



Lincolnshire Lakes Site, Scunthorpe

Biodiversity Net Gain (BNG) Baseline Report

Keepmoat Homes

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Basis of Report

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1.0 Introduction

1.1 Background

SLR Consulting Ltd was instructed by Keepmoat Homes to undertake an ecological survey of an approximately 23.94 ha site in Ashby Parkland, Lincolnshire, DN17 2AA (approximate central OS Grid Reference: SE 86163 08625).

The survey follows a Preliminary Ecological Appraisal and Phase 1 Habitat Survey completed by Ecus in 2023 (Appendix A).

The results have been used to prepare a Biodiversity Net Gain (BNG) Baseline Report to inform a planning application for a large residential development.

1.2 Site Description

The application site (herein referred to as the 'Site') comprises arable fields with small areas of semi-improved grassland and one centrally located ditch. Further ditches are present just outside of the northern and western boundary, as well as a hedgerow and a small patch of woodland located just outside of the eastern boundary.

The Site lies southwest of the town of Scunthorpe. The M181 borders the Site to the west, and Carisbrooke Manor Lane is adjacent to the Site to the east. The Site is surrounded by further agricultural fields to the north, west and south, however further east of the Site are residential areas.

1.3 Details of the Proposed Development

The proposed development includes the development of a residential estate of 599 units, with associated access, driveways, gardens and areas of Public Open Space (POS) (Appendix B).



2.0 Methodology

2.1 Field Survey

An ecological walkover of the Site was undertaken by Miss Helen Chambers, Ecologist with SLR Consulting, on 6th June 2023.

The Site was surveyed to identify the broad habitat types present in accordance with the UK Habitat Survey (UKHab) methodology¹ and to undertake condition assessments of the habitats present following Biodiversity Metric 4.0 guidance².

The UK Habitat Classification (UKHab) system comprises a principal hierarchy (the Primary Habitats) which involves the identification of broad habitats and Priority habitats, as well as the use of non-hierarchical Secondary codes.

The Preliminary Ecological Appraisal (PEA) completed by Ecus Ltd (Appendix A) was used to support the field survey and BNG baseline assessment.

2.2 Biodiversity Metric 4.0

The results of the survey were analysed within Biodiversity Metric 4.0, to calculate a baseline biodiversity value of the Site.

Biodiversity Metric 4.0² uses habitat as a proxy for biodiversity and its primary application is to provide planners and developers with a method of establishing how much and what type of habitats should be created or enhanced in order to ensure that the impacts of a development do not result in a net loss of biodiversity. Habitats are assigned the following ‘multiplier’ scores:

- Distinctiveness: A measure of the type and importance of a habitat;
- Condition: A measure of the present or predicted condition of a habitat type; and
- Strategic significance: How a habitat is regarded within Local Planning Policy.

2.2.1 Habitat Distinctiveness

Within the biodiversity metric the following is used to determine habitat distinctiveness:

“Habitat distinctiveness considers species richness, habitat rarity, the extent to which a habitat is protected by designations and the degree to which a habitat supports species rarely found in other habitats.”

Technical Table 3-1 (taken from the Biodiversity Metric 4.0 – Technical Annex 2³) shows the categories and the thresholds used for assignment.

Technical Table 3-1 Habitat distinctiveness categories and criteria thresholds

Distinctiveness category	Criteria threshold
Very high	Priority Habitats as defined in Section 41 of the Natural Environment and Rural Communities (NERC) Act that are highly threatened, internationally scarce and require conservation action, for example blanket bog. Small amount of remaining habitat with a high proportion unprotected by designation. Critically Endangered European Red List habitats.
High	Priority Habitats as defined in Section 41 of the NERC Act requiring conservation action, for example lowland fens.

¹ <https://ukhab.org>

² <https://publications.naturalengland.org.uk/publication/6049804846366720>

³ Natural England. (2023). The Biodiversity Metric 4.0 Technical Annex 2 – Technical Information. <https://publications.naturalengland.org.uk/publication/6049804846366720>.



Distinctiveness category	Criteria threshold
	Remaining Priority Habitats not in very high distinctiveness band and other Near Threatened and Vulnerable Red List habitats.
Medium	Semi-natural habitats not classed as a Priority Habitat but with significant wildlife benefit, for example mixed scrub. Arable field margins (Priority Habitat only).
Low	Habitat of limited biodiversity value for example temporary grass and clover ley. Agricultural and urban land of lower biodiversity value.
Very low	Little or no biodiversity value for example hard standing or sealed surface.

