Derek Finnie Associates®
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Land east of Lunce's Hill, Haywards Heath

Ecological Assessment

January 2025

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REGISTERED
PRACTICE 2024-2025

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Report Ref: DFA24115V2

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1 INTRODUCTION

1.1 Background

1.1.1 Derek Finnie Associates was commissioned by Catesby Strategic Land Ltd and Rurban Estates Ltd. to undertake an Ecological Assessment in relation to an area of land referred to as Land east of Lunce's Hill, Haywards Heath, herein referred to as the 'Site' (Figure 1). Catesby is seeking outline planning permission for the erection of up to 130 dwellings, together with the change of use of an existing barn for flexible community or commercial use along with associated outdoor space and landscaping, drainage infrastructure, hard and soft landscaping, parking, access and associated works (all matters reserved except for access). Therefore, there is a need to understand the ecological value of the Site and determine the presence of ecologically valuable habitats and/or protected species or species of a raised conservation status, as these are a material consideration in planning system.

1.1.2 To this end, an Extended Phase 1 Habitat survey of the Site was undertaken in July 2023 and March 2024, [redacted] reptile, water vole, otter, bird and bat assessments being conducted throughout the summer/early autumn of 2024. The following report describes the methodology employed, describes the current ecological conditions within the Site, evaluates the ecological receptors identified and assesses the potential impact of the proposal based on information gathered to date.

1.1.3 The application site straddles the boundary of Lewes District Council and Mid Sussex District Council; therefore, two identical planning applications have been submitted to each local planning authority. The contents of this report considers the relevant adopted and emerging planning policies forming part of the Local Development Plans in each authority area.

1.1.4 For a full list of planning policy and guidance, please refer to the submitted Planning and Affordable Housing Statement.

2 LEGISLATIVE FRAMEWORK

3 National policy and Guidance

Legal Framework

3.1.1 The legislative framework applicable to this assessment is summarised below.

International Conventions and Directives

- Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive);
- Council Directive 2009/147/EC on the Conservation of Wild Birds (Birds Directive);
- The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979;
- The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1983; and
- Convention on Biological Diversity 1992.

National Legislation

- Environment Act 2021
- The Wildlife and Countryside Act 1981 (WCA);
- The Conservation of Habitats and Species Regulations 2017;
- The Countryside and Rights of Way Act 2000 (CRoW);
- Natural Environment and Rural Communities Act 2006 (NERC);
- [redacted]
- The Hedgerow Regulations 1997.

Statutorily Protected Sites

3.1.2 Local Nature Reserves (LNRs); National Nature Reserves (NNRs); Sites of Special Scientific Interest (SSSIs); Special Areas of Conservation (SAC); and Special Protection Areas (SPAs) contain examples of some of the most important natural and semi-natural ecosystems in Europe and receive strict protection under United Kingdom (UK) legislation. Although not strictly protected under legislation, Ramsar sites are given the same level of protection through policy.

Non-Statutory Sites

3.1.3 Non-statutory sites of county conservation value are designated by Local Planning Authorities (LPAs). Such sites are afforded a measure of protection in local development plans.

Protected Species

3.1.4 Under UK legislation, a number of species, including bats *Chiroptera* sp. and great crested newts *Triturus cristatus* are strictly protected from death, injury or harm; whilst places used for their shelter or rest are protected from damage, disturbance and

destruction. Certain species such as some reptiles and birds only receive partial protection under UK legislation, e.g. protection from killing / injuring only or protection at certain times of the year only.

Invasive Weeds

3.1.5 The WCA 1981 makes it an offence to plant or otherwise cause to grow in the wild numerous species including Japanese knotweed *Fallopia japonica* and giant hogweed *Heracleum mantegazzianum*.

Non-Statutory Policies

3.1.6 The UK Biodiversity Action Plan (UK BAP) was established in response to the global Convention on Biological Diversity, 1992. Individual Action Plans define actions and measures to meet the conservation objectives defined in the strategy and specify measurable targets. They determine the broad habitats and species that are of value to the natural environment of the UK and identify actions and projects that could be undertaken to help protect or enhance the national biodiversity.

3.1.7 Local Biodiversity Action Plans (LBAPs) are implemented through planning policy, identifying habitats and species in need of conservation action at the local or regional level. BAPs in the UK have no statutory status but provide a framework for implementing conservation requirements.

