# **Preliminary Ecological Appraisal**



Cross in Hand, Rugby January 2024



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# **Summary**

- S.1. This report has been prepared by Tyler Grange Group Limited on behalf of Nurton Developments Ltd. It sets out the findings of a Preliminary Ecological Appraisal at Cross in Hand, Rugby, hereinafter referred to as 'the site' to inform its promotion through the Rugby Local Plan, and potential for development.
- S.2. This report describes: the important ecological features that could be affected by the proposed development, identified through a desk study and a site survey of the site in question; potential ecological constraints which may need to be considered at the time of site design; and identifies the opportunities for ecological enhancements, including considerations for biodiversity net gain (BNG).
- S.3. In terms of protected sites, there are four 'potential' local wildlife sites/Ecosites on/immediately adjacent to the site.

  These could be retained and protected within vegetated buffers, and there is an opportunity to extend and better connect these through appropriate green infrastructure design, which would be a distinct benefit for development.
- 5.4. The site consists predominantly of arable cropland of negligible ecological importance, which poses little constraint to development. In accordance with the mitigation hierarchy and local policy (Rugby Local Plan, Policy NE1), the design concept retains more important habitats, namely deciduous woodland (priority habitat), species-rich hedgerows (priority habitat) with associated ditches, ponds (priority habitat), mature trees, grassland, and tall ruderal vegetation. These have been incorporated within the green and blue infrastructure design, which in addition maintains connectivity within the site and beyond and includes new habitats associated with surface water drainage.
- S.5. In anticipation of carrying out a BNG assessment, the baseline habitat value of the site has been calculated using the biodiversity metric 4.0. The total number of baseline units was 253.72 habitat units and 67.88 hedgerow units. The indicative biodiversity enhancement scheme would result in -30.31 habitat units (-11.94% BNG) and 6.76 hedgerow units (11.83% BNG). To achieve a 10% biodiversity enhancement an additional 55.68 off-site habitat units (equivalent to c.8.35 ha neutral grassland of moderate condition) will be needed. Off-site BNG could be achieved on the neighbouring land owned by the landowner.
- S.6. Habitats on site could support protected bats, birds, badger, dormouse, great crested newt (GCN), reptiles, and otter, and priority brown hare, hedgehog, and invertebrates. The features that could be important for these species can for the most part be retained, and habitat creation and enhancement would improve wildlife corridors through and beyond the site enabling continued use of the site by species that are likely to be present. Further detailed survey work would be needed for bats, birds, badgers, dormouse, GCN, reptiles and otter to inform a future planning application. The full scope of further work is dependent on proposals.
- 1.1. No issues that could affect the principle or significantly affect the quantum of development the site could support have been identified. Given the largely arable nature of the site, development has the potential to deliver not only biodiversity net gains within the site boundary but can be designed to retain pLWSs/Ecosites and strengthen wildlife corridors to enable movement of wildlife within the site and beyond. With the recommendations and further work set out in this report, there can be confidence that the site could be developed in accordance with relevant planning policy and legislation (including policies NE1 and NE2 of the Rugby Borough Local Plan).



# **Section 1: Introduction**

### Introduction

- 1.1. This report has been prepared by Tyler Grange Group Ltd on behalf of Nurton Developments Ltd. It sets out the findings of a Preliminary Ecological Appraisal at Cross in Hand, Lutterworth, Rugby, CV23 OQW (OS Grid Reference SP 5024 8344), hereafter referred to as 'the site', to inform its promotion in the local plan. See **Figure 1.1** for the indicative red line boundary.
- 1.2. The site is located to the west of the town of Lutterworth which lies to the northeast of Rugby in Leicestershire. Coal Pit Lane lies to the north of site and the B4027 along the east and southern boundary. The western boundary follows a former trainline and brook. The wider landscape consists of arable crop and pastural land with scattered woodlands. A large industrial estate Is located to the northeast (Magna Park).



Figure 1.1. Indicative red line boundary and wider land uses (© Google Aerial Imagery)

# **Purpose**

1.3. This report:



- Uses available background data and results of the field surveys to describe and evaluate the ecological features present within the likely "Zone of Influence" (ZoI) of potential development of the site;
- With reference to relevant planning policy and legislation (Appendix 1), describes the known or potential
  ecological constraints and opportunities that might affect the principle or quantum of development the
  site could support;
- Where appropriate, makes recommendations for mitigation of adverse effects and ecological enhancements to ensure conformity with policy and legislation listed in **Appendix 1**; and
- Identifies the need for further work to inform a planning application in the event the site Is allocated.
- 1.4. This assessment and the terminology used are consistent with the Guidelines for Preliminary Ecological Appraisal<sup>2</sup>.

# Methodology

1.5. Full methods for the data search, Phase 1/UK Habitat Classification (UK Habs) survey, initial bat survey walkover and BNG work can be found in **Appendix 2.** 

## **Quality Control**

1.6. All ecologists at Tyler Grange Group Limited are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) or are working towards membership and act under the direction of members, and abide by the Institute's Code of Professional Conduct<sup>3</sup>.

<sup>&</sup>lt;sup>3</sup> CIEEM (2022) Code of Professional Conduct, CIEEM, Winchester



<sup>&</sup>lt;sup>1</sup> Defined by the CIEEM (2018) Guidelines for Ecological Impact Assessment as the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries

<sup>&</sup>lt;sup>2</sup> CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

# **Section 2: Ecological Features**

# **Designated Sites**

- 2.1. No internationally or nationally designated statutory sites lie within the search area (10 km for international sites and 2 km for national sites).
- 2.2. Fourteen non-statutory designated sites lie within 2 km of the site. Of these, those that could be within the site's Zone of Influence and hence potentially affected by the proposals are the six detailed in **Table 2.1** below. Three are on-site, one lies adjacent to it and two others lie within 100 m, see **Figure 2.1**.



**Figure 2.1.** Location of non-statutory designated sites ('Ecosites'<sup>4</sup> and potential Local Wildlife Sites<sup>5</sup>), see **Table 2.1** for site names.

<sup>&</sup>lt;sup>5</sup> LWSs are designated as sites of importance for nature conservation in the county; hence they are of county ecological value. pLWSs are those sites which could meet the qualifying criteria as LWS but have not been subject to adequate survey; hence their value is unconfirmed, though are provisionally evaluated as being of between local and county value.



<sup>&</sup>lt;sup>4</sup> Ecosites are those sites of nature conservation interest that do not meet the LWS qualifying criteria so are likely to be of local to district value.

