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Biodiversity Net Gain Feasibility Report

Client

Hargreaves Land Limited

Project

Lincolnshire Lakes (North),

Scunthorpe.

Date

January 2025

CONTENTS

TABLES

FIGURES

Rev	Issue Status	Prepared/Date	Approved/Date
-	Issue	ET/10.01.25	IH / 14.1.25

NON-TECHNICAL SUMMARY

Report Scope

FPCR Environment and Design Ltd. (FPCR) were commissioned by Hargreaves Land Limited to complete a Biodiversity Net Gain Report for a site at Lincolnshire Lakes (North).

A Hybrid planning application is being submitted to North Lincolnshire Council. The hybrid planning application proposals include:

- Full planning application for the construction of a new vehicular access off the M181/A1077(M) roundabout, a pedestrian and cycle link to Scotter Road, a foul pumping station, earthworks and 'off-plot' drainage, ecological and associated landscaping and infrastructure works.
- Outline planning application, with all matters reserved, for the development of up to 550 residential dwellings (Use Class C3), a local centre (Use Class E) and associated 'on-plot' landscaping, drainage and other infrastructure works.

Methods

Baseline habitats were identified, mapped using the UKHab Classification system during surveys undertaken over four visits between November 2023 and November 2024.The baseline survey was supplemented by a further survey undertaken in September 2024, to collect detailed botanical information to inform the condition assessments of grassland and ditch habitats.

Condition Assessments were undertaken, based on condition criteria as set out in the Statutory Biodiversity Metric User Guide. A Biodiversity Net Gain assessment was then completed for the Site, using the Statutory Biodiversity Metric.

Post-development habitats were interpreted from the submitted Landscape Plan and Land Use Parameter Plan as included in Appendix C.

As yet, no detailed layout or Landscaping plans exist for the proposed development areas. These have been classed as residential development in Housing Allocation areas, or developed Land, sealed surface, in designated Local Centre areas, in line with the Land Use Parameter Plan (See Appendix C)

Within proposed borrow pit areas south of Brumby Common Lane, no current residential development is proposed. It has therefore proposed to return these areas to agricultural use following the current development phase. A temporal delay has been applied within the metric, to account for the temporary loss of arable habitat.

Within the Statutory Biodiversity Metric, temporal multipliers have been applied to proposed habitats in order to account for the phased nature of proposals as outlined within the submitted Phasing Plan.

Key Findings

The Site is dominated by arable fields with localised areas of species poor neutral grassland, modified grassland and bramble scrub. A small and localised area of acidic grassland was identified near the north eastern boundary. Although not strictly matching the habitat description, this area has been classed as priority habitat within the baseline. Two native hedges and several ditches form the Site boundaries and field margins.

It has been assumed that with the exception of some species poor other neutral grassland all area based habitat will be lost. Hedges H1 and H2 and ditches D3.6 and D3.7 will be lost within proposals as these lie within areas of proposed residential development within the outline proposals. A section of D3.1b will be culverted to facilitate creation of an access road. All other ditches are retained within the scheme

The majority of biodiversity enhancement areas will be provided within the initial phase. Proposed newly created habitats include a large wetland area incorporating ponds, ditches and species rich marginal, aquatic and grassland planting. The northern part of this area incorporates mitigation habitat for several species, including water vole, birds and bats. Planting of native trees is proposed within areas of open greenspace and along road verges.

The baseline value of the Site has been calculated at 115.09 area-based units, 5.89 hedgerow units and 9.94 watercourse units. On-site post intervention consists of 132.54 habitat units, 7.14 hedgerow units and 15.17 watercourse units. As such, the development will result in a 15.17%gain in habitat units, 21.21% hedgerow gain and 52.69% watercourse gain. At least 10% of the proposed biodiversity units must come from additional activities other than those required to mitigate or compensate for protected or notable species impacts. Section 10 of this report outlines how this may be achieved within proposals.

The current proposed creation and enhancement measures do not adequately compensate for the losses of medium distinctiveness scrub, with an additional 0.32 scrub units required. In order to satisfy the trading rules. Future approvals will require a degree of scrub to be created within the scheme. This is achievable via provision of a degree of moderate condition mixed native scrub instead of other neutral or modified grassland within proposals.

Additionally trading rules have not been met for high distinctiveness Lowland acid grassland. No detailed design for this parcel currently exists, it has therefore been assumed that this habitat will be temporarily lost during construction. However, due to its location at the boundary, there is potential to retain and enhance this habitat within proposals. If this is not possible, a further 0.57 units of Lowland dry acid grassland will be required within proposals.

Given the above, it is concluded that proposals can deliver over 10% biodiversity net gain for the scheme, which would be secured by the Biodiversity Net Gain Condition, attached to any planning permission for the proposed development. Subsequent Reserved Matters schemes for each phase of the Site are expected to incorporate some additional green infrastructure within the outline application areas and as such, the Biodiversity Net Gain calculation provided within this report represents a low value 'benchmark' for the outline application areas, against which future Reserved Matters approvals are expected to improve upon.

A condition of any outline planning permission would be the submission of an Overall Biodiversity Gain Plan to determine the upfront framework for how the biodiversity gain objective of at least a 10% gain is expected to be met across the entire development.

Each Phase of development would then require a 'Phase Biodiversity Gain Plan' to be submitted and approved by the planning authority before the development of that phase can begin. Each Phase Biodiversity Gain Plan will subsequently set out a phase's contribution to biodiversity net gain and confirm progress towards the overall biodiversity gain objective for the development once clear proposals for each phase have been developed.

1.0 INTRODUCTION

1.1 FPCR were commissioned by Hargreaves Land Limited to prepare a Biodiversity Net Gain Report for a hybrid planning application at Lincolnshire Lakes (North), in Scunthorpe. The application site is located within the eastern plot of the wider Lincolnshire Lakes (North) site (central grid reference SE865095). as is shown on Fig 1 of the accompanying EcIA (FPCR 2025) and hereafter referred to as the 'Site'.

1.2 The applicant is proposing to submit a hybrid planning application with two separate planning applications submitted simultaneously. The full planning application will relate to the infrastructure works and provision of the majority of biodiversity enhancement areas, and the outline planning application will relate to the built development. Further detail on this is provided below.

1.3 This report details the results of a UKHab Survey which was used to establish the pre-development biodiversity value of the Site. As proposals are for a hybrid application, with some matters reserved for subsequent approval, this report goes on to provide an illustrative Biodiversity Net Gain Calculation in order to demonstrate that the delivery of a 10% net gain is feasible for the project.

1.4 Temporal multiplies have been applied within the Statutory Biodiversity Metric to account for the phased nature of development, as set out in section 3.

1.5 Proposed habitats have been calculated as set out in Section 7. These have been based on the submitted Landscape Plan and Phasing Allocation Plan as included in Appendix 11 . This provides detailed landscaping within BG1 and BG2 areas and identifies broad development zones within the remainder of the Site, with the exception of 'borrow pit' areas to the south of Brumby Common Lane, where it has been assumed that land will be returned to agricultural use at the end of the development. Subsequent Reserved Matters schemes for the Site are expected to incorporate additional green infrastructure within the outline application areas and as such, the Biodiversity Net Gain calculation provided within this report represents a low value 'benchmark' against which future Reserved Matters approvals are expected to improve upon.