Planning Policy

National Planning Policy

National Planning Policy Framework 2024

3.1.8 The following objectives relating to biodiversity conservation are considered relevant to this assessment. The National Planning Policy Framework (NPPF) seeks to:

- Protect and enhance valued landscapes, geological conservation interests and soils;
- Recognise the wider benefits of ecosystem services;
- Minimise impacts on biodiversity and provide net gains in biodiversity, where possible, contribute to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- Prevent both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability;
- Remediate and mitigate despoiled, degraded, derelict, contaminated and unstable land, where appropriate; and
- Prevent the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.

Local Development Plans

3.1.9 The following policies from the adopted Development Plans for Lewes and Mid Sussex Districts are relevant to this report:

- Lewes District Local Plan Part 1- Core Policy 8 and 10
- Lewes District Local Plan Part 2 – Policy DM24
- Mid Sussex District Local Plan – Policy DP37 and DP38
- Wivelsfield Neighbourhood Plan – Policy 6
- Haywards Heath Neighbourhood Plan – Policy E6

3.2 Guidance

3.2.1 This assessment has been undertaken with reference to the Chartered Institute for Ecology and Environmental Management's Ecological Impact Assessment (EcIA) (CIEEM 2018) as well as the latest sectoral guidance produced by the CIEEM and in line with *BS42020: 2013 Biodiversity – Code of Practice for Planning and Development*.

3.2.2 Also of relevance is Lewes District Council's Biodiversity Net Gain Technical Advice Note.

4 METHODOLOGY

4.1 Data Search

4.1.1 A review of the Government's MAGIC website was undertaken for the location and extent of statutory protected sites within 2km of the Site, extending to 5km in the case of Natura 2000 sites.

4.1.2 Surrey Biological Information Centre (SBIC) was also contacted for information they may hold on non-statutory designated sites as well as species of a raised conservation status within a 2km radius of the Site.

4.2 Survey Extent

4.2.1 The entirety of the land within the Application Site (Red Line) was surveyed.

4.3 Habitat Survey

4.3.1 An 'extended' Phase 1 Habitat Survey was carried out on the 18th July 2023 and 23rd March 2024. The survey methodology followed that presented by the JNCC (2010). The Phase 1 technique aims to classify each habitat into categories based on the assemblage of plant species present, with the dominant plant species for each habitat being noted. In some cases, sub-divisions or modifications of the standard categories can be made where this is useful in providing further detail.

4.3.2 An 'extended' form of the basic methodology was employed to determine whether any notable or protected species of fauna utilise the study area, in particular [redacted] bats, amphibians, reptiles and birds. In the absence of direct evidence of these species, an assessment was made of the potential for the site to support such species.

4.3.3 Additional data on certain vegetation parameters were also collected during the site survey to allow the Defra Biodiversity Net Gain metric to be completed.

4.4 [redacted]

4.4.1 [redacted]

4.4.2 [redacted]

4.4.3 The following criteria were used when classifying any setts found (after Thornton 1988):

- **Main Setts:** These usually have a large number of holes with large spoil heaps and generally look well used. They usually have well defined paths to and from the sett and between sett entrances. Although normally the breeding sett, it is in continual

use all year round. It is possible to find a main sett that has become disused because of excessive disturbance.

- **Annexe Setts:** These are generally close to a main sett, within 50m or so, and are usually connected to the main sett by one or more obvious, well-worn paths. They consist of several holes, but are not necessarily in use all the time, even if the main sett is very active.
- **Subsidiary Setts**: Often these have only a few holes, are usually at least 50m from a main sett, and do not have an obvious path connecting them with another sett. They are not continuously active.
- **Outlier Setts**: These usually only have one or two holes, often have little spoil outside the hole, have no obvious path connecting them with another sett, and are only used sporadically.

4.5 Reptile survey

4.5.1 During the Phase 1 Habitat survey, potentially suitable reptile habitat was identified, hence it was deemed appropriate to undertake a species-specific survey of this taxon.

4.5.2 A total of 90 refugia, consisting of heavy-duty roofing felt approximately 0.5m^2, were placed across the Site in line with best practice survey guidance. To maximise the efficiency of the survey the refugia were concentrated in areas which appeared to be more likely to support reptiles which was deemed to be the edges of the field (Figure 2). As the Site covers 8.81ha (excluding parts of the red line boundary in the highway), the placement of 90 refugia results in a density slightly above that recommended by Froglife (1999) of 10ha^{-1}; the additional ones allow for some loss or damage to the refugia during the course of the survey without affecting the results significantly.