## Table 2.1. Designated Sites

Designated site	Distance and direction from site	Description	Ecological Importance
Long Spinney (Ecosite 02/58), part of 'Long Spinney, The Nursery and Coal Pit Lane' potential Local Wildlife Site (pLWS).	On-site	Broadleaved semi-natural woodland with hazel coppice understorey and pond.	Local to County
Disused Railway pLWS (Ecosite 18/48X)	On-site	Disused railway dominated by scrub, with shallow pools. Records for grizzled skipper <i>Pyrgus malvae</i> and dingy skipper <i>Erynnis tages</i> .	Local to County
Smite Brook, headwater and tributaries. Tributary of the River Sowe (Ecosite 59/48)	On-site (northwestern boundary)	Waterway. Surveys in 1990's revealed the area to be good for invertebrates. Otter Lutra lutra spraints were recorded in 2004.	Local to District
Cottons Furze & Long Spinney (Ecosite 12/48), part of 'Long Spinney, The Nursery and Coal Pit Lane' pLWS	c. 15 m west	Deciduous woodland with hedgerow and wet ditch. Wood Warbler <i>Phylloscopus sibilatrix</i> has been recorded on passage in the woodland.	Local to County
Disused Railway pLWS (Ecosite 05/58)	c. 88 m south	Disused railway with broadleaved woodland, scrub and semi-improved grassland. Species records indicate this railway line may be of very high nature conservation value.	Local to County
Streetfield Spinney pLWS (Ecosite 03/58)	c. 148 m east	Mature deciduous woodland with tall herbs and grasses, marshy grassland and a small pond.	Local to County



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# **Habitats**

2.3.	The habitats and presence of, or potential for, protected species that could be affected by the proposed
	development are summarised below in Tables 2.2 and 2.3, respectively. The locations of habitats are shown on
	the Habitat Features Plan 16228/P01.



Table 2.2. Habitats, their Importance, Potential Impacts and Mitigation/Enhancement Opportunities

Habitats	Ecological Importance/Suitability for Protected/Priority <sup>6</sup> species	Photograph
Primary code(s): Cropland - cereal crops c1c, winter stubble c1c, and horticulture c1f Modified grassland g4  Secondary code(s): Ruderal/ephemeral 81 Cattle grazed 101 Bare ground 510	The majority of site is cultivated arable fields, which at the time of survey were either winter stubble planted with grain, maize or winter vegetable crops.  The arable field margins are generally narrow in width and the species present are Indicative of disturbance.  Two modified grassland areas are present. The grassland adjacent to the off-site wood is dominated by one species (species unknown due to recent cutting). The southern grassland is cattle-grazed with tussocky patches and signs of disturbance (thistles).  Arable crop and modified grassland are considered to be of negligible ecological importance.	Winter stubble Winter crops  Cattle grazed modified grassland (part of Ecosite 18/48X)
Primary code(s): Broadleaved woodland w1f7 Native hedgerow h2a Native hedgerow, species-rich h2a5 Mixed scrub h3h  Secondary code(s): Semi-natural woodland 30 Scattered trees 32 Pond 40/41 Ditch 50 Young trees – self-set 202 Mature tree 203 Veteran tree 204 Coppice 210 Complex woody structure 213 Standing dead wood abundant 215 Large hollow or cavities 216 Seasonally wet 502	A mixed broadleaved woodland with understorey scrub and a pond is present in the northwest corner of site (Long Spinney, part of Long Spinney, The Nursery and Coal Pit Lane pLWS), and another woodland is present adjacent to the western boundary of site (Disused Railway pLWS).  A network of native hedgerows bounds the fields, around a third of which are species-rich, and half associated with wet and dry vegetated ditches. Mature and veteran trees, predominantly ash, are scattered along the hedgerows. Two ponds are associated with the hedgerow and wet ditch network.  Hedgerows, ponds and deciduous woodland are priority habitats, and based on their maturity and species-richness they are considered to be of local ecological importance. Mature trees are also considered to be of local ecological importance, and the woodland Ecosite (see above) may be up to county ecological importance - to be determined through further survey.	Woodland (Ecosite 02/58)  Woodland edge (Ecosite 02/58)

<sup>&</sup>lt;sup>6</sup> Priority species and habitats are those listed at Section 41 of the Natural Environment and Rural Communities (NERC) Act 2005. Section 40 of the Nerc Act puts a duty on local authorities to have regard for the conservation of these species, including when considering planning allocations and applications.





		Example photos of mature scattered trees with wounds, deadwood, rot, and fungi, among other veteran tree features.
Invasive species	No invasive species were returned during the data search or recorded during the Phase 1 survey.	



#### **Fauna**

#### **Amphibians**

- 2.4. Six records of amphibians were returned by WBRC. The closest record for the heavily protected great crested newt (GCN) *Triturus cristatus* is 461 m southeast of site. Records for smooth newt *Lissotriton vulgaris*, toad *Bufo bufo* and frog *Rana temporaria* were also returned.
- 2.5. The three ponds and network of vegetated wet ditches with associated hedgerows offer suitable aquatic and terrestrial habitat for amphibians on-site. Additionally, the woodland, hedgerows, and grassland provide suitable terrestrial habitat for amphibians.
- 2.6. Eight ponds lie within 500m/250m of the site boundary, seven to the southeast and one to the west.

#### **Badgers**

- 2.7. Four records of badgers were returned from WBRC within 500 m of site, three for badger setts and one for a badger casualty.
- 2.8. No badger setts were recorded during the survey and the arable fields are relatively sub-optimal foraging habitat. However, heavily used mammal paths were present along the hedgerows and through the ditches onsite. The pasture field, field margins and cereal crops offer some foraging for badgers, and there is potential for badger setts to be present within the land and woodland immediately to the north and west of site.

#### **Bats**

- 2.9. WBRC returned 41 records of bats. Species recorded include pipistrelle species (*Pipistrellus pipistrellus, P. pygmeaus, P. nathusii*), Myotis species (*Myotis brandtii* and *M. nattereri*), noctule *Nyctalus noctula*, serotine *Eptesicus serotinus*, and brown long-eared *Plecotus auritus*.
- 2.10. Whislt the arable fields are not likely to be of importance to bats, the woodlands, and network of hedgerows linking to the woodlands and associated with wet ditches, ponds and mature and mature trees offer habitat of moderate to high suitability for commuting and foraging bats.
- 2.11. The woodland and mature trees also offer habitat of up to high suitability for roosting bats.

#### Birds

- 2.12. WBRC returned 354 records of notable birds. Records were returned for water birds and wetlands such as teal Anas crecca, greylag goose Anser anser, reed bunting Emberiza schoeniclus, common gull Larus canus, lesser black-backed gull Larus fuscus, grey wagtail Motacilla cinerea, lapwing Vanellus vanellus; declining farmland and woodland species such as skylark Alauda arvensis, corn bunting Emberiza calandra, yellowhammer Emberiza citrinella, linnet Linaria cannabina, spotted flycatcher Muscicapa striata, tree sparrow Passer montanus; and grassland species such as yellow wagtail Motacilla flava.
- 2.13. One record for teal *Anas crecca* was returned in the fields along the eastern edge of site. The record was of a sighting in pools of the flooded field in 1978.



2.14. The woodland, mature trees, and network of hedgerows on-site are suitable for nesting birds. Additionally, the arable cropland, ponds and wet ditches, pastoral grassland and the deciduous woodland are suitable for foraging birds, such as declining species of farmland bird, and woodland/hedgerow birds.

#### **Hazel Dormouse**

- 2.15. No records were returned for dormouse from WBRC. However, the site lies within the Princethorpe Biodiversity Opportunity Expansion Area, for which one of the core species<sup>7</sup> is hazel dormouse *Muscardinus avellanarius*.
- 2.16. The species-rich hedgerows and semi-natural woodland with hazel understorey offer suitable foraging and breeding habitat for dormouse.

#### Otter and Water Vole

- 2.17. WBRC returned eight records for otter spraint and footprints for c. 1.6 km southeast of site. No records were returned for water vole.
- 2.18. Otters have been recorded using the Smite Brook, headwater and tributaries Ecosite, which partially lies along the western boundary of site.
- 2.19. The wet ditches and ponds, with associated hedgerows provide opportunities for otter and water vole to shelter and forage.