Site Location and Planning Context

1.6 The wider Lincolnshire Lakes (North) site is located to the west of Scunthorpe and extends to 224.41ha, of which 97.49ha is located to the east of M181 and 126.91ha to the west of M181.

1.7 The application Site is located within the eastern plot of the wider Lincolnshire Lakes (North) site and extends to approximately 56.5ha of mostly arable land, with some smaller areas of grassland The Site is relatively flat and currently divided into separate parcels of land through existing hedgerows and ditches. The boundaries of the site are as follows;

- The western boundary is bounded by the M181 / A1077(M) and a roundabout that has recently been constructed with vehicular access provided into the PA#1 site;
- The southern boundary (with the exception of Plots BG4 and AB3) is bounded by the existing Brumby Common Lane which horizontally dissects the Lincolnshire Lakes (North) site from Scotter Road to the east and a bridge over the M181 to the west;
- The eastern boundary is bounded by existing open arable fields with woodland further east and the town of Scunthorpe; and

- The northern boundary is bounded by existing woodland.

The hybrid planning application proposals include:

- Outline planning application, with all matters reserved, for the development of up to 550 residential dwellings (Use Class C3), a local centre (Use Class E), earthworks and associated 'on-plot' landscaping, drainage and other infrastructure works.
- Full planning application for the construction of a new vehicular access off the M181 roundabout, a pedestrian and cycle link to Scotter Road, a foul pumping station and 'off-plot' drainage, ecological and associated landscaping and infrastructure works.

2.0 LEGISLATION AND PLANNING POLICY

The Environment Act 2021

2.1 In England, biodiversity net gain is now required under statutory frameworks introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). Under this framework, every grant of planning permission will be deemed to have been granted subject to a general biodiversity gain condition. This will require an objective for developments to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of all onsite habitats.

2.2 This is a pre-commencement condition requiring the provision of a Biodiversity Gain Plan to be submitted and approved before works can be commenced, but after planning permission has been granted.

2.3 In principle, the grant of planning permission is not within the scope of BNG, however it is important to consider as part of the consenting body's decision-making process how a scheme will able to demonstrate BNG after permission is granted. Therefore, this biodiversity net gain report presents the results of a Biodiversity Net Gain assessment that has been completed in order to demonstrate how the proposals will be compliant with the requirements of the Environment Act.

Biodiversity Net Gain Hierarchy

2.4 The statutory framework allows for the 10% biodiversity gain to be delivered through onsite biodiversity gains, registered offsite biodiversity gains or statutory biodiversity credits. However, as set out in Articles 37A and 37D of the Town and Country Planning (Development Management Procedure) (England) Order 2015, development must consider the biodiversity net gain hierarchy when designing scheme proposals. This sets out hierarchy of actions as follows:

- First, for all medium, high and very high distinctiveness habitats, the avoidance of any adverse effects.
- Where these can't be avoided, mitigating any adverse effects on medium, high and very high distinctiveness habitats.
- Then, for all onsite habitats (including low distinctiveness), adverse effects should be compensated by in accordance with the following hierarchy:
    - Prioritising the enhancement of existing habitats; then
    - Creation of onsite habitats;

- Allocation of registered offsite unit gains; then
- Purchase of biodiversity credits.

2.5 Proposals must demonstrate how the biodiversity hierarchy has been applied to or provide the reasons for any deviation. This biodiversity net gain hierarchy is distinct from the mitigation hierarchy set out in paragraph 193(a) of the National Planning Policy Framework (2024) which is addressed in the accompanying Ecological Impact Assessment where relevant.

Exemptions

2.6 There are a number of circumstances where a Site will be exempt from biodiversity net gain including:

- Development impacting habitat of an area below a 'de minimis' threshold of 25m^2, or 5m for linear habitats.
- Householder applications (as defined within article 2(1) of the Town and Country Planning (Development Management Procedure) (England) Order 2015).
- Self-build and custom-build applications (no more than 9 dwellings, site no larger than 0.5 ha and consists exclusively of self-build/ custom dwellings).
- Biodiversity gain sites (where habitats are being enhanced for wildlife only).
- Previously developed land with a baseline score of zero (exempted via the Statutory Biodiversity Metric).

2.7 The proposals for the Site do not fall under any of the above criteria and this report has therefore been prepared in order to aid North Lincolnshire Council in their decision-making process

National Planning Policy Framework (2024)

2.8 The revised NPPF (2024) seeks to ensure that the planning system contributes to and enhances the natural and local environment, protects and enhances biodiversity and geodiversity by:

"187. d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;

192. b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity."

Local Policy

2.9 The North Lincolnshire Local Development Framework is a suite of Development Plan Documents (DPDs) which set out the local planning policy for the area. These include:

The Core Strategy [1]

2.10 The North Lincolnshire Core Strategy was adopted in June 2011 and it provides a long term spatial planning framework for the development of North Lincolnshire up to 2026.

2.11 Policies relevant to BNG include:

- Policy CS4 of the Core Strategy states that Lincolnshire Lakes will provide a "significant wildlife habitat."
- Policy CS17 " Ensuring development seeks to produce a net gain in biodiversity by designing in wildlife, and ensuring any unavoidable impacts are appropriately mitigated for".

Lincolnshire Lakes Area Action Plan (AAP)[2]

2.12 The Lincolnshire Lakes Area Action AAP was adopted on 10 May 2016 and establishes a site-specific policy and delivery framework to provide guidance for achieving the aims of Lincolnshire Lakes development, including ecological enhancement and new habitat creation. The Plan sets out strategically important Green Infrastructure areas and prescriptions for habitat retention and enhancement within these locations.

2.13 Within the Lincolnshire Lakes AAP, the following habitats with relevance to the Site are identified as strategically important:

- New areas of woodland, acid grassland, neutral grassland, wetland and ponds within the areas identified as natural and semi-natural greenspace on the Green Infrastructure Parameters Plan
- New and existing ditches and swales
- New and existing, trees, woodland and hedgerows
- Existing Local Wildlife Sites
- Existing farmland

3.0 METHODOLOGY

Baseline Habitat Assessment

3.1 A walkover survey of the site was completed broadly following the UKHab Classification System[3] with minor departures from this methodology to allow for compatibility with the Defra Statutory Biodiversity Metric where applicable. This involved a systematic walk over of the survey area during which discrete blocks of habitat were identified and mapped. Representative plant species lists were compiled for each habitat mapped along with additional notes regarding the current 'condition' of the habitat, completed in accordance with the Statutory Biodiversity Metric Condition Assessments[4] .

[1] https://m.northlincs.gov.uk/public/planningreports/corestrategy/adopteddpd/FullCoreStrategy.pdf
[2] https://m.northlincs.gov.uk/public/planningreports/LincolnshireLakes/Adoption/Lincolnshire_Lakes_AAP_2016.pdf
[3] UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at https://ukhab.org)
[4] Condition' is one of the measures of the quality of a habitat used within the DEFRA biodiversity metric. It takes into account key physical characteristics and typical species of a particular habitat type.