4.5.3 The refugia generally heat up quicker than the surrounding environment, which makes them attractive to reptiles which need to attain a certain body temperature to hunt effectively. Thus, careful inspection of the refugia results in a more effective way to locate these often-elusive animals.

4.5.4 The refugia were placed on Site on the 18th April 2024 and allowed to 'bed in' for at 10 days before the survey proper began. The refugia were checked on seven occasions throughout the survey period, on suitable days, which are classified as sunny, or partially sunny days, with little or no wind and an air temperature between 8°C and 19°C, as summarised in Table 1.

Table 1. Reptile Survey Dates and Conditions

Visit No.	Date	Weather
1	28th April	15°C, sunny, no cloud
2	3rd May	12°C, 1/8 cloud
3	15th May	14°C, 3/8 cloud, light wind
4	3rd June	16°C, sunny, 3/8 cloud
5	21st June	14°C, sunny, no cloud
6	15th July	12°C, sunny, no cloud
7	21st August	11°C, sunny, 1/8 cloud

4.5.5 In addition to checking the artificial refugia, other suitable natural basking areas around the Site were carefully inspected from a short distance using Leica 10x32 BGA binoculars, expanding the search area to cover parts of the Site where refugia could not be placed.

4.6 Bat Survey

Night Time Walkover Surveys (NTWS)

4.6.1 The methodology for the activity surveys was based on that outlined within the Bat Conservation Trust guidelines (BCT 2023), modified to meet the specific site requirements. The aim of the survey was to provide an indication of the level of bat activity within the study area, the species present and their distribution.

4.6.2 Four NTWS have been undertaken across the Site on the dates shown in Table 2. The surveys commenced approximately 15 minutes prior to sunset and concluded one and half hours after sunset. The surveyor was positioned towards the east of the Site where bat activity was likely to be greatest. Forty-five minutes after sunset, when commuting appeared to have ceased, the surveyor walked a continuous transect along a predetermined route (Figure 3), noting bat activity enroute. The surveyor was equipped with an 'Echo Meter Touch Pro 2' bat detector and a pair of 'Hikmicro Habrok 4K HE25L' infra-red and thermal imaging binoculars. The Echo Meter Touch Pro 2 allows bat calls to be recorded in both full spectrum and heterodyne; any bat calls can then be analysed using specific software where necessary.

Table 2. Bat Activity Survey Dates

Date	Sunset	Start time	Temperature	Weather
11/05/24	20:41	20:20	13 °C	1/8 cloud, light wind
09/06/24	21:17	20:55	14 °C	Clear, dry
10/08/24	20:36	20:20	15 °C	3/8 cloud, no wind
06/09/24	19:42	19:20	13°C	2/8 wind, light wind

Static Surveys

4.6.3 In addition to the activity surveys, two Anabat Swift static detectors were placed within the branches of suitable tree on six occasions (See Figure 3). The static detectors were in place between:

- 9th – 13th May,
- 7th – 11th June,
- 13th – 18th July,
- 2nd – 7th August,
- 31st August to 4th September and
- 15th – 20th September 2024.

4.6.4 A 2m microphone extension lead was used to ensure the microphone was located within the optimum presumed flight path of any foraging bats.

4.6.5 In addition, an Anabat Swift detector was left inside the barn on two occasions, between 8th – 12th June and 2nd – 7th August 2024.

4.6.6 The data from the detectors were analysed using Anabat Insight with *BatClassify UK AutoID*, with the ID Tag Certainty Threshold set at 80%. For the commoner species (common pipistrelle and soprano pipistrelle) one in every ten recordings was checked manually, with recordings being compared to those presented by Russ (2012); for the more uncommon species, every recording was checked manually.

4.6.7 Given the size of the Site, the habitats present and the predicted level of impact, the level of bat survey was deemed sufficient; this is in line with the proportionality principles presented in Section 5.5 of BS42020.

Bat Roost Assessment

Budlings

4.6.8 An external inspection of the barn was undertaken during good weather, with access being available to all aspects of the external features buildings. Leica 10 x 32 BGA binoculars, a CluLite 1 million candlepower torch, a small extendable mirror and a 4m telescopic ladder were used to assist in the search as necessary. The external features of the building, particularly the roof and ridge lines were inspected for potential ingress/egress points.