#### **Reptiles**

- 2.20. WRBC returned one record for reptiles, a grass snake Natrix helvetica c. 1.7 km south of site.
- 2.21. The field margins and vegetated ditches offer suitable habitat for foraging common reptiles, though most of the site is unsuitable.

#### **Other Mammals**

- 2.22. WBRC returned 15 records of other mammals, 11 records for brown hare *Lepus europaeus* and six for hedgehog *Erinaceus europaeus*. The closest a record for several adult hares on-site in the cropland in the northwest corner of site. The arable land is on the whole sub-optimal habitat for other mammals such as hedgehog and badger.
- 2.23. WBRC returned five records for notable species of butterfly and moth (UK BAP species). The closest 666 m northwest for wall butterfly *Lasiommata megera*. The site lies within the Princethorpe Biodiversity Opportunity Expansion Area, for which one of the core species<sup>8</sup> is butterflies. The woodland, hedgerows with associated vegetated wet ditch, and grasslands offer opportunities for notable species of invertebrates on-site.

WBRC returned ten records of notable plants. The closest 52 m south of site for large thyme *Thymus pulegioides*. Records were also returned for water-purslane *Lythrum portula*, various-leaved water-starwort *Callitriche platycarpa*, treacle-mustard *Erysimum cheiranthoides*, rye brome *Bromus secalinus*, crosswort *Cruciata laevipes* 

<sup>&</sup>lt;sup>8</sup> Smith, M., 2004. Scientific Assessment of the Landscape and Species Ecology Concerning the Princethrope Great Wood Project. https://www.wildwarwickshire.co.uk/home/Princethorpe%20Woodlands.pdf, last accessed 16/01/2024



<sup>&</sup>lt;sup>7</sup> Smith, M., 2004. Scientific Assessment of the Landscape and Species Ecology Concerning the Princethrope Great Wood Project. https://www.wildwarwickshire.co.uk/home/Princethorpe%20Woodlands.pdf, last accessed 16/01/2024

and wild strawberry *Fragaria vesca*. Given the habitats present on-site, it is considered unlikely that large thyme and cross wort are present, the other notable plants could be present in the sub-optimal habitat on-site.



# Section 3: Considerations in Respect of Proposed Development

# **Proposed Development**

- 3.1. The proposals are for an industrial distribution centre with warehouses and parking and with associated green and blue infrastructure.
- 3.2. The design concept has evolved to incorporate embedded ecological mitigation and enhancement informed by:
  - National and local biodiversity guidance and policy in respect of the mitigation hierarchy, local wildlife sites and green and blue corridors (Rugby Local Plan NE1 and NE2);
  - National and local habitat and species priorities;
  - Commitment to achieving 10% BNG on-site;
  - Site drainage requirements; and
  - Landscaping and landscape character requirements.
- 3.3. Issues to be considered in respect of future development of the site and those important ecological features that exist, or have potential to exist, are described below. Opportunities to deliver biodiversity gain are also described, with reference to relevant legislation and planning policy, summarised in **Appendix 1**.

#### **Protected Sites**

- 3.4. The policy states that 'All Development proposals impacting on local wildlife sites will be expected to assess the site against the 'Green Book' criteria<sup>9</sup> to determine the status of the site and to ascertain whether the development clearly outweighs the impacts on the site'. Therefore, the four pLWS/ Ecosites on and immediately adjacent to site require further assessment (Local Wildlife Site survey) to determine their eligibility to become Local Wildlife Sites.
- 3.5. Potential impacts:
  - Dust and air pollution;
  - Surface water run-off;
  - Noise and vibration disturbance;
  - 'Naturalness' of surrounding habitat; and
  - Increase in disturbance from potential increased public footfall.

<sup>&</sup>lt;sup>9</sup> The Green Book: Guidance for the Selection of Local Wildlife Sites in Warwickshire, Coventry and Solihull (2015) Local Wildlife Sites Project: Habitat Biodiversity Audit for Warwickshire.



Cross in Hand, Rugby Preliminary Ecological Appraisal

- 3.6. In line with the mitigation hierarchy (Policy NE1 or the Rugby Borough Local Plan), the pLWS and Ecosites should be retained and impacts avoided in the first instant and if this is not possible impacts should be mitigated for. If full mitigation is not possible compensation will need to be provided, as a last resort.
- 3.7. There is an opportunity to protect, restore and enhance the green and blue infrastructure network of the pLWS and Ecosites along the western and northern site boundaries, in line with Policy NE2 (Rugby Borough Local Plan), to provide a multifunctional network, see below for further detail (Para 3.10).

#### **Habitats and Flora**

- 3.8. The majority of the site is of negligible ecological importance and presents more of an ecological opportunity than a constraint.
- 3.9. The most important features on-site are the woodland (pLWS and Ecosite), hedgerows (particularly the species-rich hedgerows associated with ditches), and the ponds. These priority habitats of up to county ecological importance should be avoided wherever possible, in accordance with the mitigation hierarchy. Where habitat loss cannot be avoided, these habitats can be replaced with similar habitats of greater ecological value.
- 3.10. The ecological design principles that have informed the concept are:
  - Retain and enhance the woodland habitat connectivity (pLWS and Ecosites) within and into offsite areas by creation of woodland and scrub habitat that extends and reinforces the western and northern site boundaries. This could comprise native species-rich scrub, woodland and grassland that results in a transitional woodland 'ecotone' habitat linking the woodland and grassland, which is of value to a diversity of fauna species. This would be in accordance with the objectives of the Princethorpe Woodland Biodiversity Opportunity Expansion Area, which covers part of the site.
  - Retain the majority of species-rich hedgerows and associated wet ditches and ponds, through the creation
    of a wetland corridor with grassland through site. This would comprise surface water attenuation (SuDS)
    surrounded by species-rich swards and rougher tussocky grassland that results in a transitional wetland to
    grassland 'ecotone' habitat. This could include wetlands with reed and sedges and wet grasslands with
    species-rich native aquatic planting.
  - Design of surface water attenuation and wildlife corridors that create wetland to woodland ecotone
    habitats that are both visually attractive (to promote well-being for the users of the development) and of
    biodiversity importance.
- 3.11. Additionally, retained boundary hedgerows could be enhanced to higher quality habitat through sensitive management and tree planting.
- 3.12. The blue and green infrastructure proposed above would be both beneficial for wildlife, in line with Policy NE2 (Rugby Local Plan), and serve as informal public open space. The design of the public access would need to be mindful of the potential for disturbance, that might otherwise affect the biodiversity potential of retained and newly created habitats. Such matters could be addressed by careful design and ongoing aftercare, controlled by a landscape and ecological management plan (LEMP).

#### **BNG**

3.13. In anticipation of carrying out a full BNG assessment once development proposals are known, the baseline habitats of the site are presented in **Tables A3.1** and A**3.2** in **Appendix 3**. The total number of baseline habitat



units is 253.72 and baseline hedgerows units is 67.88. Offsite BNG will be needed to reach 10% BNG, this can be achieved in neighbouring land owned by the landholder. See **16228/P02** for the on-site indicative BNG enhancement plan.