3.2 Where species are referred to in the text, the accepted common name is used, with the corresponding scientific name provided in Appendix B. Vascular plant nomenclature followed Stace (2019)[5] and assessment of abundance for plants was made using the DAFOR scale:

D - Dominant

A - Abundant

F - Frequent

O - Occasional

R - Rare

L - Locally (e.g. LF = Locally Frequent or LA = Locally Abundant)

3.3 The UkHab baseline survey was undertaken over four visits on 20th November 2023, 24th and 25th January 2024 and 26th November 2024. Surveys were undertaken by suitably experienced ecologists from FPCR. Surveys were undertaken by:

- Two Senior Ecologists from FPCR (BSBI Field Identification Skills Certificate Level 4);
- a Principal Ecologist from FPCR (BSBI Field Identification Skills Certificate Level 3); and
- an Assistant Ecologist from FPCR.

Condition Assessments

3.4 The baseline survey was supplemented by a further survey undertaken on 26th and 27th September 2024, to collect detailed botanical information to inform the condition assessments of grassland and ditch habitats. Condition assessments were carried out by a Senior Ecologist from FPCR (BSBI Field Identification Skills Certificate Level 4).

3.5 For the grassland habitats, this involved recording the plant species present within a series of 1m x 1m quadrats, which were used to inform the habitat classification selected and the corresponding condition assessment undertaken. Quadrats were placed within what were visually considered to be stands of homogenous vegetation where the vegetation was considered to potentially be representative of a distinct community type. The number of quadrats collected within each community sampled varied between 1-11 based on the size of the community, perceived species richness, distinctiveness or variability within the sward.

3.6 The location of each quadrat was recorded and a photograph taken of the sampled area. Within each quadrat, all vascular plant species and common bryophytes were recorded and given a percentage cover. This information was then used to construct 'floristic tables' which include the frequency and abundance range for each species recorded within the sample quadrats. The percentage cover of bare ground and average sward height was also recorded within each quadrat. The floristic tables for the Site can be found in Appendix B

Habitat Condition Assessment

3.7 Defra has developed a Statutory Biodiversity Metric based on evaluating each individual habitat's value within the Statutory Biodiversity Metric. All habitats/habitat compartments on site have been assessed using the technical guidance document provided by Defra for use with

[5] Stace, C (2019) New Flora of the British Isles. 4th edn. C&M Floristics

their biodiversity Statutory Biodiversity Metric[6]. The guidance provides a list of criteria for a range of broad habitat types which are used to determine whether habitat fall into a 'poor', 'fairly poor', 'moderate', 'fairly good' or 'good' condition score.

Statutory Biodiversity Metric

3.8 The Statutory Biodiversity Metric was published in February 2024, and this has been used for this scheme. The Statutory Biodiversity Metric is an MS Excel spreadsheet that is used to quantify the predicted net-change in biodiversity value ("biodiversity units") of a proposed development site before and after development. It treats the area "habitats" and linear features "hedgerows" and "watercourses" separately, and is based on pre-determined values, along with published written guidance, set by a Natural England-led team of experts.

3.9 The aim of biodiversity offsetting is to compensate for significant adverse impacts on biodiversity identified after appropriate avoidance, minimisation and on-site rehabilitation measures have been taken, according to the mitigation hierarchy as required by the NPPF.

3.10 To facilitate this, the Site has been mapped and digitised using the Statutory Biodiversity Metric QGIS Template, with the existing habitats identified and areas automatically generated. In accordance with the Statutory Biodiversity Metric User Guide, habitats have been defined under UKHab.

3.11 Proposed habitats have been calculated as set out in Section 7. These have been based on the submitted Landscape Plan and Land Use Parameter Plan as included in Appendix C.

3.12 Currently no detailed layout or Landscaping plans exist for the proposed development areas., these have been classed as residential development in Housing Allocation areas, or developed Land, sealed surface, in designated Local Centre areas, in line with the Land Use Parameter Plan (See Appendix C).

3.13 Within proposed borrow pit areas south of Brumby Common Lane, no current residential development is proposed. It has therefore proposed to return these areas to agricultural use following the current development phase.

3.14 The post development habitat types and condition were assigned in line with the recommend enhancement measures in these areas. Proposed habitats were mapped and digitised into the latest Biodiversity Statutory Biodiversity Metric QGIS Template to generate areas for each of the habitats proposed.

3.15 These pre- and post-development habitat areas were then inputted into the Statutory Biodiversity Metric Calculation tool. The Statutory Biodiversity Metric then provides a habitat distinctiveness score for each of the baseline and proposed habitats which are pre-assigned scores based on the habitat type.

3.16 The following 'delay in habitat creation' were applied to account for the phased nature of development. The location of areas referred to are included within the Phasing Plan as included in Appendix C. Phase 1 includes the creation of all greenspace habitat as included within the

[6] Statutory Biodiversity Metric User Guide (2024). Department for Environment Food & Rural Affairs. Available at: https://assets.publishing.service.gov.uk/media/65c60e0514b83c000ca715f3/The_Statutory_Biodiversity_Metric_-_User_Guide_.pdf

Detailed Landscape Plan, later phases refer mainly to future residential development within the outline application and restoration of the borrow pit area at the end of the development.

Phase 1 - 0 years

Phase 2 – 2 years

Phase 3 – 3 Years

Phase 4 – 4 Years

Phase 5 and restoration of borrow pit – 5 Years

3.17 The strategic significance of the habitats was also assessed for both the pre- and post-development habitats based on the location of the site, its proximity to existing areas of biodiversity interest and its setting within wider habitat corridors.

3.18 The Statutory Biodiversity Metric assigns a range of pre-assigned factors to each of the proposed habitats. These have been advised by subject knowledge experts and are universal multipliers generated by the Statutory Biodiversity Metric itself for the following variables relevant to habitat creation, enhancement or restoration proposals:

- Difficulty of creating or restoring/enhancing a habitat: This pre-assigned score is based on how difficult a particular habitat type is to create or restore/enhance.
- Temporal risk: This is the 'time to target condition' for any particular habitat and determines how long a particular habitat type is likely to take to reach the condition score that the desired condition score assigned to it.
- Spatial Risk: This score is based on the distance between the site of habitat loss and any habitats creation or enhancement proposals at any offsite offsetting solutions.

3.19 Full details of the calculation methodology used is provided in the Statutory Biodiversity Metric– User Guide.

Habitat Trading Rules

3.20 Within the Statutory Biodiversity Metric a set of trading rules are applied, the aim of these rules is to ensure that any loss of habitat is replaced on a 'like for like' or 'like for better' distinctiveness basis.

3.21 The trading summary draws data from across the Statutory Biodiversity Metric and presents the data in a standard way to determine whether or not the trading principles set out in Rule 3 of the user guide have been adhered to. This trading summary avoids the need to track the changes in habitat type and condition on an individual parcel by parcel basis, which is not practical, particularly on larger sites. Table 2 below summarises the trading rule requirements for each distinctiveness band.

Table 1 Habitat Trading Rules and associated habitat compensation requirements.

Baseline Habitat Distinctiveness	Distinctiveness of Replacement Habitat Required by Trading Rules
Very High	Losses of these habitats are not able to be assessed within the Statutory Biodiversity Metric. A bespoke assessment and compensation package must be agreed.
High	These habitats must be replaced on a like-for-like basis with the same habitat type as impacted by the scheme.
Medium	These habitat types must be replaced with units from the same broad habitat type, or any habitat from a higher distinctiveness band.
Low	These habitat types can be replaced with any other low distinctiveness habitat type, or any habitat from a high distinctiveness band.
Very Low	No replacement is required for these land uses.