4.6.9 After the external inspection, an inspection of the internal void spaces of the building was undertaken. Evidence of droppings, scratch marks, staining, feeding remains, urine stains and bats themselves were sought throughout the void space. Particular attention was paid to the areas underneath the ridge and joists, especially where the two meet. Evidence of gaps in the roof, indicating access to the outside, was sought, as well as gaps into any cavities that may be present. Again, a CluLite 1 million candlepower torch was used to assist in the search.

4.6.10 In addition, two emergence surveys were conducted of the barn to investigate if any bats emerged, hence allowing a more detailed assessment of the barn's use as a roost to be determined. The emergence surveys were conducted on 8th June and 2nd August employing two surveyors, positioned at opposite sides of the building.

4.6.11 The potential of the building to support bat was assessed against the criteria in Table 3.

Trees

4.6.12 Whilst this is an outline application, with the layout potentially being subject to slight changes, to date no trees have been identified for removal.

Table 3. Assessment criteria for bat roost evaluation.

Suitability	Description
None	No features that could be used by bats.

Suitability	Description
Negligible	No obvious habitat features on site likely to be used by bats, but a small element of uncertainty remains.
Low	A structure or feature with one or more potential roosts sites that could be used by individual bats opportunistically
Moderate	A structure with one or more potential roost sites that could be used by bats due its size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
High	A structure with one or more potential roost sites that are obviously suitable for use by a large number of bats on a more regular basis.

4.7 Breeding Bird Survey

4.7.1 Territory mapping, as described by Bibby *et al* (2000) was used to assess the breeding bird assemblage within the Site. A transect was walked across the Site on four separate occasions, with the route being reversed on the second and fourth visit. The transect came within 50m of all points of the Site to ensure an adequate survey effort was achieved.

4.7.2 Observations of all bird species encountered, with the number, sex (where possible) and any breeding or territorial behaviour being noted on a large-scale field map. The transects were undertaken first thing in the morning, although care was taken to avoid the first hour after sunrise as this is the time of highest bird activity and may skew the results in favour of the area at the start of the transect. The survey was conducted in fine weather on the 3rd April, 17th May, 25th May and 6th June 2024.

4.7.3 Signs of breeding activity, such as nests themselves or parents carrying food or faecal sacs, as well as repeated territorial behaviour allows the potential breeding status of individual birds to be determined as shown in Table 1, subject to certain assumptions (after IBCC 1969).

Table 4. Breeding Status Criteria

Breeding Status	Criteria
Confirmed	Active nest, dependent young, parents carrying food, parents carrying faecal sacs.
Probable	Pair observed in suitable habitat, repeated territorial behaviour/display in the same area.
Possible	Individual observed in suitable habitats, single observation of territorial behaviour/display
Non-breeding	Individual observed in un-suitable habitat.

4.8 Water Vole

4.8.1 A survey for field evidence of water vole such as droppings, latrines, burrows, feeding stations and footprints as well as the animals themselves was undertaken within areas that displayed suitable habitat characterises based on the methodology presented in the "Water Vole Conservation Handbook" (Strachan & Moorhouse 2006).

4.8.2 The survey concentrated on the banks of the stream along the north and west of the Site.

4.8.3 The survey visit was undertaken on the 19th May 2024.

4.9 Otter Survey

4.9.1 The otter survey followed the same basic methodology utilised in the national Otter Survey of England 1991-1994 presented by Strachan & Jefferies (1996). This comprise examining the water courses within the Site for signs of Otter including sightings, footprints, holts, slides, spraints, rolled vegetation, couches, refuges and feeding remains. The survey visit was also conducted on the 19th May 2024

4.10 Survey Constraints

4.10.1 Phase 1 can be undertaken at any time of the year, with July and March being considered to be one of the more favourable months. Hence, confidence in the results is high.

4.10.2 There were no major constraints to the surveys, with access being available to all areas of the Site.

4.10.3 All survey work was undertaken by Derek Finnie BSc DipCons MSc CEnv MIEnvSc MCIEEM, Managing Director of Derek Finnie Associates who has over 30 years' experience as a practicing ecologist.