- 3.14. The indicative biodiversity enhancement shown in **16628/P02** would result in -30.31 habitat units (-11.94% BNG) and 6.76 hedgerow units (11.83% BNG). To reach 10% BNG, for habitat units, an additional 55.68 units would be needed off-site. This is the equivalent of 8.35 ha of neutral grassland, managed to moderate condition.
- 3.15. Note that habitats and hedgerows are assessed separately, and the landscape designs may change as the scheme progresses.

#### **Fauna**

- 3.16. Whilst it would need to be informed by detailed surveys in advance of a planning application, the design concept will strengthen the available corridors for movement within and through the site of those fauna species that are likely to use the site, notably GCN, badger, bats, birds, dormouse, invertebrates, otter and water vole, and reptiles.
- 3.17. Future development would need to include:
  - A commitment to lighting that retains dark corridors, especially along the western and northern boundaries and the retained hedgerow network;
  - Enhancement features for species such as amphibians, birds, bats and invertebrates;
  - Retention and enhancement of green and blue corridors for biodiversity to provide permeability through site and continued opportunities for the species currently using the site.
- 3.18. Some farmland birds and fauna such as brown hare and field mouse (*Apodemus sylvaticus*) are likely to be displaced by development of the site, though given the abundance of suitable habitats to the east and west this is not likely to be significant. Furthermore, such effects should be considered against the likely benefits to other fauna species that would occur by replacing the predominantly arable habitats with priority habitats that are likely to increase species richness.

### Further Work to Inform a Planning Application

- 3.19. Assuming the site is allocated, the following work would be required to inform a future planning application, the nature and scope of any mitigation and enhancement required and inform the evolution of a masterplan for the site (the scope of this should be agreed with the planning authority):
  - Badger survey;
  - Bat tree roost assessment surveys, emergence/re-entry surveys for all trees to be affected, and bat activity surveys;
  - Breeding bird surveys;
  - Dormouse surveys;
  - Great crested newt (GCN) surveys;



- Local Wildlife Site surveys;
- Otter and water vole surveys; and
- Reptile surveys.



# **Section 4: Conclusions**

- 4.1. The key constraints of the development are as follows.
  - Presence of four pLWS and Ecosites on-site/immediately adjacent to site.
  - Presence of priority woodland, hedgerow and pond habitat.
  - Presence of suitable habitat for GCN, bats, birds, dormouse, invertebrates, badger, brown hare, reptiles and otter.
- 4.2. Given the largely arable nature of the site, development has the potential to deliver not only biodiversity net gains within the site boundary, but, can be designed to retain pLWSs/Ecosites and strengthen wildlife corridors to enable movement of wildlife within the site and beyond.
- 4.3. The habitats of importance on site are woodland, species-rich hedgerows with associated wet ditches and ponds. In line with the mitigation hierarchy, development proposals should seek to retain and enhance these habitats wherever possible. Where this is not possible, any lost habitats should be replaced with habitats of either greater area or better condition or both, in order to enhance the site for BNG. Off-site BNG will be needed to reach 10% BNG with the current development design. Created habitats should be of the same broad type as those lost. The recommended proposed habitats are: deciduous woodland, mixed native scrub, other neutral grassland, trees and tree lines, and SUDs with wetland planting.
- 4.4. No issues that could affect the principle or significantly affect the quantum of development the site could support have been identified. With the recommendations and further work set out in this report, the proposed development could deliver benefits for biodiversity and there can be confidence that the site could be developed in accordance with relevant planning policy and legislation (including policies NE1 and NE2 of the Rugby Borough Local Plan).



# **Appendix 1: Legislation and Planning Policy**

### Legislation

- A1.1. Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:
  - The Environment Act 2021;
  - The Wildlife and Countryside Act (WCA) 1981 (as amended);
  - The Conservation of Habitats and Species Regulations 2017 (as amended);
  - The Countryside and Rights of Way (CRoW) Act 2000;
  - The Natural Environment and Rural Communities Act (NERC) 2006;
  - The Hedgerows Regulations 1997; and
  - The Protection of Badgers Act 1992.
- A1.2. The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The legal framework to protect the species covered by the Habitats Directive has been enacted under UK law through The Conservation of Habitats and Species Regulations 2017 (as amended).
- A1.3. In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants.
- A1.4. The CRoW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site.

#### **Environment Act 2021: Upcoming Town and Country Planning Act**

- A1.5. The Environment Act gained Royal Assent in November 2022. Whilst the premise of BNG has been around prior to this, the Assent of the Act sets the Framework for future legislation to be changed. This will be in the form of the Town and Country Planning Act (TaCPA), specifically Schedule 14 of the TaCPA, which will make Biodiversity Net Gain a condition of planning (not a planning condition). The target 'gain' is currently set at 10% but the Secretary of State has the ability to change this.
- A1.6. The timescales for changes to the wording of the TaCPA are that it will be legally mandated and enforceable from January 2024.



# Natural Office of the Deputy Prime Minister (ODPM) Circular 06/2005: Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System

- A1.7. ODPM Circular 06/05 was prepared to accompany PPS9, however continues to be valid, and material in the consideration of planning applications since PPS9's replacement by the NPPF.
- A1.8. ODPM Circular 06/05 provides guidance on applying legislation in relation to nature conservation and planning in England. Part I considers the legal protection and conservation of internationally designated sites (namely candidate Special Areas of Conservation (cSACs), SACs, potential Special Protection Areas (pSPAs), SPAs and Ramsar sites) and Part II considers the legal protection and conservation of nationally designated sites, namely Sites of Special Scientific Interest (SSSIs).
- A1.9. Part III considers the protection of habitats and species outside of designated areas (particularly UK Biodiversity Action Plan species and habitats, which it states are capable of being a material consideration in the preparation of local development documents and the making of planning decisions.
- A1.10. Part IV considers species protected by law and states that the presence of a protected species is a material consideration in the consideration of a development proposal that, if carried out, would be likely to result in harm to the species or its habitat and that it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted.

# **National Planning Policy**

#### National Planning Policy Framework (NPPF), December 2023

- A1.11. The updated National Planning Policy Framework (NPPF) was published in December 2023 and sets out the Government's planning policies for England and how these should be applied. It replaces the first National Planning Policy Framework published in March 2012.
- A1.12. Paragraph 11 states that:

"Plans and decisions should apply a presumption in favour of sustainable development."

- A1.13. Section 11 of the NPPF, paragraph 120, sub-section b states that planning policies and decisions should:
  - "encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve net environmental gains such as developments that would enable new habitat creation or improve public access to the countryside;
  - c) recognise that some undeveloped land can perform many functions, such as for wildlife, recreation, flood risk mitigation, cooling/shading, carbon storage or food production"
- A1.14. Section 15 of the NPPF (paragraphs 174 to 188) considers the conservation and enhancement of the natural environment.
- A1.15. Paragraph 180 states that planning and decisions should contribute to and enhance the natural and local environment by:



- a) "protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate; and
- 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"
- A1.16. Paragraph 181 states that plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

Paragraph 185 states that in order to protect and enhance biodiversity and geodiversity, plans should:

- a) "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity<sup>10</sup>; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation<sup>11</sup>; and
- 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."
- A1.17. When determining planning applications, Paragraph 186 states that local planning authorities should apply the following principles:
  - "if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
  - b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
  - c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons<sup>12</sup> and a suitable compensation strategy exists; and

<sup>&</sup>lt;sup>12</sup> For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat.



