

**BIODIVERSITY NET GAIN ASSESSMENT**  
**LAND AT MIDDLEDENE, SURFLEET ROAD, PINCHBECK,**  
**SPALDING, LINCOLNSHIRE**

**May 2025**



**Issued to:**

Mr & Mrs Wilson

Via email: [jason@remwaydesign.co.uk](mailto:jason@remwaydesign.co.uk)

**HS Ecology**

The Old School House  
Chapel Road  
Tumby Woodsideside  
Boston  
PE22 7SP

# **BIODIVERSITY NET GAIN ASSESSMENT**

## **LAND AT MIDDLEDENE, SURFLEET ROAD,**

## **PINCHBECK, SPALDING, LINCOLNSHIRE**

**Report to:** Mr & Mrs Wilson  
Via email:  
jason@remwaydesign.co.uk

**Report title:** Biodiversity Net Gain Assessment,  
Middledene, Surfleet Road, Pinchbeck,  
Spalding, Lincolnshire

**Revision:** Final

**Original issue**

**date:**

**Amended:** N/A

**Issued by:** Helen Scarborough      **Date:** 28th May 2025

# **BIODIVERSITY NET GAIN ASSESSMENT**

## **LAND AT MIDDLEDENE, SURFLEET ROAD,**

## **PINCHBECK, SPALDING, LINCOLNSHIRE**

### **Contents**

<b>1</b>	<b>INTRODUCTION .....</b>	<b>4</b>
<b>2</b>	<b>METHODS.....</b>	<b>4</b>
2.1	Location and grid reference.....	4
2.2	Assessment and walkover.....	5
<b>3</b>	<b>RESULTS.....</b>	<b>5</b>
3.1	Baseline Assessment – habitats.....	5
3.2	Post development habitats .....	7
3.3	Summary tables.....	7

# **BIODIVERSITY NET GAIN ASSESSMENT**

## **LAND AT MIDDLEDENE, SURFLEET ROAD,**

## **PINCHBECK, SPALDING, LINCOLNSHIRE**

### **1 INTRODUCTION**

HS Ecology has been commissioned by Mr & Mrs Wilson to undertake a Biodiversity Assessment of an area of land at Middledene, Surfleet Road, Pinchbeck, Spalding in Lincolnshire. The survey is required in connection with plans for a detached commercial building to be used as a Pilates and wellbeing studio.

The site was surveyed and assessed on the 28<sup>th</sup> 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 car park, vegetated garden, hedgerows and trees - central grid reference TF 2479 2714.

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**

#### Area habitats

The total area of the site is 679.63m<sup>2</sup> which comprises the following:

1. Artificial unvegetated, unsealed surface (u1c) – an area of 578.53m<sup>2</sup> equating to 0 habitat units.

An area of mainly gravel with <10% vegetation. Common ruderal species such as sow-thistles, barren brome, forget-me-not, dandelion, willowherb and garden escapes were noted.

2. Modified grassland (g4) – an area of 48.79m<sup>2</sup> equating to 0.02 habitat units.

A small strip of modified grassland beneath two mature trees on the north-west side of the site. It supports perennial rye-grass, daisy, red fescue, rough meadow grass, creeping buttercup and barren brome with smaller amounts of sow-thistle, cleavers, willowherb, ivy, cat's-ear, dandelion, ribwort plantain, common mouse-ear, bird's-foot trefoil and meadow buttercup. This area will be retained.

3. Vegetated garden - an area of 52.31m<sup>2</sup> equating to 0.01 habitat units

An area adjacent to the gravel with garden geranium species, cherry laurel shrubs, garden iris species, garden daffodils, willowherbs and cleavers. This area will be retained within the proposals for the site.

4. 4 mature trees – three pine trees and a silver birch. All trees class as 'medium' as they have diameters at breast height of between 40cm and 55cm. None of the trees have potential bat roost features or veteran features. They are between 7 and 12 metres in height. All four trees will be retained under the development footprint.

Using the tree calculator, these equate to 651.11m<sup>2</sup> and have 0.5990 habitat units.

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 pre development site is 0.6290 biodiversity units:

#### Linear terrestrial habitats

There are two hedgerows on the site.

One is a length of non-native Leylandii hedgerow which intersects the site, and the other is a non-native hedgerow dominated by a garden oleaster species (with some privet and ivy) which forms the eastern boundary. The eastern boundary hedgerow will be retained and the internal hedgerow will be removed with the exception of 8 metres.