5 SITE DESCRIPTION

5.1 Desk Study

Statutory Sites

5.1.1 There are no Natura 2000 Sites within 5km of the Site and no SSSIs within 2km of the Site.

5.1.2 Ashdown Forest SAP/SAC is 12.8km to the east. Lewes Downs SAC is some 13.5km to the south east.

Non-Statutory Sites

5.1.3 There are several areas of ancient woodland within the wider area, with the woodland block contiguous with the eastern site boundary considered to be ancient replanted woodland.

Species of a Raised Conservation Status

5.1.4 SBIC did not provide any records of specially protected species or species of a raised conservation status for the Site itself.

5.2 Extended Phase 1 Survey

5.2.1 The Site, which covers approximately 8.81ha (excluding the existing highway), comprises several fields delineated by hedgerows. A small stream, Pellingford Brook, runs through the centre of the Site.

5.2.2 The fields themselves supports semi-improved grassland which are reportedly normally cut for silage/hay.

5.2.3 The following Phase 1 habitats were encountered within the Site:

- Broad-leaved trees (scattered);
- Hedgerows;
- Scrub;
- Semi-improved grassland;
- Dry ditch;
- Watercourse; and
- Buildings and hardstanding.

5.2.4 Each habitat is described in turn below and depicted on Figure 1.

Broad-leaved trees (Scattered)

5.2.5 The are numerous semi-mature trees, principally associated with the hedgerows around the Site, with oak *Quercus* sp being the most frequent species; ash *Fraxinus excelsior* and the occasional willow *Salix sp.* are also present particularly towards the north of the Site.

Hedgerows

5.2.6 There are numerous hedgerows within the Site where they delineate the majority of the fields. The species composition and structure of each hedgerow is summarised Table 5 (See Figure 1 for hedge numbers).

Table 5. Summary of Hedgerows

Hedgerow Number	Description	'Important' on ecological grounds*	HPI**
H1	A line of semi-mature oaks with a blackthorn dominated hedge as an understorey.	No	Yes
H2	A line of semi-mature oaks, ash and willow with a blackthorn dominated hedge as an understorey.	No	Yes
H3	Mixed hedgerow comprising hawthorn, blackthorn, wych elm, dogrose and ash. Ditch, occasionally with some water, runs along western edge.	Yes	Yes
H4	Well managed, box flailed hawthorn hedge, gap in the centre for vehicular access.	No	Yes
H5	Well managed, box flailed hawthorn hedge, gap at end for vehicular access.	No	Yes
H6	A line of semi-mature oaks with a blackthorn dominated hedge as an understorey. Several dead ash	No	Yes
H7	A line of semi-mature oaks with a blackthorn dominated hedge as an understorey.	No	Yes

* - In line with the Hedgerow Regulations 1997;
** -Habitat of Principle Importance under the NERC Act 2006.

Scrub

5.2.7 Either side of Pellingford Brook, a strip of bramble *Rubus fruticosus* agg. dominated scrub has developed, with the occasion blackthorn sapling and self seeded willow *Salix* also present.

Semi improved grassland

5.2.8 Semi-improved grassland is the most abundant habitat within the Site, occupying approximately 90% of area, with the vast majority of it being species poor. Graminoid species include those commonly associated with agriculturally improved grassland such as perennial rye grass *Lolium perenne*, cock's-foot *Dactylis glomerata,* Yorkshire fog *Holcus lanatus* with the occasional compact rush *Juncus glomerata*, indicating some wetter areas in the soil.

5.2.9 Forbes present include white clover *Trifolium repens*, meadow buttercup *Ranunculus acris*, broad-leaved dock *Rumex obtusifolius*, sheep's sorrel *R. acetosella* common

bindweed *Convolvulus arvensis* and the occasional patch of common nettle *Urtica dioica*, especially toward the end of the fields.

5.2.10 However, either side of hedgerow H3, is a small strip of more species rich grassland. Here, the grass species sweet vernal grass *Anthoxanthum odoratum* and marsh foxtail *Alopecurus geniculatus* were also present, as were sneezewort *Achillea ptarmica*, meadowsweet *Filipendula ulmaria*, hedge bedstraw *Galium mollugo*, black knapweed *Centaurea nigra,* bird's-foot trefoil *Lotus corniculatus* and teasel *Dipsacus fullonum*.

Watercourse

5.2.11 Pellingford Brook runs west to east through the lower third of the Site.

5.2.12 The stream is contained within a steep sided channel (45°), with the bank reaching 1.5m in places. The flowing water is between 1 and 1.5m in width and was up to 0.2m deep. The bed appeared to be mainly comprised of silt and gravel.