<sup>&</sup>lt;sup>10</sup> Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

<sup>&</sup>lt;sup>11</sup> Where areas that are part of the Nature Recovery Network are identified in plans, it may be appropriate to specify the types of development that may be suitable within them.

- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate."
- A1.18. As stated in paragraph 187 the following should be given the same protection as habitats sites<sup>13</sup>:
  - a) "potential Special Protection Areas and possible Special Areas of Conservation;
  - b) listed or proposed Ramsar sites<sup>14</sup>; and
  - c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites."
- A1.19. Paragraph 182 states that the presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

# **Local Planning Policy**

#### Rugby Borough Council Local Plan 2011 - 2031, adopted 2019

- A1.20. Policies relating to ecology and nature conservation can be found in Chapter 9: Natural Environment, which are summarised as follows:
- A1.21. Policy NE1: Protecting Designated Biodiversity and Geodiversity Assets

'The Council will protect designated areas and species of international, national and local importance for biodiversity and geodiversity as set out below.

Development will be expected to deliver a net gain in biodiversity and be in accordance with the mitigation hierarchy below. Planning permission will be refused if significant harm resulting from development affecting biodiversity cannot be:

- Avoided, and where this is not possible;
- Mitigated, and if it cannot be fully mitigated, as a last resort;
- Compensated for.

<u>Sites of International and European Importance</u>

<sup>&</sup>lt;sup>14</sup> Potential Special Protection Areas, possible Special Areas of Conservation and proposed Ramsar sites are sites on which Government has initiated public consultation on the scientific case for designation as a Special Protection Area, candidate Special Area of Conservation or Ramsar site.



<sup>&</sup>lt;sup>13</sup> The policies referred to are those in this Framework (rather than those in development plans) relating to: habitats sites (and those sites listed in paragraph 181) and/or designated as Sites of Special Scientific Interest; land designated as Green Belt, Local Green Space, an Area of Outstanding Natural Beauty, a National Park (or within the Broads Authority) or defined as Heritage Coast; irreplaceable habitats; designated heritage assets (and other heritage assets of archaeological interest referred to in footnote 68); and areas at risk of flooding or coastal change.

Development that is likely to result in an adverse effect on the integrity of any European site (either alone or in combination), will not be permitted unless:

- There are no alternative solutions; and
- There are imperative reasons for overriding public interest; and
- Adequate compensatory measures can be taken to ensure the overall coherence of Natura 2000 is protected.

As per the requirements of the Habitat Regulations.

Sites of International or European Importance Include: Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar Sites.

#### Sites of National Importance

Development affecting nationally important Sites of Special Scientific Interest (SSSIs) either directly or indirectly will only be permitted in exceptional circumstances where the benefits of development clearly outweigh the impacts on the site or species.

#### Sites of Local Importance

Development likely to result in the loss, deterioration, degradation or harm to habitats or species of local importance to biodiversity, geological or geomorphological conservation interests, either directly or indirectly, will not be permitted for Local Nature Reserves (LNRs); Local Wildlife Sites (LWS), Local Geological Sites (LGS), European and UK protected species, or Biodiversity Action Plan habitats unless:

- The need for, and benefits of, the development in the proposed location outweighs the adverse effect on the relevant biodiversity interest. All Development proposals impacting on local wildlife sites will be expected to assess the site against the 'Green Book' criteria to determine the status of the site and to ascertain whether the development clearly outweighs the impacts on the site;
- It can be demonstrated that it could not reasonably be located on an alternative site that would result in less or no harm to the biodiversity interest; and
- Measures can be provided (and secured through planning conditions or legal agreements), according to the mitigation hierarchy as set out above. The level of protection and mitigation should be proportionate to the status of the habitat or species and its importance individually and as part of a wider network.

#### **Ancient Woodland**

<sup>&</sup>lt;sup>15</sup> The Green Book: Guidance for the Selection of Local Wildlife Sites in Warwickshire, Coventry and Solihull (2015) Local Wildlife Sites Project: Habitat Biodiversity Audit for Warwickshire.



Planning permission will be refused for development resulting in the loss or deterioration of ancient woodland, and/or the loss of aged or veteran trees found outside of ancient woodland unless the need for, and benefits of, the development in that location clearly outweighs the loss.

All development proposals in the proximity of ancient woodland shall incorporate buffers having regard to Natural England's standing advice.

#### **Ecological Assessment**

All proposals likely to impact on the sites noted above will require an Ecological Assessment. The Ecological Assessment shall include due consideration of the importance of the natural asset, the nature of the measures proposed (including plans for long term management) and the extent to which they avoid and reduce the impact of the development.'

#### A1.22. Policy NE2: Strategic Green and Blue Infrastructure

'The Council will work with partners towards the creation of a comprehensive Borough wide Strategic Green and Blue Infrastructure Network which is inclusive of the Princethorpe Woodland Biodiversity Opportunity Areas (also known as the Princethorpe Woodlands Living Landscape), as shown on the Green and Blue Infrastructure Policies Map. This will be achieved through the following:

- The protection, restoration and enhancement of existing and potential Green and Blue Infrastructure assets within the network as shown on the Policies Map; and
- multi-functional strategic Green and Blue Infrastructure network

Where appropriate new developments must provide suitable Green and Blue Infrastructure corridors throughout the development and link into adjacent strategic and local Green and Blue Infrastructure networks or assets where present.

Where such provision is made a framework plan should be produced as part of the planning application demonstrating the contribution to the overall achievements of the multi-functional strategic Green and Blue Infrastructure network. A management plan, based on delivering the framework plan and detailing how the infrastructure will be managed, may be required by condition.'

#### A1.23. Policy SDC6: Sustainable Drainage

Sustainable Drainage Systems (SuDS) are required in all major developments and all development in flood zones 2 and 3. Such facilities should preferably be provided on-site or, where this is not possible, close to the site, and:

- Be designed and located outside the floodplain and to integrate with Green and/or Infrastructure functions;
- [...];
- Promote enhanced biodiversity;

[...]

In exceptional circumstances, where a sustainable drainage system cannot be provided, it must be demonstrated that:



- An acceptable means of surface water disposal is provided which does not increase the risk of flooding or give rise to environmental problems and improves on the current situation; and
- Contributions will be made to off-site SuDS schemes if located in an area known to suffer surface water flooding the development should seek to offer a strategic solution.'