Limitations

3.22 The UKHab habitat baseline map has been reproduced from detailed field notes and informed by aerial imagery, OS mapping and site maps provided by the client. The accuracy of this figure is therefore ultimately guided by the accuracy of these sources and can only be relied upon to a certain degree of resolution.

3.23 Natural ecological communities are susceptible to change; at times this change can be rapid as a result of internal and external environmental factors. The biodiversity offsetting calculations are based on ecological assessments of habitats carried out during 2024; as a result, changes which may affect the conclusions of this report may occur, if a prolonged period of time elapses prior to the commencement of the project.

3.24 The UKHab surveys were undertaken outside the optimal survey period (May-July) for general habitat surveys. However, given the presence of mostly very common and widespread habitats, it is considered that habitat classification was possible with a high degree of accuracy. Where necessary a precautionary approach was taken to the assessment of classification and condition.

3.25 MG2 was not subject to a detailed assessment. However, given the habitat type and location, this is not considered to be a significant constraint and it is considered that habitat type and condition have been assessed to an appropriate level of accuracy.

3.26 No further limitations specific to this report influenced this assessment.

4.0 BASELINE CONDITIONS

Strategic Significance

4.1 There are three levels of strategic significance:

- Highly strategically significant ('formally identified in local strategy') – pre and post development habitats are subject to a 15% multiplier;

- Medium strategic significance (Location Ecologically Desirable but not in Local strategy) - pre and post development habitats are subject to a 10% multiplier;
- Low strategic significance (Area not in local strategy) – No multiplier.

4.2 The Local Nature Recovery Strategy (LNRS), which would define the strategic significance of habitats within the region, is yet to be published. In the absence of the LNRS, the location of the Site relative to Nature Improvement Areas, locally designated sites and principles outlined within the Lincolnshite Lakes AAP Green Infrastructure strategy have been used to assign strategic significance. Figure 1 of the EcIA (FPCR 2025) shows the location of local sites.

4.3 Much of the wider landscape offsite to the west of the Site is mapped under the Humberhead levels Nature Improvement area.

4.4 The following strategic Green Infrastructure is of relevance to the Site:

- Brumby Common West and Viaduct Local Wildlife Site - adjacent to the north boundary, (see Fig 1 for location).
- Westcliff Lagoon LWS to the south of the Site's eastern boundary (see Fig 1 for location).
- A band of woodland and acid grassland east of the Site protected under saved Policy LC11 of the adopted Local Plan, running alongside Scotter Road from its intersection with the railway line in the north towards Burringham Road further south this incorporates Westcliff Lagoon LWS.
- Within the Lincolnshire Lakes Area Action Plan (AAP), Areas specifically identified for ecological and habitat protection, creation or enhancement under policy G4 include :
    - New and existing areas of acid grassland, neutral grassland and ponds within the areas identified as natural and semi-natural greenspace on the Green Infrastructure Parameters Plan. Within the Site boundary these include areas BG1, BG2, BG4,m AB1, AB3 and also the north and east boundary of HA1b and a corridor south of Brumby Common Lane.
    - New and existing ponds, ditches and swales
    - New and existing hedgerows
    - New and existing trees
    - Medium or above distinctiveness habitat adjacent to existing Local Wildlife Sites,

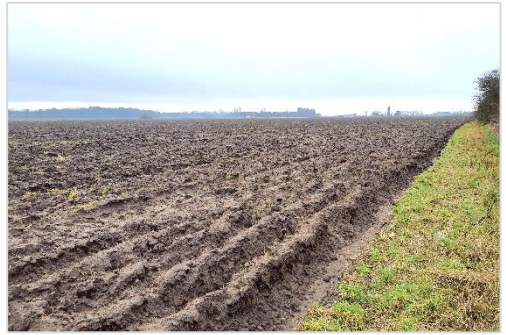
4.5 As a result of the above all medium distinctiveness habitats and above, which are present within the baseline or proposed habitats, which contribute to the functioning of wildlife networks, either through improving connectivity or by increasing the extent of biodiverse habitats, have been mapped as medium strategic significance.

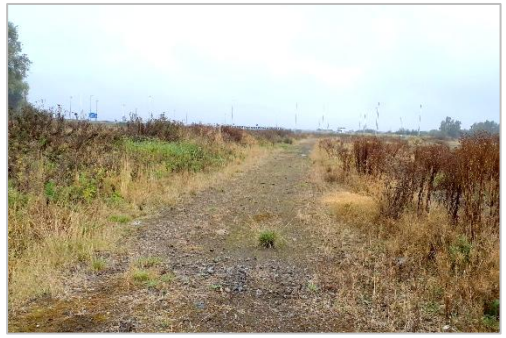
4.6 All other habitats are of low strategic significance. Existing farmland has been attributed a low strategic significance. Although mentioned within policy G4, the AAP habitat strategy includes important farmland within the policy, in terms implementation of appropriate Countryside Stewardship Schemes on retained farmland to increase biodiversity, subject to land ownership and permission.

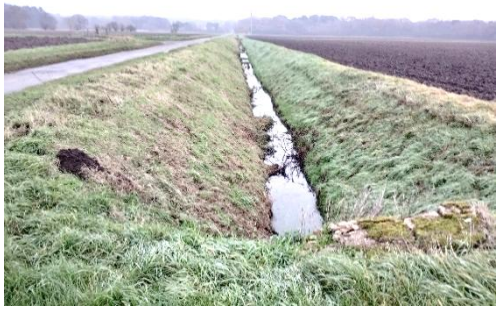
Baseline Habitats

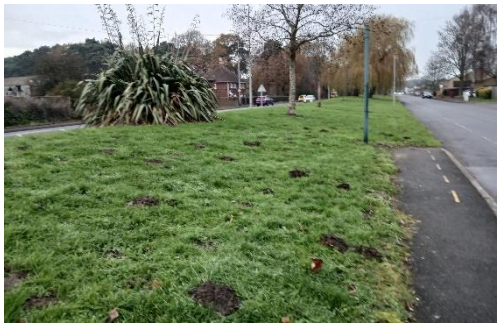
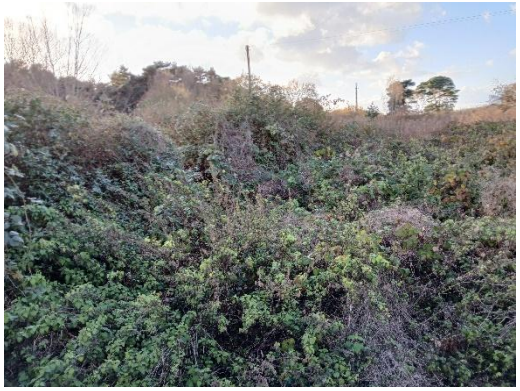
4.7 Baseline habitats present at the time of the surveys are shown on Figure 1. And described in Table 2, below. Condition assessments are included in Appendix A of this report and species lists within Appendix B.