Non-native hedgerow (h2b) on the east boundary – 24.28m equating to 0.0243 habitat units.  
 Internal non-native hedgerow (h2b) – 15.5m equating to 0.0155 habitat units.

### 3.2 Post development habitats

Post development the site will comprise the following habitats:

5. Building (u1b) – an area of 114.40m<sup>2</sup> (0 habitat units)
6. Artificial unvegetated, unsealed surface (u1c) – an area of 512.92 m<sup>2</sup> (0 habitat units)
7. Vegetated garden - an area of 52.31m<sup>2</sup> equating to 0.01 habitat units
8. Planters with bee friendly species – 10.5m<sup>2</sup> equating to 0.002 habitat units.
9. Non-native hedgerow (h2b) on the east boundary – 24.28m equating to 0.0243 linear habitat units.
10. Non-native internal hedgerow – 8m equating to 0.008 linear habitat units.
11. Newly planted native hedgerow – 10m equating to 0.0335 linear habitat units.

The post development plans are shown as an appendix.

### 3.3 Summary tables

**Table 1 – pre development habitats**

Habitat parcel	Area m <sup>2</sup>	Biodiversity unit value
Artificial unvegetated, unsealed surface	578.53	0
Modified grassland	48.79	0.02
Vegetated garden	52.31	0.01
Four medium trees	651.11	0.5990
<b>Total units – 0.6290</b>		

**Table 2 – post development habitats**

Habitat parcel	Area m <sup>2</sup>	Biodiversity unit value
Buildings	114.40	0
Artificial unvegetated, unsealed surface	512.92	0
Vegetated garden (retained)	52.31	0.01
Four medium trees (retained)	651.11	0.5990
Modified grassland (retained)	48.79	0.02

Planters	10.50	0.0020
Five new trees (saplings)	203.47	0.0622
<b>Total units – 0.6932</b>		

**Table 3 – linear habitats pre development**

Habitat parcel	Length m	Biodiversity unit value
Non-native hedgerow 1	24.28 m	0.0243
Non-native hedgerow 2	15.47 m	0.0155
<b>Total units – 0.0398</b>		

**Table 4 – linear habitats post development**

Habitat parcel	Length	Biodiversity unit value
Non-native hedgerow 1	24.28m	0.0243
Native hedgerow 2	8m	0.008
Newly planted native hedgerow	10m	0.0335
<b>Total units – 0.0658</b>		

For area and linear habitats the trading rules and requirements of the statutory metric have been met.

There is a gain of 0.0642 area habitat units post development equating to a 10.21% gain in biodiversity.

There is a gain of 0.0260 linear habitat units post development equating to a 65.29% gain in linear biodiversity.

A summary of the headline results from the BNG assessment are provided below:

**Table 5: Headline results**

Site Name	Mill Lane, Pinchbeck		
Sheet Name	Headline Results		
<b>Headline Results</b>			
Headline		BNG Targets Met ✓	
Trading Rules		Trading Rules Satisfied ✓	
Next steps		Check for input errors/rule breaks present in the metric A	
Baseline Units	<i>Habitat units</i>	0.6290	
	<i>Hedgerow units</i>	0.0398	
	<i>Watercourse units</i>	Zero Units Baseline	
Post-development Units	<i>Habitat units</i>	0.6932	
	<i>Hedgerow units</i>	0.0658	
	<i>Watercourse units</i>	0.0000	
Total net unit change	<i>Habitat units</i>	0.0642	
	<i>Hedgerow units</i>	0.0260	
	<i>Watercourse units</i>	0.0000	
Total net % change	<i>Habitat units</i>	10.21%	#NAME?
	<i>Hedgerow units</i>	65.29%	#NAME?
	<i>Watercourse units</i>	% target not appropriate	
Habitats units required to meet target		0.0000	
Hedgerow units required to meet target		0.0000	
Watercourse units required to meet target		0.0000	



**Photograph 1: Gravelled area (u1c)**



**Photograph 2: Further view of the gravelled area (u1c)**



**Photograph 3: Closer view of the gravelled area**



**Photograph 4: Vegetated garden area (u1)**



**Photograph 5: Grassland area (g4)**



**Photograph 6: Hedgerow 1 (h2b)**



**Photograph 7: Hedgerow 2 (h2b)**



**Photograph 8: Tree 1**



**Photograph 10: Tree 2**



**Photograph 11: Trees 3 & 4**

#### **4 REFERENCES**

Baker, J. et al (2019) Biodiversity Net Gain. Good Practice principles for Development, A Practical guide. CIRIA, London. JNCC (1990).