## **Supplementary Planning Documents**<sup>16</sup>

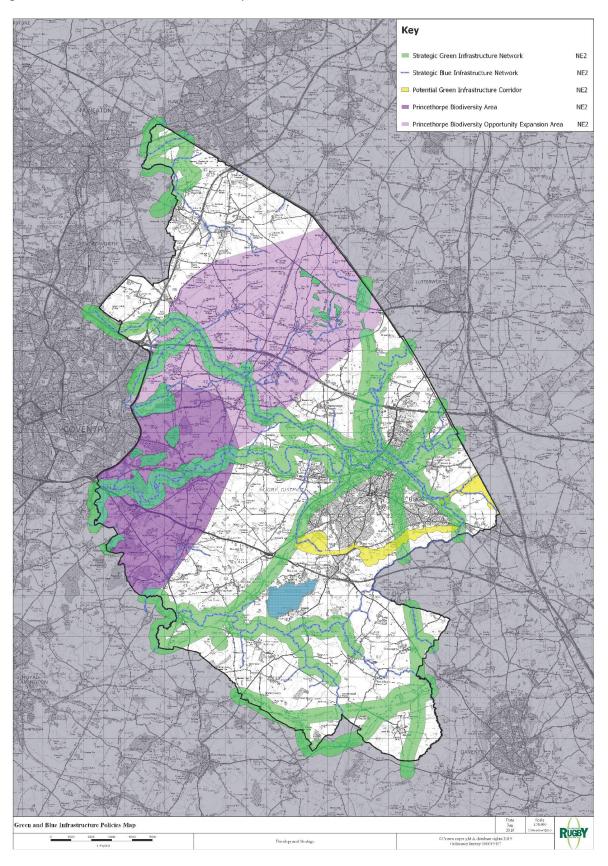
A1.24. The Rugby Borough Council Green Infrastructure Policies Map shows the Rugby borough Green and Blue Infrastructure network, and the Princethorpe Biodiversity Area and Opportunity Expansion Area, see **Figure A1.1** below.

 $https://www.rugby.gov.uk/documents/20124/6585161/Appendix\_8c\_\_GI\_Policies\_Map.pdf/4d74249a-c7e4-5464-76be-fb94027fe567?t=1702377142360$ , last accessed 16/01/2024



<sup>&</sup>lt;sup>16</sup> Rugby Borough Council, 2019,

Figure A1.1 Green Infrastructure Policies Map





## **Biodiversity Actions Plans<sup>17</sup>**

Calcareous grassland

A1.25. The Warwickshire Wildlife Trust has local biodiversity action plans for the habitats and species set out below. Below are listed only those appropriate to the site and its surroundings.

#### A1.26. Habitat Action Plans:

•	Acid	grass	land
-	Aciu	Sidoo	uiiu

• Field margins

Hedgerows

• Lakes and Reservoirs

Lowland Heathland

Marsh and Swamp

 Mosaic Habitats on Previously Developed Land

Neutral Grassland

 Old Parkland and Veteran Trees Ponds

Reed Beds

Rivers and Streams

Roadside verges

Woodland

#### A1.27. Species Action Plans:

Adder

Argent & Sable Moth

Barn Owl

Bats

• Bittern

Black Poplar

Bloody-Nosed Beetle

Chalk Carpet Moth

Common Dormouse

Cuckoo Bee

• Dingy Skipper

Dotted Bee-Fly

• Farmland Birds

Great Crested Newt

Hedgehog

Lapwing

• Leaf-Rolling Weevil

Otter

Rare Bumblebees

Red Wood Ant

• Scarce Arable Plants

Small Blue Butterfly

Snipe

Song Thrush

Wading Birds

Water Vole

White-Clawed Crayfish

Wood White Butterfly

 $<sup>^{17}\</sup> Warwickshire\ Wildlife\ Trust,\ n.d.,\ https://www.warwickshirewildlifetrust.org.uk/LBAPActionPlans,\ last\ accessed\ 16/01/2024$ 



# **Appendix 2: Methodology and Results**

#### **Data Search**

- A2.1. A desk-based study was conducted whereby records of designated sites and records of protected and priority species were purchased and interrogated for the site and the surrounding landscape. The aim of the data search is to collate existing ecological records for the site and adjacent areas. Obtaining existing records is an important part of the assessment process as it provides information on issues that may not be apparent during a single survey, which by its nature provides only a 'snapshot' of the ecology of a given site.
- A2.2. The following resources were consulted/contacted:
  - Multi-Agency Geographic Information for the countryside (MAGIC) website<sup>18</sup>;
  - Warwickshire Biological Records Centre (WBRC)<sup>19</sup>; (Data ordered and received in September 2023);
  - Rugby Borough Council website<sup>20</sup>;
  - Ordnance Survey mapping; and
  - Google Maps, including aerial photography.
- A2.3. The following areas of search around the boundary of the site boundary were applied:
  - 2 km for protected and priority species, national statutory designated and non-statutory sites; and
  - 10 km for European statutory sites.

#### Limitations

4.5. The site sits on the edge of the WBRC area. Therefore, part of the 2 km search area for protected and priority sites and species falls within Leicestershire and Rutland Environmental Records Centre's (LRERC) remit. Records were not requested from LRERC at this time and would need to be requested prior to a planning application. It is considered that this will not affect our assessment or advice at this stage.

## 'Extended' Phase I Survey and UK Habs

A2.4. An 'extended' Phase 1 survey was carried out on the 27th September 2023 by Charlotte Smith BSc (Hons) PhD, a suitably experienced ecologist and qualifying member of CIEEM. The methods used during the walkover survey broadly followed methods used in an 'extended' Phase I habitat survey<sup>21</sup> and entailed recording the main plant species

<sup>&</sup>lt;sup>21</sup> Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey - a technique for environmental audit. JNCC, Peterborough.



<sup>&</sup>lt;sup>18</sup> https://magic.defra.gov.uk/ [Last accessed 16/01/2024]

<sup>&</sup>lt;sup>19</sup> https://www.warwickshire.gov.uk/environment-ecology/warwickshire-biological-records-centre [Accessed: September 2024]

<sup>&</sup>lt;sup>20</sup> https://www.rugby.gov.uk/ [Last accessed 16/01/2024]

- and classifying and mapping habitat types with reference to the Habitat Definitions provided by the UK Habitat Classification Working Group<sup>22</sup>.
- A2.5. Additionally, the habitats identified were evaluated for their potential to support legally protected and notable fauna species. Where access allowed, adjacent habitats were also considered in order to assess the site within the wider landscape and to provide information with which to assess possible impacts within the context of the site boundary.
- A2.6. All habitats were assessed utilising the relevant condition criteria for the relevant habitat type under Metric 4.0", which included confirming 'pass' / 'fail' criteria taken from the UK Habitat/Phase 1 methodology where necessary.

#### Limitations

- A2.7. Hedgerow and ditch vegetation cutting took place on some of the field boundaries before the site visit on 27th September. However, this does not affect our habitat assessment or advice.
- A2.8. Access to the grassland and hedgerows in the southwest corner of site were restricted by the presence of livestock (young cows). It is possible that the grassland is of higher quality than recorded. It's therefore recommended that a grassland survey of the pasture field be undertaken when livestock are absent for confirmation of habitat distinctiveness.

# **Preliminary Bat Surveys**

- A2.9. The surveys followed standard methodologies set out in the Bat Mitigation Guidelines<sup>23</sup>, the Bat Workers Manual<sup>24</sup> and Bat Surveys for Professional Ecologists- Good Practice Guidelines 4<sup>th</sup> Edition<sup>25</sup> and comprised:
  - Day-time Bat Walkover (DBW) Walkover of the sites to assess potential bat activity including foraging areas and potential commuting routes; and
  - Ground Level Tree Assessment (GLTA) Ground level inspection of trees to assess potential of trees on site to support roosting bats.