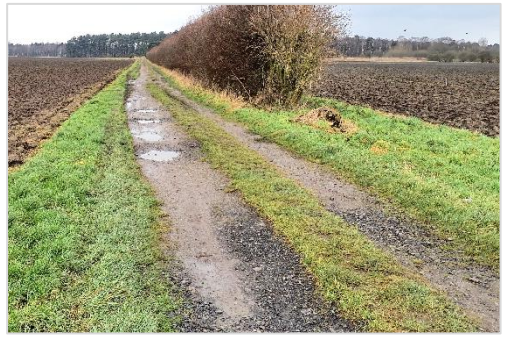
Table 2: Summary of Baseline Habitats.

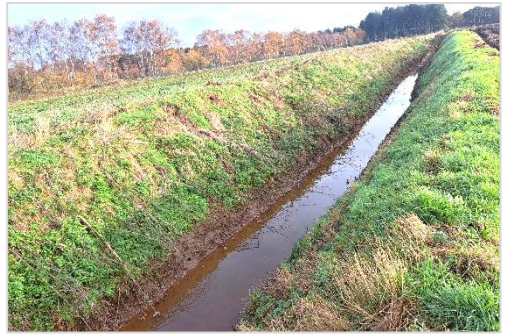
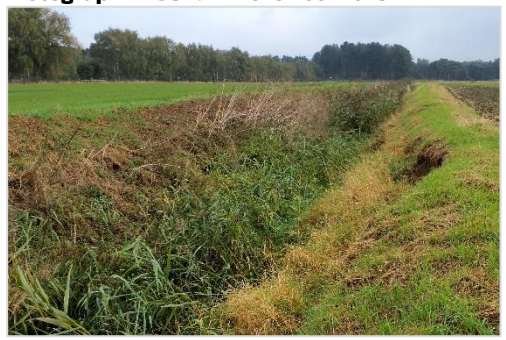
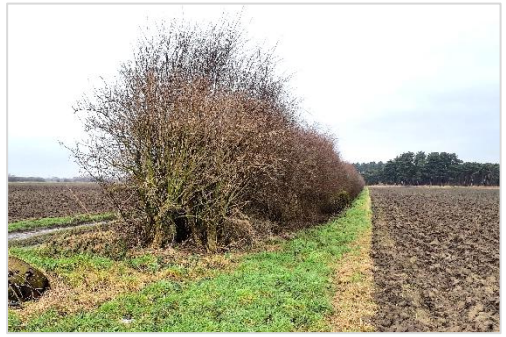
Ref	Habitat	Condition / Distinctiveness	Description	Photo
N/A	Arable crop	Low Distinctiveness Condition Assessment N/A	The majority of the Site comprised ploughed arable fields with modified grassland field margins. Margins were very species-poor. The sward was dominated by perennial rye-grass with locally abundant cock's-foot, Yorkshire fog and common nettle and locally frequent bracken. Forbs including common mouse-ear, dandelion, cleavers, broad-leaved dock, common ragwort and spear thistle were noted as rare. The vegetation was generally short throughout and there were less than six species per m^2.	 **Photograph 1: Ploughed fields**
ONG 1	Other neutral grassland	Medium Distinctiveness Poor Condition	In the south-western corner of the parcel was an area of unmanaged vegetation classified as other neutral grassland. This grassland featured a largely tall and unmanaged sward characterised by a high cover of ruderal species including common ragwort, spear thistle, and creeping thistle. Shorter areas along the track edge had increased herbaceous diversity with a higher cover of neutral grassland associated species including common knapweed and black medick. The grassland does not strictly meet the UKHab other neutral grassland feature passing only two out of the four criteria (abundant cover of 1 or more non-intensive agricultural grass species – false oat grass and <30% cover of rye grass or white clover – 1.6%). Despite not passing the 1st two criteria the grassland most aligns to neutral grassland community g3c5 *Arrhenatherum* which typically features a tall sward structure with a high cover of false oat grass but with low overall diversity. Under medium, high and very high grassland assessment criteria, ONG1 was assessed as being in 'poor' condition, passing only criterion 4 (low cover of bracken/scrub).	 **Photograph 2: ONG 1**

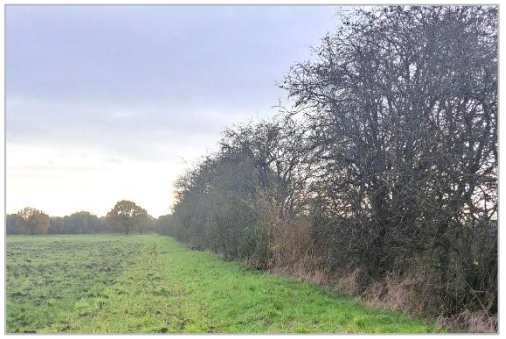
Ref	Habitat	Condition / Distinctiveness	Description	Photo
				 **Photograph 3: ONG 1 near track.**
ONG 2	Other neutral grassland	Medium Distinctiveness Poor Condition	Grassland ONG2 lay along the western edge of a Scot's pine woodland patch with sandy soils evident in areas of open ground. The sward was comprised of frequent Yorkshire-fog, frequent to abundant rough meadow-grass and false oat-grass, occasional to frequent cock's foot and occasional creeping bent and common bent. Common reed was noted as a rare occurrence. Several forb species were present, including Locally frequent ground-ivy, occasional cat's ear, and rarely occurring common knapweed, mugwort, selfheal and Canadian fleabane. A localised area within this community featured a number of acid indicators, This smaller area has been mapped separately as an area of lowland dry acid grassland (see below). Under medium, high and very high grassland assessment criteria, ONG2 was assessed as being in 'poor' condition. passing only criterion 4 and 5 (cover of bare ground and sub-optimal species).	 **Photograph 4: ONG2**

Ref	Habitat	Condition / Distinctiveness	Description	Photo
LAG	Lowland dry acid grassland	V high Distinctiveness Moderate Condition	A localised area within ONG2 which featured a more open sward with grasses sub-dominant, instead featuring a blanket of mosses (including a haircap species, likely *Polytrichum formosum*), liverworts and lichens with herbs and fungi growing throughout (including a potential *Hygrophoraceae*). Sand sedge was also noted in this area and throughout the taller grassland. A number of acid indicator species were recorded as present including common heather (just outside the redline closer to the woodland edge), heath woodrush, sheep's sorrel, common stork's-bill and locally abundant lichens. However, the community, as assessed did not contain sufficient acid grassland indictors to meet the broad habitat definition of g1a lowland acid grassland under UKHab 2.0. However, given the seasonality of the survey and the likelihood of smaller earlier flowering annual indicators being present in this community a classification of g1a was made on a precautionary basis.	 **Photograph 5: Lowland Acid Grassland within ONG2.**
MG1	Modified grassland	Low Distinctiveness Poor condition	Linear modified grassland adjacent to ditches . The habitat was very species-poor whilst the sward was dominated by perennial rye-grass with locally abundant cock's-foot, Yorkshire fog and common nettle and locally frequent bracken. Several forbs including common mouse-ear,, dandelion, cleavers broad-leaved dock, common ragwort and spear thistle were noted as rare. The vegetation was short throughout (approximately 2cm) and there were less than six species per m^2. Under low grassland assessment criteria, the habitat was assessed as being in 'poor' condition failing criteria for vascular plant species count, diversity of sward height, physical damage and cover of bare ground.	 **Photograph 6: Modified Grassland MG1 south of Brumby Common Lane.**