Handbook for Phase 1 Habitat Survey – a technique for environmental audit. Field manual. 5 th ed. Peterborough, JNCC.

Panks, S. et. al. (2021). The Biodiversity Metric 4.0: Auditing and accounting for biodiversity – Technical Supplement. Natural England.

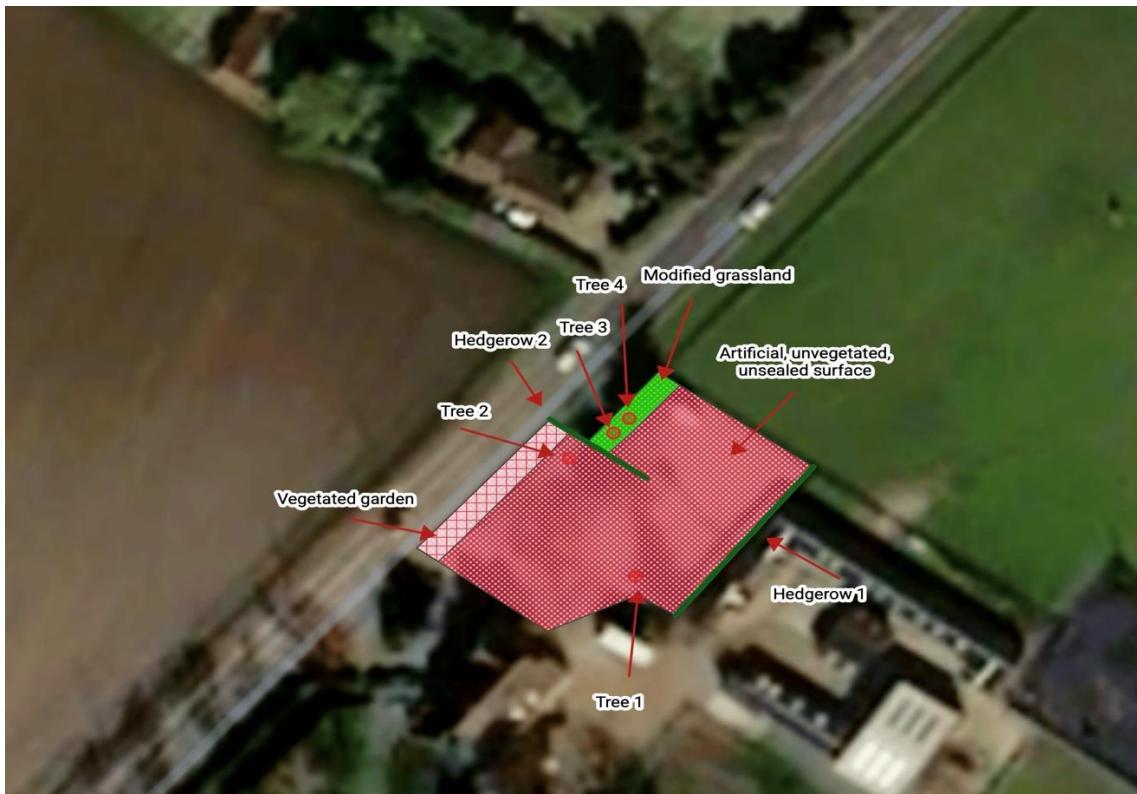
Panks, S. et. al. (2021). The Biodiversity Metric 3.0: Auditing and accounting for biodiversity - User Guide. Natural England. QGIS Development Team (2018).

UK Habitat Classification Working Group (2023). UK Habitat Classification – Habitat Definitions V2.0 at <http://ecountability.co.uk/ukhabworkinggroup-ukhab>

# BIODIVERSITY ASSESSMENT

## LAND AT MIDDLEDENE, SURFLEET ROAD, PINCHBECK, SPALDING, LINCOLNSHIRE

### Appendix 1 –Pre development habitat map



# BIODIVERSITY NET GAIN ASSESSMENT

## LAND AT MIDDLEDENE, SURFLEET ROAD, PINCHBECK, SPALDING, LINCOLNSHIRE

### Appendix 2 – Post development habitat map

