METHODS

2.1   Location and grid reference

The survey site comprises areas of modified grassland, gravel, traditional orchard, hedgerows and trees - central grid reference TF 2437 3168.

The site does not occur within a biodiversity opportunity/green infrastructure area and therefore the strategic significance of the habitats is assessed as 'Area/compensation not in local strategy/ no local strategy'.

Figure 1: Aerial view of the site

2.2   Assessment and walkover

A walkover of the site was undertaken in April 2025; the site area was defined and the site boundaries were mapped. All habitats within the site and on the boundaries were identified, measured and classified in accordance with The UK Habitat Classification V2. The condition of each of the habitats was assessed in accordance with The Statutory Biodiversity Metric.   The areas of the site were calculated using the Multi-Agency Geographic Information for the Countryside (MAGIC) website, or using information supplied by the client.

3   RESULTS

3.1   Baseline Assessment – habitats

<u>Area habitats</u>

The total area of the site is 0.285 hectares which comprises the following:

1. Artificial unvegetated, unsealed surface (u1c) – an area of 0.0164 hectares equating to 0 habitat units.

These are areas of gravel associated with the access to the site and an area of gravel/hardstanding where a container is located. They have <10% vegetation cover and support typical ruderal/ephemeral species such as greater plantain and annual meadow grass. Condition assessments do not apply.

2. Modified grassland (g4) – an area of 0.23791 hectares equating to 0.95 habitat units

An area of short sward mown lawn supporting perennial rye-grass, daisy, white clover, field speedwell, dandelion, with some cat's-ear, ragwort, common mouse-ear, springy turf moss, creeping buttercup, Yorkshire-fog, bird's-foot trefoil, nipplewort, tare species and ribwort plantain.

Condition assessment
Criteria A is met as there are on average 6 species per 1m^2 quadrat.
Criteria B is failed as sward height is uniformly short.
Criteria C is passed – these is no scrub.
Criteria D is passed – there is no physical damage.
Criteria E is failed – there is no bare ground.
Criteria F is passed – there is no bracken.
Criteria G is passed – there are no non-native, invasive plant species

Five criteria are passed giving the grassland 'moderate 'condition.

3. Traditional Orchard (BNG21) - an area of 0.030272 hectares equating to 0.18 habitat units

A fenced off area (with temporary sheds) which supports 6 fruit trees (apple, plum and cherry) over bare ground and ruderals species such as hedge mustard, mayweed species, butterfly bush, wheat, shepherds purse, docks species, feverfew, willowherb species, creeping thistle, red dead-nettle, small nettle, dandelion, barren brome, common couch, creeping bent and mullein species.

Condition assessment
Criteria A is failed – there are no ancient or veteran trees
Criteria B is met – some of the trees have 20% (or more) deadwood
Criteria C is passed – scrub does not smother the trees
Criteria D is failed – there is no evidence of deliberate pruning
Criteria E is passed – the trees are not damaged
Criteria F is failed as the vegetation beneath the trees has clearly been heavily trodden and grazed by chicken or other avian livestock

Criteria G is failed – the grassland is not medium or high distinctiveness quality

Criteria H is failed – there are no invasive species listed on Schedule 9 however the ground flora comprises ruderal species indicative of enrichment

The orchard fails five criteria and therefore is assessed as having 'poor' condition.

This area will be retained as part of the development; it has the potential to be significantly enhanced.

The enhancement will be achieved by addressing criteria D, F and G. An appropriate grassland seed mix will be added to the area to promote a wildflower/grassland type ground flora, new trees will be planted and the existing trees will be managed appropriately. This will give the area 'good' condition.

General site information

No notable or rare plant species (locally or nationally) were recorded.

The site would not meet any criteria to qualify as a Local wildlife Site (LWS).

The biodiversity units for these habitats are as follows:

The total for the site is 1.13 biodiversity units:

Linear terrestrial habitats
The linear habitats are as follows:

Non-native hedgerow (h2b) on the eastern and northern boundary – 72m equating to 0.07 linear habitat units.

Timber fencing on the northwest corner – 39m – 0 linear habitat units.

3.2   **Post development habitats**

Post development the site will comprise the following habitats:

4. Buildings and driveway (u1b) – an area of 0.067135 hectares (0 habitat units)

5. Vegetated garden (u1) turfed gardens – an area of 0.182056 hectares equating to 0.35 habitat units

6. Traditional orchard (retained and enhanced to good condition) an area of 0.030272 achieving 0.31 habitat units

7. 41 new trees to be planted; these will be assumed to have poor condition. An area of 0.1669 hectares equating to 0.51 habitat units

8. Five sapling trees (already planted and established since 2021) – an area of 0.0204 hectares equating to 0.06 habitat units

These trees occur along the northern edge of the site. They comprise horse-chestnut, whitebeam, maple species, cherry species and laburnum. They are non-native varieties.

Criteria A is failed – they are non-native varieties
Criteria B is passed – the limited canopies are continuous
Criteria c is failed – they are young/sapling trees
Criteria D is passed – there is no evidence of adverse impact on the trees
Criteria E is failed – the trees do not have sufficient age to provide ecological niches
Criteria F is passed – the trees oversails vegetation

The trees pass three criteria and therefore class as having 'moderate' condition.

Linear habitats

The non-native hedgerows will be retained and an additional 30 metres of native hedgerow will be planted to separate the development plots.