#### Day-time Bat Walkover (DBW)

A2.10. A DBW was undertaken on all habitats within the site boundary. The assessment was undertaken on 27th September 2023 by Charlotte Smith BSc (Hons), a qualifying member of CIEEM. All surveys were daytime inspections and the conditions for all surveys were considered optimal. The DBW assessed habitats on-site for the likelihood to be used by foraging and commuting bats as detailed in **Table A2.1** below. This combined with desk study records of local bats and bat roosts, and potential for roosting bats on-site is used to determine suitability of the site for bat activity.

Table A2.1: Flight Path and Foraging Habits Assessment Criteria - adapted from Collins, 2023.

<sup>&</sup>lt;sup>25</sup> Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6



<sup>&</sup>lt;sup>22</sup> UKHab Ltd. (2023). UK Habitat Classification Version 2.0 (at https://www.ukhab.org)

<sup>&</sup>lt;sup>23</sup> Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.

<sup>&</sup>lt;sup>24</sup> Mitchell-Jones, A.J, & McLeish, A.P. (eds). (2004) 3rd Edition Bat Workers' Manual., JNCC, Peterborough, ISBN 1 86107 558 8

Suitability	Description of Roosting Habitats
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e.no habitats that provide continuous lines ofshade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a smallelement of uncertainty remains in order to account fornon-standard bat behaviour.
Low	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.
	Suitable, but isolated habitat that could be used by smallnumbers of foraging bats such as a lone tree (not in aparkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens.
	Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge.
	High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.
	Site is close to and connected to known roosts.

# **Ground Level Tree Assessment (GLTA)**

A2.11. A GLTA was undertaken on all trees within the site boundary. The assessment was undertaken on 27th September 2023 by Charlotte Smith BSc (Hons), a qualifying member of CIEEM. All surveys were daytime inspections and the conditions for all surveys was considered optimal. The location of the trees at the site are shown on Plan 16228/P01. All trees were inspected from the ground using digital camera and torch. Potential Roosting Features (PRFs) of interest include those detailed in Table A2.2 below.

 Table 2.2: PRF Types hat can be Exploited by Bats and How they Form - adapted from Collins, 2023.

PRFs formed by disease and decay	PRFs formed by damage	PRFs formed by association with trees
Woodpecker holes	Lightning strikes	Fluting
Squirrel holes	Hazard beams	lvy
Knot holes	Subsidence	
Pruning cuts	Cracks	
Tear outs	Shearing cracks	
Wounds	Transverse snaps	
cankers	Welds	



Compression	Lifting bark	
Forks	Desiccation	
Butt rots	Fissures	
	Frost cracks	

A2.12. The potential of trees to support roosting bats was assessed using the criteria shown in **Table A2.3** below.

Table 2.3: Assessment of Tree Suitability Criteria - adapted from Collins, 2023.

Roost Suitability	Description of Roosting Habitat
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

## **Biodiversity Net Gain**

- A2.13. The Statutory Biodiversity Metric operates by calculating the number of biodiversity units associated with a particular habitat type (both pre-and post-development) the 'unit' value associated with each habitat type is calculated based on the following parameters:
  - Size (in hectares)/Length (in km);
  - Distinctiveness (i.e. how rare/valuable a given habitat is);
  - Condition (i.e. how well the recorded habitat fits [or will fit] the standardised description of that habitat);
     and
  - Strategic significance (i.e. if the existing or proposed habitat is within an area formally adopted in the local plan for green infrastructure or biodiversity improvements).
- A2.14. When considering the creation of new habitats in the post-development site, other factors are also considered when calculating the 'unit' value of a given habitat and these are:
  - Time to reach the target condition of each habitat; and
  - Difficulty category for the creation of a given habitat.
- A2.15. A calculation has been undertaken using the baseline habitats identified during habitat condition assessment survey, which was carried out on the 27th September 2023, alongside the 'extended' Phase 1 survey above. All surveys were carried out by Charlotte Smith BSc (Hons) PhD, a suitably experienced ecologist and qualifying member of CIEEM.
- A2.16. The UK Habitat Classification was used to identify habitat types. Note that the calculation is completed separately for non-linear and linear habitats. Habitat areas entered into the biodiversity metric 4.0 in hectares were rounded to two decimal places.



#### **Evaluation**

- A2.17. The evaluation of habitats and species is defined in accordance with published guidance<sup>26</sup>. The scale of importance of each ecological feature is assigned within a defined geographical context, namely international and European, national, regional, county, and local. Below these are features considered to be of negligible importance.
- A2.18. Consideration will also be given to legally protected or controlled species which are 'important features' in the context of this assessment, for which mitigation measures are required to ensure legal compliance, regardless of their geographic scale of importance. Thus, it is possible for a feature of negligible ecological importance to be legally protected and hence require mitigation.
- A2.19. Evaluation is based on various characteristics that can be used to identify ecological features likely to be important in terms of biodiversity. These include site designations (such as Sites of Species Scientific Interest (SSSIs), or for undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological feature. In terms of the latter, quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.



# **Appendix 3: BNG Baseline and Suggested Action**

Table 2.3. Table 3.1. Baseline Habitat Assessment and Suggested Action

Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Condition	Suggested action to address habitat losses
Cropland	Winter Stubble/Cereal Crop	84.15	Low	Condition Assessment NA	Same distinctiveness or better habitat required ≥
Grassland	Modified grassland	6.48	Low	Poor	Same distinctiveness or better habitat required ≥
Woodland and forest	Lowland mixed deciduous woodland	1.29	High	Good	Same habitat required =
Sparsely vegetated land	Ruderal/Ephemeral	0.05	Low	Moderate	Same distinctiveness or better habitat required ≥
Lakes	Ponds (non-priority)	0.05	Medium	Moderate	Same broad habitat or a higher distinctiveness habitat required (≥)
Individual trees	Rural tree	4.05	Medium	Good	Same broad habitat or a higher distinctiveness habitat required (≥)

Table 3.2. Baseline Hedgerow Assessment and Suggested Action

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	Suggested action to address hedgerow losses
H1, H4	Native hedgerow - associated with bank or ditch	0.48	Medium	Good	Same distinctiveness band or better
Н9	Native hedgerow - associated with bank or ditch	0.27	Medium	Moderate	Same distinctiveness band or better
Н3, Н5	Native hedgerow - associated with bank or ditch	1.24	Medium	Poor	Same distinctiveness band or better
H10, H12, H22, H23	Native hedgerow	1.13	Low	Good	Same distinctiveness band or better
H13	Native hedgerow	0.08	Low	Moderate	Same distinctiveness band or better
H6, H18-20	Native hedgerow	1.41	Low	Poor	Same distinctiveness band or better



H2, H7, H8, H11	Species-rich native hedgerow - associated with bank or ditch	1.07	High	Good	Like for like or better
H14, H15, H17	Species-rich native hedgerow - associated with bank or ditch	1.08	High	Moderate	Like for like or better
H16	Species-rich native hedgerow	0.23	Medium	Moderate	Same distinctiveness band or better

