

BIODIVERSITY NET GAIN ASSESSMENT LAND TO THE REAR OF TUDOR LODGE, FEN ROAD, HOLBEACH, LINCOLNSHIRE

November 2025



**Issued to: Pippard Construction
C/O TAC Architects
Western Hills
Spalding
Lincolnshire
PE12 6DD**

HS Ecology
The Old School House
Chapel Road
Tumby Woodside
Boston
PE22 7SP

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Report to: Pippard Construction
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To the Rear of Tudor Lodge, Fen Road,
Holbeach, Lincolnshire

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1 INTRODUCTION

HS Ecology has been commissioned by TAC Architects on behalf of Mr Richard Pippard to undertake a Biodiversity Assessment of an area of land located to the rear of Tudor Lodge, Fen Road, Holbeach in Lincolnshire. The work is required in connection with development of the land for residential housing.

The site was surveyed and assessed on the 12th November 2025 by Helen Scarborough (FISC level 4) and Sarah Vinters.

It should be noted that this is a retrospective Biodiversity Net Gain Assessment and therefore the baseline habitats have been assessed using aerial photographs and photographs of the site pre development. The grassland assessment has been assisted by examining adjacent grassland areas. The trees and treeline on site has been assessed with the assistance of an arboricultural report dated 2022.

2 METHODS

2.1 Location and grid reference

The survey site comprises former modified grassland paddocks (now under development as a housing estate) with associated line of trees and individual rural trees at Tudor Lodge, Fen Road in Lincolnshire - central grid references TF3554 2373.

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 (pre works)

2.2 Assessment and walkover

A walkover of the site was undertaken in November 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 9151.67m² which comprised the following:

1. Modified grassland (g4) – 9151.67m² an area of equating to 2.75 habitat units.

The modified grassland adjacent to the site (paddocks to the west) are dominated by perennial rye-grass (approximately 70%) with some crested dog's-tail, daisy, Yorkshire-fog, common couch, meadow foxtail, and cock's-foot with small amounts of common ragwort, creeping buttercup, dandelion, ribwort plantain, creeping bent, white clover, and prickly sow-thistle.

Photographs provided by the client show that the area pre development was dominated by a short sward grazed grassland with areas of disturbance around the gateways. There was a field shelter present in the south-west corner. The photographs show a heavily grazed, short sward grassland with disturbed areas. The adjacent grassland is species poor dominated by perennial rye-grass *Lolium perenne*, white clover *Trifolium repens*, Dandelion *Taraxacum agg* and daisy *Bellis perennis* with lesser amounts of sow-thistle species *Sonchus spp*, common ragwort *Jacobaea vulgaris* and common mouse-ear *Cerastium fontanum*. The field has been assigned a condition of 'fairly poor'; retrospective assessments are difficult but based on the adjacent field and the photographs, the field is species poor so Category A is likely to have been failed and all other criteria apart from those relating to scrub cover, bracken cover and invasive species are likely to have failed.

2. Field shelter building and associated hard standing (u1b) – an area of 0.1 hectares equating to 0 habitat units.

The field shelter and surrounding hard standing – this feature is evident in aerial photos and pre development photos.

General information

No invasive species listed on Schedule 9 were noted.

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

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

3. Rural trees – collectively 0.0529m² an area of equating to 0.63 habitat units.

The tree protection plan and arboriculture report produced by Andrew Belsen in 2022 has been used to assist this section of the assessment. The majority of the trees on site form part of a line of trees which follows the watercourse along the western boundary of the site.

In accordance with the report, the following trees have been removed from the site:

Tree number in the report	Species	Age	Size for BNG purposes	Condition assessment for BNG purposes
8502	Lime	Over mature	60cm DBH – large	Good
NT14	Larch	Dead	30cm DBH – medium	Good

Linear terrestrial habitats

A line of trees occurs down the western boundary of the site measuring 191m.

The species recorded are sycamore, holly, yew, box, maple species, lime, silver birch, mature beech trees, cherry laurel, privet, holly, cherry species and elder over bramble and ivy. This linear habitat is (in the main) over 5 metres tall and therefore classes as a line of trees rather than a hedgerow. There 5+ mature trees.