The plans are shown as an appendix.

3.3   Summary tables

Table 1 – pre development habitats

Habitat parcel	Area hectares	Biodiversity unit value
Artificial unvegetated, unsealed surface	0.0164	0
Modified grassland	0.23791	0.95
Traditional Orchard	0.030272	0.18
Total units – 1.13		

Table 2 – post development habitats

Habitat parcel	Area hectares	Biodiversity unit value
Buildings & driveway	0.067135	0
Vegetated garden	0.182056	0.35
Traditional Orchard (retained and enhanced)	0.030272	0.31
Ground level planters	0.0037375	0.01
Trees (collectively)	0.1873	0.57
Total units – 1.24		

Table 3 – linear habitats pre development

Habitat parcel	Length	Biodiversity unit value
Non-native hedgerow (retained)	72m	0.07
Timber fencing	39m	0
Total units – 0.07		

Table 4 – linear habitats post development

Habitat parcel	Length	Biodiversity unit value
Non-native hedgerow	72m	0.07
Newly planted native hedgerow	30m	0.06
Total units – 0.12		

For linear habitats the trading rules and requirements of the statutory metric have been met. There will be a 70.69% increase in linear habitat units.

For area habitats the trading rules have been met; but the net gain required for the statutory metric have not been met. Under the current development proposals, there is a net gain of 9.49% for area habitats.
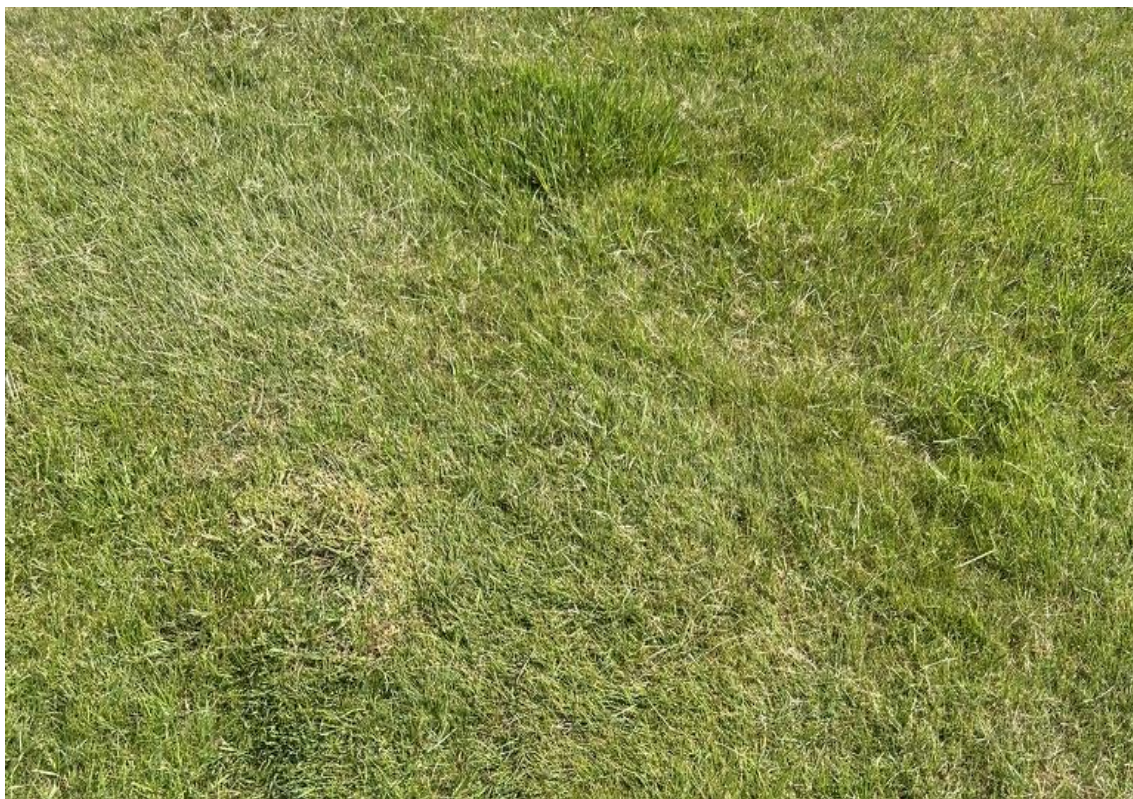
There is a small shortfall of 0.01 units required to achieve the 10% gain required. These units can be purchased from an offsite provider such as The Environment Bank or Green Investment in Greater Lincolnshire (GIGL).

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Photograph 1: Grassland area (g4)

Photograph 2: Further view of the grassland area (g4)

Photograph 3: Closer view of the grassland area (g4)

Photograph 4: Fenced area with fruit trees (orchard)

Photograph 5: Further view of the orchard area

Photograph 6: Internal fence within the northwest corner

Photograph 7: Gravel access/driveway

Photograph 8: Gravel storage area and fencing

Photograph 9: Non-native eastern boundary hedgerow (h2b)

Photograph 10: Non-native northern boundary

Photograph 11: Tree planted along northern side of the site

Photograph 12: Tree planted along northern side of the site

4　REFERENCES

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Appendix 1 –Pre development habitat map

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Appendix 2 – Post development habitat map

For final Masterplan see drawings by Remway Design