Ref	Habitat	Condition / Distinctiveness	Description	Photo
MG2	Modified grassland	Low Distinctiveness Poor condition	Heavily managed grassland areas within the roadside verge along Scotter road. This area was included due to proposed improvements to the Scotter road crossing and has not been subject to a detailed assessment. Due to the habitat type and location, a poor condition has been assumed.	 **Photograph 7: Modified grassland MG2**
N/A	Bramble Scrub	Low Distinctiveness Condition Automatically poor	Bramble dominant scrub within the east part of the Site, adjacent to Brumby Common Lane. Occasional goat and grey willow noted plus rarely occurring hawthorn, silver birch, dog rose and wild privet.	 **Photograph 8: Bramble scrub**

Ref	Habitat	Condition / Distinctiveness	Description	Photo
N/A	Developed land; sealed surface	V. Low Distinctiveness Condition Automatically poor	A small area of partially fenced off developed land was present within other neutral grassland ONG1 in the south-western corner of the northern parcel of the Site. Tarmac road surface along Brumby Common Lane and Scotter Road and pavements/ paths.	 **Photograph 9: Developed, sealed surface.**
N/A	Artificial unvegetated, unsealed surface	V. Low Distinctiveness Condition Automatically poor	An access area with associated unadopted path directly westerly adjacent to hedgerow H1.	 **Photograph 10: Access track adjacent to H1.**

Ref	Habitat	Condition / Distinctiveness	Description	Photo
D3.1 to D4.1	Ditches	Medium Distinctiveness Moderate Condition	A network of ditches was present throughout the survey area. Bankside vegetation comprised mostly modified grassland, with sections of scrub in places. The ditches are all subject to regular management practices by the IDB, including flailing the bankside vegetation and digging out the channel, removing aquatic and marginal vegetation. There was presence of litter/obvious signs of pollution within several ditches Ditch 3.7 was part dry in June 23 and dry in Sep 24, but was holding water during the survey in November 23 . Marginal and aquatic vegetation was noted within a number of ditches, however this is periodically removed via the current management practice of digging out the channel. Species noted include common reed, starwort sp, branched bur-reed, watercress, reed sweetgrass, reed canary-grass, and Yellow flag-iris. No ditches were considered species rich. D3.1a and 3.1b were assessed as Moderate condition, the remainder were assessed as poor condition.	 **Photograph 11:** D3.1a in November 2023  **Photograph 12: D3.1a in September 2024**
H1,	Native Hedgerow associated with a bank or Ditch	Medium Distinctiveness Good Condition	The hedgerow H1 was 3.5m in height and 2m in width and was located within the centre of the Site, adjacent to a ditch. The species composition comprised dominant hawthorn with rare elder and domestic apple. A 30m sample was undertaken which consisted of dominant hawthorn. The adjacent ditch was dry during surveys undertaken in June 23 and Sep 24 and was therefore not assessed separately under the watercourse baseline. Assessed as being in 'good' condition failing only two criteria related to canopy continuity and undisturbed ground cover.	 **Photograph 13: H1**

Ref	Habitat	Condition / Distinctiveness	Description	Photo
H2	Native Hedgerow	Low Distinctiveness Good Condition	The hedgerow H2 was 2.5m in height and 2m in width and was located easterly to H1 along ditch D3.7. The hedgerow was species poor consisting of dominant hawthorn. There were gaps totalling more than 10% towards the southern extent of the habitat. Assessed as being in 'good' condition failing only two criteria related to canopy continuity and undisturbed ground cover. As the adjacent ditch (D3.7) was wet, it was included separately within the watercourse Statutory Biodiversity Metric.	 Photograph 14: H2

5.0 BASELINE VALUE

5.1 The Site has a current biodiversity value of 115.09 area-based units, 5.89 hedgerow units and 9.94 watercourse units.

On-site baseline	*Habitat units*	115.09
	Hedgerow units	5.89
	Watercourse units	9.94

6.0 PROPOSED HABITATS

6.1 The proposed habitats are shown in Figure 2 and 6, with the proposed habitat distinctiveness and condition shown on Figure 5 and 7. Onsite proposed habitats have been based on the submitted Landscape plan and Phasing Allocation Plan, as included in Appendix C.

6.2 As proposals are for a hybrid application, post development configurations within the outline application areas and the following Biodiversity Net Gain calculation have been based on the the submitted Phasing Allocation Plan, as included in Appendix C, which identifies broad development zones. The details of the proposed habitats used within the calculations for these areas are outlined in section 8 below.

6.3 The majority of biodiversity enhancement areas will be provided within the initial phase and this report provides an illustrative Biodiversity Net Gain Calculation in order to demonstrate that the delivery of a 10% net gain is feasible for the project.

6.4 Subsequent Reserved Matters schemes for each phase of the Site are expected to incorporate some additional green infrastructure within the outline application areas and as such, the Biodiversity Net Gain calculation provided within this report represents a low value 'benchmark' for the outline application areas, against which future Reserved Matters approvals are expected to improve upon.

6.5 Land south of Brumby Common Lane is included within the redline as it is proposed to utilise this area as a borrow pit for the development. No detailed plans or timescales for subsequent development of these areas currently exists. It has therefore been assumed that these areas will be returned to agricultural use following development. A time delay has been applied to account for the delay in re-establishing these areas to agricultural use.

7.0 RETAINED AND ENHANCED HABITATS

7.1 Figure 3 shows the habitat retention plan. Due to the nature of proposals, the vast majority of area habitats within the Site boundary are being lost, the exception being areas of other neutral grassland adjacent to the south west boundary. It is assumed that the condition of these grassland areas will be enhanced from poor to moderate via implementation of management practices to improve species and structural diversity.

7.2 It has been assumed that Hedges H1 and H2 and ditches D3.6 and D3.7 will be lost within proposals as these lie within areas of proposed residential development within the outline proposals . Additionally, a section of D3.1b will be culverted to facilitate creation of an access road. All other ditches are retained within the scheme.

7.3 Three retained ditches are proposed for enhancement via reduction of riparian encroachment. These are ditch 3.1a and 3.2 (south side only) and D3.1b (both banks). This will be achievable due

to the cessation of ploughing and implementation of 5-7m development buffers along retained ditches.

8.0 HABITAT CREATION

8.1 Detailed landscape plans are being provided for BG1, BG2 and AB1 areas, as shown on the Landscape plan, included in Appendix C.

For the remaining areas, broad residential parcels have been determined from the Phasing Allocation Plan, as included in Appendix C. These have been split with a 70% Developed land and 30% vegetated garden. The Local centre area has been allocated as 100% developed land. Proposed habitats are shown in Figure 4 and 6 with the proposed habitat distinctiveness and condition shown on Figure 5 and 7. The proposed habitat classification and condition have been interpreted from the submitted illustrative masterplan, with assumptions made where necessary.

8.2 Table 3 sets the outline details of the proposed habitats within the development together with their target conditions. Habitat creation and ongoing management prescriptions are outlined to demonstrate how target habitat type and condition will be achieved through the management period, with the implementation of a detailed biodiversity management plan, which can be secured by condition.

