

BIODIVERSITY NET GAIN ASSESSMENT

THORESBY BRIDGE FARM, NORTH COTES,
LINCOLNSHIRE
for
CHESTERFIELD POULTRY LTD

(March 2024)
(Contract number 450a)

Prepared by:
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PROJECT DATA

BNGA prepared by	Craig Emms and Linda Barnett
Site Address	Thoresby Bridge Farm, North Cotes, Lincolnshire DN36 5TY
Local Planning Authority	East Lindsey District Council
Full Planning Permission to be applied for:	Redevelopment of a poultry farm
Central Ordnance Survey Grid Reference	TF 33745 99656
Date Report Issued	12 March 2024
Biodiversity Net Gain Assessment Report	Version 1

REPORT SUMMARY

The proposed project is the redevelopment of a poultry farm at Thoresby Bridge Farm, North Cotes, Lincolnshire DN36 5TY.

The assessment of habitats on and off site are based on a visit during the preliminary ecological appraisal on the 27th February 2024 (Emms and Barnett, 2023). The areas of each habitat type which would be present within the site post development are based on the proposed site plan A1 (1) (Ian Pick Associates Ltd, 2024) and personal contact with the project agent. The areas have been calculated using MAGIC (Multi-Agency Geographic Information for the Countryside - www.magic.gov.uk).

The site is part of a farm and is for the most part, surrounded by arable land. Habitats on and adjacent to the site include buildings, hardstanding, amenity grassland, ephemeral/short perennial vegetation, tall ruderal herb, arable land and a hedgerow.

Prior to development the site consists of hardstanding, amenity grassland, ephemeral/short vegetation grading into tall ruderal herb at the site's boundaries and a species poor hedgerow on the site's northern boundary (see Map 1 in the Appendices). Seven buildings on the site will be removed during the development. The farmhouse and a barn will be retained. The post development site will consist of two large new poultry sheds with associated infrastructure and hardstanding for loading and turning, an attenuation pond and pollen and nectar rich neutral grassland. A new native hedgerow will be planted on the site's eastern and southern boundaries (see Map 2 in the Appendices).

The creation of the native species rich hedgerow will provide a biodiversity net gain on site in hedgerow biodiversity units. The newly created grassland on site will also provide a biodiversity net gain in habitat biodiversity units.

There is no Local Nature Recovery Strategy (LNRS) for this area at the present time. Hedgerows are however a priority habitat in the Lincolnshire Biodiversity Action Plan (2011), especially in relation to farmland. Hedgerows are also a UK priority habitat (NERC, 2006).

The new 250m hedgerow on site will contribute to the increase in biodiversity by eventually providing much increased opportunities for invertebrates, birds, bats and small mammals. The new neutral grassland rich in nectar and pollinating sources will support farmland birds, pollinating insects and natural pest control.

Additional measures proposed under the scheme including faunal enhancements such as the bat roost boxes will also bring forward considerable additional biodiversity net gains that are unable to be reflected within the DEFRA Statutory Biodiversity metric.

Pre-development, there are 0.64 habitat units and 0.08 hedgerow units on site. Post-development there will be 0.85 habitat units and 0.61 hedgerow units on site. This equates to a biodiversity net gain of 33.43% in habitat units and 663.44% in hedgerow units for the project.

From the assessment of the habitats on the site pre and post development using the DEFRA Statutory Biodiversity Metric, it is considered highly likely that there will be more than a 10% a net gain for the site.

The Statutory Biodiversity Metric calculation spreadsheet is supplied as a separate document.

BIODIVERSITY NET GAIN ASSESSMENT

Introduction and Methods

This report has been prepared by Craig Emms and Linda Barnett who were contracted by Chesterfield Poultry Ltd to undertake a biodiversity net gain assessment of the proposed development at Thoresby Bridge Farm, North Cotes, Lincolnshire DN36 5TY.