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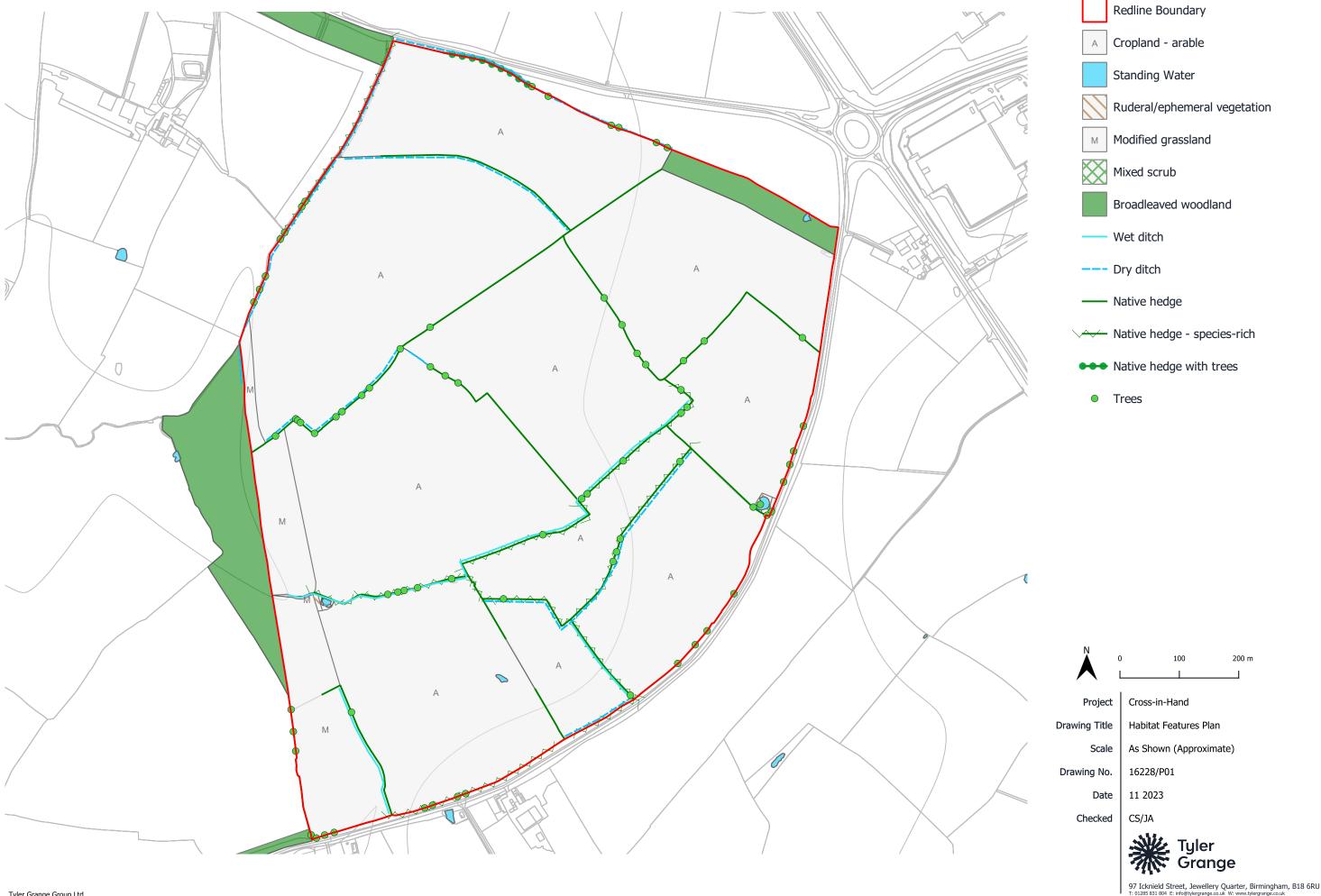


# Plans:

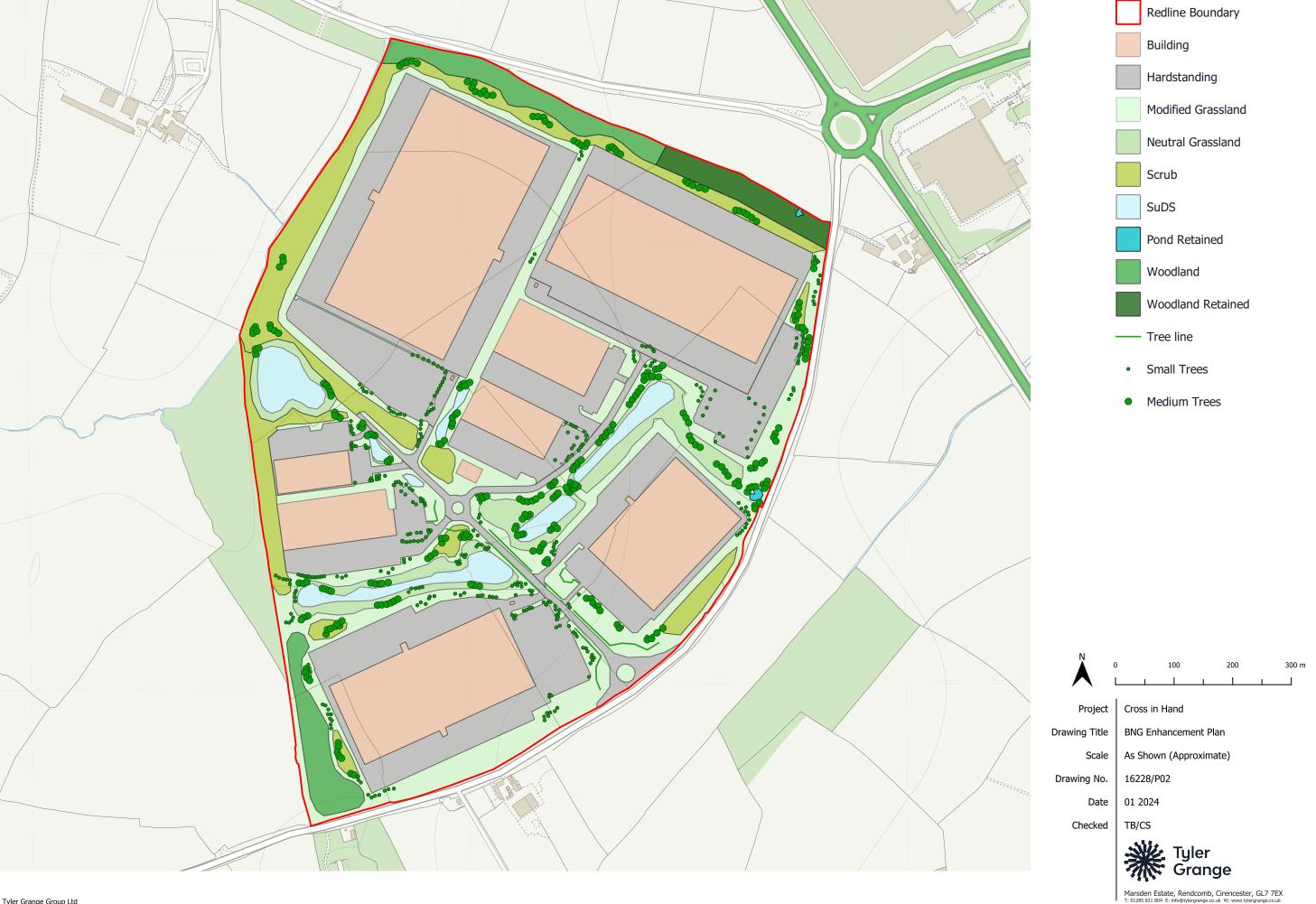
Plan 1: Habitat Features Plan 16228/P01

Plan 2: Indicative BNG enhancement Plan 16228/P02





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