Table 3: Proposed habitats

Habitat	Target Condition	Outline Habitat Creation and management prescriptions
Other neutral grassland	Good	A good condition will be targeted within the mitigation area as this area will be managed for wildlife and public access discouraged via considered landscaping. Initial soil testing will be undertaken to inform suitability of habitat proposed and the seed mix used. The areas should be created by sowing a native species meadow mix, targeting an average of at least 10 species per m^2. Management involving 1-2 cuts per year, with the grassland left un-mown during the summer and any arisings removed. Mowing will be undertaken in line with detailed mitigation strategies for protected species. In addition, recreational impacts and overall cover of bare ground will be monitored and corrective measures undertaken if above the specified thresholds. Inclusion of information boards so residents are informed about the biodiversity value of such habitats; why at certain periods the habitat looks unmanaged and to help create a sense of place.

Habitat	Target Condition	Outline Habitat Creation and management prescriptions
Other neutral grassland	Moderate	The remaining areas will target a moderate condition. Prescriptions will follow those outlined above, but without the requirement to deliver a variety of sward heights and with a degree of recreational impacts accounted for.
Lowland acid grassland	Moderate	No detailed design for this parcel currently exists, it has therefore been assumed that this habitat will be lost. However, due to its location at the boundary, there is potential to retain and enhance this habitat within proposals. There is also potential to create additional habitat where soil testing identifies suitable substrate. The existing acid soil substrate from this area will be collected and stored in a suitable location prior to works. On completion, the substrate will be reinstated. Initial soil testing will be undertaken to inform suitability of habitat proposed and the seed mix used. The area should be re-created by sowing a suitable native species meadow mix. Management of this habitat will be as for other neutral grassland in moderate condition (above).
Modified grassland	Moderate/Poor	These areas will be seeded using a flowering lawn mix that responds well to regular mowing. Mowing will be relaxed for two months during May-June to allow flowering. Moderate condition can be achieved by an increased species richness due to seed mix used. Regular mowing will restrict cover of scrub and undesirable species. Poor condition has been targeted within the grass verges along Scotter Road. All other modified grassland has been given a target of Moderate condition.

Habitat	Target Condition	Outline Habitat Creation and management prescriptions
Ponds (non priority)	Moderate	Creation of ponds within BG1 and BG2. Ponds will be allowed to fill naturally with rainwater. The pond margins will be seeded with a native species-rich pond edge mix which will introduce a diverse range of native wildflowers and grasses. This will be supplemented with a range of marginal, emergent and aquatic plants that will thrive in inundated soil conditions and open water. This seed mix will not include non-native plant species. Tree and scrub planting will not be undertaken along the southern banks of newly created ponds. Regular monitoring will track the presence of invasive non-native species and duckweed or filamentous algae and will trigger remedial action where necessary to remove their presence. Planting and management within the mitigation area to be undertaken and monitored in line with protected species mitigation strategy.
Vegetated garden	N/A	As a minimum it has been assumed that garden plots associated with new properties will be turfed or seeded with an amenity grass mix.
Individual trees	Moderate	Mixed planting of native trees . To be planted singly and where possible in random groups of 3-5 trees of a mix of species. The pruning regime should be minimal and should allow the trees to retain more than 75% of their expected canopy.
Species Rich Native Hedgerow	Good	Planting of mixed native species, to achieve an average of at least 5 species per 30m planted densely, in order to create a continuous canopy. Management should allow for hedgerow growth of at least 1.5m in height and width. At least 1m of ground cover either side of the hedgerow should remain undisturbed, and hedgerow cutting should only occur where absolutely necessary. with no more than 1/3rd of the total hedgerow resource pruned at any one time.
Ditches	Moderate	Creation and management to be undertaken in line with water vole mitigation strategy and ponds above.

9.0 BIODIVERSITY NET GAIN CALCULATION

9.1 The Statutory Biodiversity Metric has been submitted with the application, and the headline summary results are given below.

9.2 At present, the on-site baseline consists of 115.09 area-based units, 5.89 hedgerow units and 9.94 watercourse units, as such future approvals will require a total of 126.60 habitat units, 6.48 hedgerow units and 10.93 watercourse to deliver a 10% gain.

9.3 At present, based on the submitted plans, on-site post intervention consists of 132.54 habitat units, 7.14 hedgerow units and 15.17 watercourse units. Overall, this equates to a net gain of 15.17% in habitat units, 21.21% in hedgerow units and 52.69% in watercourse units.

On-site baseline	*Habitat units*	115.09	
	Hedgerow units	5.89	
	Watercourse units	9.94	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	132.54	
	Hedgerow units	7.14	
	Watercourse units	15.17	
On-site net change (units & percentage)	*Habitat units*	17.46	15.17%
	Hedgerow units	1.25	21.21%
	Watercourse units	5.24	52.69%

9.4 The current proposed creation and enhancement measures do not adequately compensate for the losses of medium distinctiveness scrub, with an additional 0.32 scrub, units required. In order to satisfy the trading rules, future approvals will require a degree of scrub or higher distinctiveness habitat to be created within the scheme. It is considered that this will be achievable via provision of a degree of moderate condition mixed native scrub instead of other neutral or modified grassland within proposals.

9.5 Additionally trading rules have not been met for high distinctiveness Lowland acid grassland. No detailed design for this parcel currently exists, it has therefore been assumed that this habitat will be temporarily lost during construction. However, due to its location at the boundary, there is potential to retain and enhance this habitat within proposals. If this is not possible, a further 0.57 units of Lowland dry acid grassland will be required within proposals.

10.0 PROVISION OF MITIGATION WITHIN THE SCHEME

10.1 At least 10% of the proposed biodiversity units must come from additional activities other than those required to mitigate or compensate for protected or notable species impacts. Outlined below is how the scheme will aim to provide this.

<u>Area Habitats</u>

10.2 At least 11.5 habitat units will need to be provided from enhancements not provided as mitigation. This can be achieved within areas of open greenspace, outside of the mitigation area. Within the recreational areas provided in BG1 and BG2, proposed habitat provision provides the following uplift

- 1.0879 Ha of cropland replaced with other neutral grassland in moderate condition providing an uplift of 5.84 units.
- Enhancement of 0.6773Ha of other neutral grassland from poor to moderate condition providing an uplift of 2.09 units.
- 0.6759Ha of cropland replaced with modified grassland in moderate condition providing an uplift of 0.99 units
- Additionally, Provision of 447 small trees throughout the scheme provides 6.12 units.

10.3 In total these provide an uplift of 15.04 habitat units.

10.4 Additionally, the above figures do not take into account any additional areas of green infrastructure which would be included within detailed designs associated with reserved matters application(s) for the outline application.

Watercourse habitat

10.5 At least 1 watercourse unit will need to be provided from watercourse enhancements not provided as mitigation. This could be provided via reducing riparian encroachment of ditch 3.1a and 3.2 (south side only) and D3.1b (both banks) This will occur due to cessation of ploughing close to the banks. Within proposals, these ditches will be retained and buffered from development, therefore no temporal delay has been applied within the calculations. This will deliver a total of 1.5 watercourse units.

10.6 Additionally, within the outline application areas, new ditches will be provided within residential areas, providing a further uplift in proposed watercourse units at reserved matters stage.

11.0 CONCLUSION

11.1 This report details the results of an UKHab Survey which was used to establish the pre-development biodiversity value of the Site.