A site visit was undertaken on 27th February 2024 to assess the habitats on and off site for a Preliminary Ecological Appraisal (Emms and Barnett, 2024). The baseline and post development areas of habitat present have been calculated using MAGIC (Multi-Agency Geographic Information for the Countryside - www.magic.gov.uk). The site is 1.2 ha in extent.

The biodiversity net gain assessment was undertaken using the DEFRA Statutory Biodiversity Metric developed by Natural England. The habitat areas within the existing site and the site post development were entered into the calculation spreadsheet which is supplied as a separate document. Maps of the site pre and post development are presented in the Appendices.

The Statutory Biodiversity Metric calculator tool utilises the UK Habitat Classification System (UKHab) as the standard data input for habitats. The Phase 1 Habitat Survey data for the site was subsequently converted for the purposes of the metric calculation using the Phase 1 habitats to UKHab translation feature, included in the Statutory Biodiversity Metric calculator tool, or using professional opinion.

RESULTS OF BASELINE HABITAT AND HEDGEROW CALCULATIONS

ON-SITE HABITAT BASELINE

Table 1a and 1b show the status of the existing habitat areas and hedgerow with a summary of their current conditions as determined from the site visit 27th February 2024.

Table 1a: Baseline on-site habitat conditions

Ref	Habitat	Condition	Condition Assessment	Description
1	Urban: Developed land; sealed surface	N/A Other	The DEFRA metric automatically assigns the condition data.	These are poultry sheds and associated buildings.
2	Grassland: Modified grassland	Poor	Criteria 1: Fail; 2: Fail; 3: Fail; 4: Pass; 5: Pass; 6; Pass; 7: Pass	This is amenity grassland which is mown on a regular basis.
3	Sparsely vegetated land; ruderal/ephem eral	Poor	Criteria: 1, Pass; 2: Pass; 3. Fail; 4: Fail	This is an area of tall ruderal and ephemeral/ short perennial vegetation mainly on the western and southern edges of the site and between the poultry sheds.

The existing habitats are assessed to provide **0.64** habitat biodiversity units.

No irreplaceable habitats were identified within the red line boundary of the proposed scheme.

ON-SITE HEDGEROW BASELINE

Table 1b: Baseline on-site hedgerow conditions

Ref	Habitat	Condition	Condition Assessment	Description
1	Native hedgerow	Moderate	Criteria A1: Fail, A2: Fail, B1: Pass, B2: Pass, C1: Fail, C2: Pass, D1: Pass, D2 Fail.	This is a short garden hedgerow on the site's northern boundary consisting of hawthorn. It fails criteria A1, A2, C1 and D2 and will be retained in the development.

The existing hedgerow is assessed to provide **0.08** hedgerow biodiversity units.

RESULTS OF POST DEVELOPMENT HABITAT AND HEDGEROW CALCULATIONS

PROPOSED – ON SITE HABITAT CREATION

Table 3 shows the details of the habitat proposed on site and a summary of their targeted conditions.

Table 3: Proposed on site habitat creation details

Ref	Habitat	Condition	Condition Assessment	Description
1	Urban – developed land, sealed surface	N/A - Other	The DEFRA metric automatically assigns the condition data.	Building/structures/hard standing
2	Urban; sustainable urban drainage	Poor	Criteria targeted: 4b	This is the new attenuation pond
3	Grassland; other neutral grassland	Poor	Criteria targeted: 1,2 and 5	The new grassland will be created through sowing with a mix of grasses and native wildflowers and managed appropriately.

PROPOSED ON-SITE HEDGEROW CREATION

Table 4 shows the details of the habitat proposed on site and a summary of their targeted conditions.

Table 4: Baseline on-site hedgerow conditions

Ref	Habitat	Condition	Condition Assessment	Description
1	Native species rich hedgerow	Poor	Criteria targeted: A1, A2, B1, B2, C1, C2, D1, D2	This native hedgerow will be 250m long and species rich. It will be planted on the site's eastern and southern boundaries.