2.2.2 Condition Assessments

The following apply to habitat condition assessments, undertaken as part of BNG calculations:
"Habitat condition is a measure of the state of a habitat. This is often linked to past and present management and land use. It is a way of measuring variation in the quality of habitat parcels of the same habitat type.

Condition sheets form a crucial part of any evidence base used to inform metric inputs. These should be provided to the consenting body or planning authority to support metric calculations.

Assessors must use the appropriate condition assessment sheets for the habitats identified. Technical Annex 1: Condition Assessment Sheets and Methodology contains the condition sheets and detailed guidance on their application.

Some habitats are allocated a fixed condition score in the metric. These habitats do not require a condition assessment for the metric to be completed. It may still be appropriate to survey these habitats for species or other environmental importance.

There is a separate condition assessment methodology for watercourses as set out in the watercourse unit module."

Table 5-2 (taken from the Biodiversity Metric 4.0 – User Guide⁴) shows the metric condition categories and resulting score multipliers.

Table 5-2 Metric condition categories and scores

Condition category	Condition score multiplier applied in the metric
Good	3
Fairly Good	2.5
Moderate	2
Fairly Poor	1.5
Poor	1
Condition Assessment N/A	1
N/A - Other	0

2.2.3 Strategic Significance

The final Biodiversity Metric 4.0 score multiplier concerns the strategic significance of the land and the habitats present. Wherein:

"Strategic significance is the local significance of the habitat based on its location and habitat type. Assessors should assign a strategic significance category (Table 5-3) for each individual

⁴ Natural England. (2023). The Biodiversity Metric 4.0 User Guide.
<https://publications.naturalengland.org.uk/publication/6049804846366720>.



habitat parcel both at baseline and at post-intervention. Assessors should use published plans, strategies or policies which are relevant to the habitat's location."

Table 5-3 (taken from the Biodiversity Metric 4.0 – User Guide⁵) shows the strategic significance categories and resulting score multipliers.

Table 5-3 Metric strategic significance categories, score multipliers, and descriptions

Strategic significance category	Score multiplier applied in the metric	Description
High	1.15	Where the location has been identified within a local plan, strategy or policy as being ecologically important for the specific habitat type or where that habitat has been identified as being locally ecologically important.
Medium	1.10	Where there is no relevant plan, strategy or policy in place, professional judgement may be used to justify the use of the medium strategic significance category. This judgement should consider the importance of that habitat in providing a linkage between other strategic locations.
Low	1	If the habitat is not included in local plans, strategy or policy, and there is no evidence to suggest that the habitat is of medium strategic significance.

⁵ Natural England. (2023). The Biodiversity Metric 4.0 User Guide.
<https://publications.naturalengland.org.uk/publication/6049804846366720>.



3.0 Biodiversity Net Gain (BNG) Baseline Assessment

3.1 Onsite Habitats

Details of the habitats on Site, including a habitat map, can be found within the PEA (Appendix A).

The habitats identified on Site and their accompanying condition assessments are summarised below.

Table 3-1: Habitats located on Site.

Phase 1 habitat type	UK Habitat type	Condition	Criteria failed	Estimated extent
Arable	c1c Cereal crops	N/A	N/A	22.6 ha
Semi-improved grassland	g4 Modified grassland	Moderate	D – Physical damage E – Bare ground cover	0.3 ha
Semi-improved grassland	g4 Modified grassland	Poor	A – No. of species B – Sward height D – Physical damage E – Bare ground cover	1.04 ha
Dry ditch	191 Ditch – on Site (D5 in PEA)	Poor	A – Water quality B – Range of emergent, submerged and floating-leaved plants D – Fringe of aquatic marginal vegetation F – Sufficient water levels	0.5km
Ditch	191 Ditch – on boundary (D2-3 in PEA) ⁶	Poor	A – Water quality B – Range of emergent, submerged and floating-leaved plants D – Fringe of aquatic marginal vegetation F – Sufficient water levels	0.85km
Hedgerow (outside of Site boundary)	h2a Hedgerow (priority habitat) ⁷	Good	C2 – Nutrient-enriched perennial vegetation D2 – Current damage	N/A (outside of Site boundary)
Dense scrub (outside of Site boundary)	h3d Bramble scrub ⁸	N/A	N/A	N/A (outside of Site boundary)
			Total	23.94

⁶ This length of ditch has been included within the BNG baseline calculation as its 5m wide riparian zone falls within the site boundary.