11.2 The above survey has determined that the Site has a current biodiversity value of 115.09 area-based units, 5.89 hedgerow units and 9.94 watercourse units. as such future approvals will require a total of 126.60 habitat units, 6.48 hedgerow units and 10.93 watercourse to deliver a 10% gain.

11.3 A Biodiversity Net Gain calculation was then completed for the Site, with the onsite post-development habitats based on the submitted Landscape Plan and Land Use Parameter Plan as included in Appendix B.

11.4 Within the outline application area, the Land Use Parameter Plan identified broad development zones, with minimal green infrastructure as such, the Biodiversity Net Gain calculation provided within this report represents a low value 'benchmark' against which future permissions would be an improvement on.

11.5 On-site post intervention consists of 132.54 habitat units, 7.14 hedgerow units and 15.17 watercourse units. Overall, this equates to a net gain of 15.17% in habitat units, 21.21% in hedgerow units and 52.69% in watercourse units.

11.6 The current proposed creation and enhancement measures do not adequately compensate for the losses of medium distinctiveness scrub, with an additional 0.32 scrub, units required. In order to satisfy the trading rules, future approvals will require a degree of scrub or higher distinctiveness habitat to be created within the scheme.

11.7 Additionally trading rules have not been met for high distinctiveness Lowland acid grassland. No detailed design for this parcel currently exists, it has therefore been assumed that this habitat will be temporarily lost during construction. However, due to its location at the boundary, there is potential to retain and enhance this habitat within proposals. If this is not possible, a further 0.57 units of Lowland dry acid grassland will be required within proposals.

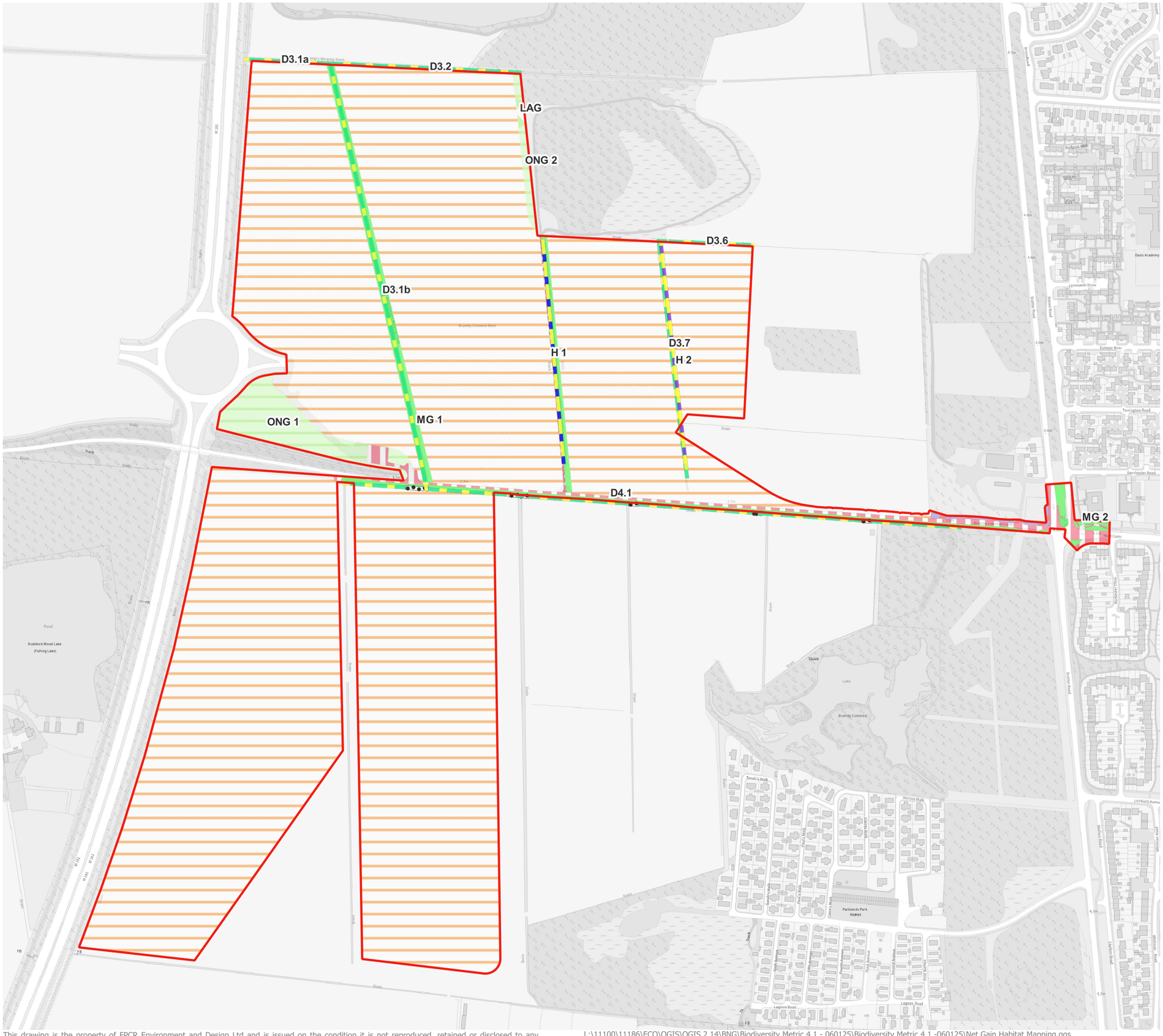
11.8 The 10% gain is not wholly delivered through mitigation measures required for protected and notable species.

11.9 Given the above, it is concluded that proposals can deliver over 10% biodiversity net gain for the scheme, which would be secured by the Biodiversity Net Gain Condition, attached to subsequent approval(s) for the Site. to any planning permission for the proposed development.

11.10 A condition of any outline planning permission would be the submission of an Overall Biodiversity Gain Plan to determine the upfront framework for how the biodiversity gain objective of at least a 10% gain is expected to be met across the entire development. The overall Gain plan will require:

- detailed design, management and monitoring requirements of the Sites Green infrastructure.
- Detailed phasing of the delivery of the Sites Green infrastructure.
- The proportion of the total number of units the site requires to deliver a 10% gain that each phase would contribute.
- The proportion of the units delivered by sites green infrastructure each phase would have allocated.

11.11 Each Phase of development would then require a 'Phase Biodiversity Gain Plan' to be submitted and approved by the planning authority before the development of that phase can begin. Each Phase Biodiversity Gain Plan will subsequently set out a phase's contribution to biodiversity net gain and confirm progress towards the overall biodiversity gain objective for the development once clear proposals for each phase have been developed.



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0 100 200 m

Red Line Boundary

Habitats Baseline

- Artificial unvegetated, unsealed surface
- Bramble scrub
- Cereal crops
- Developed land; sealed surface
- Lowland dry acid grassland
- Modified grassland
- Other neutral grassland

Baseline Hedgerow

- Native hedgerow
- Native hedgerow - associated with bank or ditch

Baseline Watercourse

- Culvert
- Ditches

date 30/01/25

drwn/chkd ET/IH

client
Hargreaves Land

project
Lincolnshire Lakes,
Scunthorpe

title
BASELINE HABITAT PLAN

scale 1:5,000 @ A3

number
FIGURE 3

rev -

FPCR | environment & design

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t: 01509 672772 e: mail@fpcr.co.uk w: www.fpcr.co.uk