Based on the proposed habitats and hedgerows within the site and their targeted conditions, which includes the retained habitats and hedgerows, they are assessed to provide **0.85** habitat biodiversity units and **0.61** hedgerow biodiversity units.

SUMMARY OF RESULTS

Table 5 shows a summary of the habitat's biodiversity net gain assessment.

Table 5: Summary of the habitat's biodiversity net gain assessment

On site - baseline

Habitat units	0.64
Hedgerow units	0.08

On site post intervention (including habitat retention, creation and enhancement)

Habitat units	0.85
Hedgerow units	0.61

Total net unit change (including habitat retention, creation and enhancement)

Habitat units	0.21
Hedgerow units	0.53

Total on-site net% change (including habitat retention, creation and enhancement)

Habitat units	33.43%
Hedgerow units	663.44%

Trading rules satisfied	Yes
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From the assessment of the habitats on and off the site pre and post development using the DEFRA Statutory Metric, it is considered highly likely that there will be more than a 10% net gain for the site. The biodiversity gain is proposed through the creation of a new native species-rich hedgerow on site and through the creation of pollen and nectar rich neutral grassland on site.

REFERENCES

Lincolnshire Biodiversity Partnership (2011) *Lincolnshire Biodiversity Action Plan 3rd edition*. Lincolnshire Biodiversity Partnership c/o Banovallum House, Manor House Street, Horncastle, Lincolnshire LN9 5HF

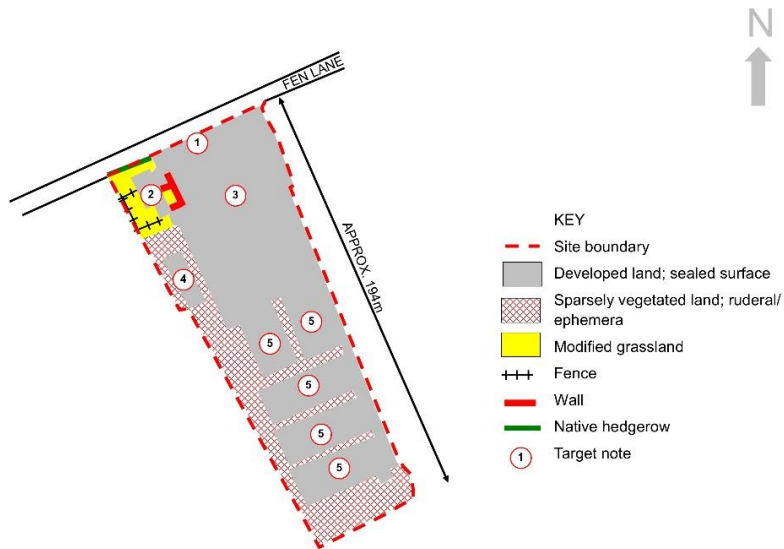
Emms, C. and Barnett, L. (2024) *Preliminary Ecological Appraisal of Thoresby Bridge Farm, North Cotes, Lincolnshire for Chesterfield Poultry Ltd*. Craig Emms and Linda Barnett, Huntingdon, UK.

Ian Pick Associates Ltd (2024) *Proposed Site Plan A1 (1) for Thoresby Bridge Farm, North Cotes, Lincolnshire DN36 5TY*. Ian Pick Associates Ltd, Driffield, UK.

Natural Environment and Rural Communities (2006) *Section 41 - Habitats and Species of Principal Importance in England*. <https://www.legislation.gov.uk>