⁷ This hedgerow has been excluded from the BNG baseline calculation as it falls outside the red line boundary.

⁸ This bramble scrub has been excluded from the BNG baseline calculation as it falls outside the red line boundary.



3.2 Onsite Baseline Value

The calculated baseline units for habitats and watercourses on Site are provided below in Tables 3-2 and 3-3.

Overall, the Site is calculated to hold a baseline biodiversity value of 48.48 habitat (area) units and 2.03 watercourse (linear) units.

Table 3-2: Baseline habitat units on Site.

UK Habitat type	Condition	Strategic significance	Estimated extent	Habitat units
c1c Cereal crops	N/A	Area/compensation not in local strategy/ no local strategy	22.6 ha	45.20
g4 Modified grassland	Moderate	Area/compensation not in local strategy/ no local strategy	0.3 ha	1.20
g4 Modified grassland	Poor	Area/compensation not in local strategy/ no local strategy	1.04 ha	2.08
		Total	23.94 ha	48.48

Table 3-3: Baseline watercourse units on Site.

UK Habitat type	Condition	Strategic significance	Estimated extent	Watercourse units
191 Ditch – on Site (D5 in PEA)	Poor	Area/compensation not in local strategy/ no local strategy	0.5 km	0.75
191 Ditch – on boundary (D2-3 in PEA) ⁹	Poor	Area/compensation not in local strategy/ no local strategy	0.85 km	1.28
		Total	1.35 km	2.03

⁹ This length of ditch has been included within the BNG baseline calculation as its 5m wide riparian zone falls within the site boundary.





Appendix A Preliminary Ecological Appraisal

Lincolnshire Lakes Site, Lincolnshire Lakes Site,
ScunthorpeScunthorpe

Preliminary Ecological Appraisal

Ecus Ltd

19 January 2023



Appendix B Feasibility Layout

Lincolnshire Lakes Site, Lincolnshire Lakes Site,
ScunthorpeScunthorpe

Feasibility Layout

Nineteen47

11 May 2023



Housing Schedule					
House Type	Storeys	Bed	Number	House Sq ft	Total Sq ft
Watergrove	1	2	10	822	8,220
Pedbury	2	2	54	778	42,012
Ashburn	2	2	47	778	36,566
Darracott	2	2	36	874	31,464
Covenham	2	2	35	874	30,590
Eldwick	2	3	7	1,004	7,028
Fewston	2	3	23	933	21,459
Seacourt	2	3	22	933	20,526
Fartley	2	3	63	1,037	65,331
Westbourne	2	3	33	1,034	34,122
Holgate	2	3	48	1,034	49,632
Sisset	2.5	3	48	1,094	53,606
Denton	2.5	3	40	1,122	44,880
Killington	2	3	14	1,030	14,420
Longford	2	4	35	1,169	40,915
Prenton	2	4	31	1,169	36,239
Oldbury	2.5	4	9	1,287	11,583
Thirmerie	2	4	18	1,318	23,724
Devonke	3	4	12	1,321	15,852
Newham	2	4	13	1,309	17,017
Total			599		605,196
Net Dev				38.42 acres	
Coverage				15,752 sq ft/acre	
2-5 Storey Above			110		18.4%

182 30%

299 50%

118 20%



nineteen47
 CHARTERED TOWN PLANNERS
 & URBAN DESIGNERS

Project
 Lincolnshire Lakes

Drawing Title
 Feasibility Layout

Project Code	Drawing Nr	Rev
n1720	007	XX
Date	Drawing Scale	
11.05.2023	1:1,000 @ A1	



Appendix C Biodiversity Metric 4.0 Baseline Calculator (Supplied Separately)

Lincolnshire Lakes Site, Lincolnshire Lakes Site,
ScunthorpeScunthorpe

Biodiversity Metric 4.0 Baseline Calculator (Supplied Separately)

SLR Consulting Ltd

12 June 2023