This linear habitat has been retained in the most part; however it has been managed as part of the development, some of the north-west section has been removed and now some of the trees have been isolated from the line and will form part of the gardens. This has been addressed by assuming the line of trees was in good condition pre development and down grading it to moderate condition post development. The trees which now form part of the gardens will not be included in the post development figures as they are located within private gardens and future management cannot be secured; however it should be noted that they have been retained and will contribute to biodiversity of the site post development.

There is a wet ditch (maintained and managed by the local Internal Drainage Board) associated with this line of trees. It supports common reed and has been managed recently. Water quality was poor. It is not under the control of the site owner.

This watercourse will be retained in full.

3.2 Post development habitats

Post development the site will comprise the following habitats:

4. Building and developed land sealed surface (u1b and u1b5) – 3965.76m² equating to 0 units
5. Vegetated garden and verges - an area of 5185.91m² equating to 1.04 habitat units.

Linear terrestrial habitats

1. A line of trees occurs down the western boundary of the site measuring 191m.

This will be retained in the main but some management has occurred as part of the development. The condition assessment will be downgraded to moderate to reflect the management work.

2. A ditch occurs in association with the line of trees – it measures 123.47 metres and equates to 0.52 linear habitat units. It supports little vegetation, has poor water quality and is of 'poor' condition.

The plans are shown as an appendix.

3.3 Achieving Biodiversity Net Gain

In order to achieve the required 10% uplift on biodiversity and achieve the trading rules of the statutory metric it will be necessary to secure additional linear and area units from an off-site provider or create them on site.

Linear habitat can be created on site through the planting of native hedgerows along fence lines and boundaries; the aim is to secure native hedgerows in moderate condition (100 metres). The remainder of linear habitat units will be purchased from an off-site provider.

Additional watercourse units, linear units and area habitat units will be purchased from an off-site provider.

3.4 Summary tables

Table 1 – pre development habitats

Habitat parcel	Area m ²	Biodiversity unit value
Modified grassland	91,516.6	2.75
Rural trees	0.0529	0.63
Building and hardstanding (field shelter)	0.1	0
Total units – 3.38		

Table 2 – post development habitats

Habitat parcel	Area m ²	Biodiversity unit value
Buildings and hard standing, developed land, sealed surface	49,677.6	0
Vegetated gardens	51,895.91	1.04
Total units – 1.04		

Table 3 – pre development linear habitats

Habitat parcel	Length m	Biodiversity unit value
Line of trees	191	1.15
Ditch	123.47	0.52
Total units – 1.15 (linear) 0.52 (watercourse)		

Table 4 – post development linear habitats

Habitat parcel	Length m	Biodiversity unit value
Line of trees	131	0.26
Native hedgerow	100	0.33
Ditch	123.47	0.52
Total units – 0.59 (linear) 0.52 (watercourse)		

There is a loss of 2.34 area habitat units post development equating to a 69.30% loss. In order to achieve BNG, a further 2.68 units must be purchased from an off-site provider.

There is a loss of 0.55 linear habitat units post development equating to a 48.37% loss. In order to achieve BNG, a further 0.67 linear units must be purchased from an off-site provider.

The watercourse units remain unchanged – in order to achieve the 10% uplift a further 0.05 units must be purchased from an off-site provider.



Photograph 1: Site pre development (photograph supplied by client)



Photograph 2: Further view of the site pre development (photo supplied by client)



Photograph 3: Access track to the site



Photograph 4: On site buildings and hardstanding



Photograph 5: Gravel/parking area and garages



Photograph 6: Vegetated garden area



Photograph 7: Further view of garden areas



Photograph 8: Newly planted grass



Photograph 9: Line of trees – with some trees now occurring within gardens



Photograph 10: Line of trees with some trees occurring within gardens



Photograph 11: As above



Photograph 12: Line of trees on the western boundary – retained



Photograph 13: Further view of the line of trees – retained



Photograph 14: Western boundary ditch

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>

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Appendix 1 – Pre development map



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Appendix 2 – Post development habitat map