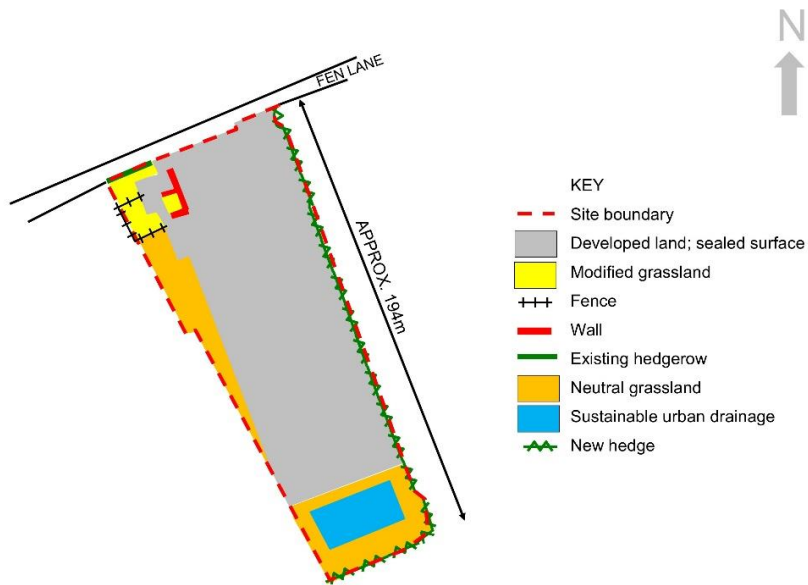
APPENDICES

Map 1: On site baseline



Please note: This plan is intended to indicate the approximate location of features and should therefore, not be treated as an accurate scale plan.

Map 2: On site post intervention



Please note: This plan is intended to indicate the approximate location of features and should therefore, not be treated as an accurate scale plan.

QUALITY ASSURANCE

This report format is designed to comply with statutory authority (*e.g.* Natural England, Natural Resources Wales and Scottish Natural Heritage) and the Chartered Institute of Ecology and Environmental Management relevant standing advice. Further studies may be required where there is evidence of protected species or if other notable ecological factors are found.

Craig Emms MSc, MCIEEM

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Craig and Linda are professional ecologists with over 65 years of combined practical experience in nature conservation, wildlife research and management and ecological consultancy, gained from working in the UK and overseas. Craig has a MSc. in Ecosystems Analysis and Governance and Linda has a PhD in Genetics. Together they have carried out original academic research on a broad range of wildlife; insects, amphibians, reptiles, birds and mammals (including bats), and published the results as scientific papers in a number of international peer-reviewed journals. Linda co-authored the Species Action Plans for Britain's eight most endangered butterflies while working for Butterfly Conservation, and has supervised students in research projects on hazel dormouse, great crested newts and moths whilst she was co-ordinating and lecturing on a Masters course in Analytical Biology at the University of Warwick. Craig was also a lecturer in ecological methods on two Masters courses at the University of Warwick. Linda and Craig are skilled and practiced field ecologists, especially with regard to wildlife and countryside management. They are licenced by Natural England as bat and great crested newt surveyors (and are former volunteer bat roost visitors/handlers for Natural England, and former registered bat carers for the Bat Conservation Trust with 15 years of experience) and have an extensive and broad experience of a great variety of field surveys including mammals (otter, badger, water vole, hedgehog, small mammals and bats), birds, reptiles, amphibians, dragonflies, butterflies and moths. Both have undergone training in the use of eDNA methodology and field sample collection and are licensed by the British Trust for Ornithology as bird nest recorders. Craig is also licenced by Natural Resources Wales as a bat and great crested newt surveyor and has been the named ecologist and clerk of works on many bat mitigation and compensation (development) licences.

Please be aware that ecological reports generally have a limited period of currency. Many statutory authorities now regard one year as the maximum time that should elapse before a report will need to be updated. Where a European Protected Species licence is to be applied for once planning permission has been granted, a walk-over of the site should be carried out within three months of an application being submitted to check that the habitats have not changed significantly since the survey was carried out.

Any information relating to legal matters, designs, specifications, advice, suggestions, or comments written or verbal in this report is provided in good faith and for consideration only

and does not purport in any way to give any advice on or interpretation of the law whatsoever. Professional legal advice should always be sought.

Note. Whilst all due and reasonable care is taken in the preparation of reports, Craig Emms and Linda Barnett accept no responsibility whatsoever for any consequences of the release of this report to third parties.

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