5.2.13 There is paucity of aquatic or emergent vegetation, with the exception of the occasional pendulous sedge *Carex pendulous* and willow saplings. The banks of the brook contain developing bramble scrub.

Buildings and hardstanding

5.2.14 Towards the west of the Site is a brick built barn with a tiled pitched roof.

5.3 Fauna

5.3.1 [redacted]

Bats

NTWS

5.3.2 The NTWS realised a low to moderate bat assemblage with only five species of bat being encountered, namely common pipistrelle, soprano pipistrelle, noctule, brown long eared bat and *Myotis* spp.

5.3.3 Up to four common pipistrelle were noted foraging up and down woodland on the west of Site's western boundary The first registration was some 20 minutes after sunset, suggesting the roost is nearby, but unlikely to be within the Site given the timings of the bats' fist registrations after sunset. Three soprano pipistrelle were also noted in this area.

5.3.4 A maximum of three noctule were noted forging high over the field at, or around, sunset, which is typical of this species. Additional registrations were noted associated with tree belt leading from the office complex. Two , possibly three *Myotis* species were detected 35 minutes after sunset, also apparently foraging along the edge of the woodland.

5.3.5 A summary of bat registration encountered during the surveys is present in Table 6.

Table 6. Summary of Bat registrations during transect.

Species	11/05/24	09/06/24	10/08/24	06/09/24
Common pipistrelle	31	32	17	27
Soprano pipistrelle	16	19	12	9
Noctule	7	6	4	11
Brown-long eared bat	3	5	2	3
Myotis spp.	2	4	5	6

Static surveys

5.3.6 The result of the static surveys mirror those of the NTWS, although the proportion of *Myotis* spp. was perhaps higher on the static detectors. Barbastelle's bat was also noted, bringing the number of species associated with the Site to at least six. The number of bat registrations, given as summed totals for each five night period are presented in Table 7.

Table 7. Summary of BRPN (summed over 5 nights)

Species	9th – 13th May		8th – 12th June		12h – 17th July		2nd – 7th August		31st – 4h September		15th – 20th September	
	Det 1	Det 2	Det 1	Det 2	Det 1	Det 2	Det 1	Det 2	Det 1	Det 2	Det 1	Det 2
Common pipistrelle	595	278	433	301	479	215	551	157	388	213	411	215
Soprano pipistrelle	119	85	132	99	216	36	98	57	71	69	112	97
Noctule	48	32	31	18	22	25	21	16	31	15	16	5
Myotis spp.	14	12	6	18	5	11	16	11	21	16	9	17
Brown Long eared	-	3	3	3	2	1	3	3	2	5	2	3
Barbastelle's bat	2	-	-	-	2	1	-	-	1	-	1	-

5.3.7 The results of the Anabat from within the barn are summarised in Table 8. As can be seen, there appears to be a higher concentration of brown-long eared bat activity in and around the barn. From reviewing the time of individual registrations, it would appear that they are feeding in the barn as well as roosting in it.

Table 8. Summary of BRPN within the barn

Species	8th – 12th June	2nd – 7th August
Common pipistrelle	558	421
Soprano pipistrelle	153	123
Brown long-eared bat	164	98

Roost Survey

5.3.8 Several droppings consistent with those of brown long-eared bat were noted inside the barn, principally below the main ridge line in the central area of the barn. Two brown long eared bats were noted emerging from the barn on the 8th June and heading east, with a single brown long-eared bat observer emerging on the 2nd August and flying off in a north east direction.

Reptiles

5.3.9 The reptile survey did not record any reptiles within the Site. The normal management of the grassland through cutting may have resulted in the sward being too short for much of the year to support such species.

Amphibians

5.3.10 There are no waterbodies within the Site or the immediate surrounding area. Therefore, the potential for terrestrial phase great crested newts to be within the Site is negligible.

Birds

5.3.11 A total of 22 species were recorded from within and immediately adjacent the Site. The majority of the species encountered were associated with hedgerows and offsite woodland. Very few species were associated with the fields themselves, although it is apparent the swallows, which are breeding in the barn, foraging extensively over the grassland.

5.3.12 House sparrow and starling were associated with existing residential properties to the west of the Site, outside the application boundary.

5.3.13 Eleven were confirmed as breeding (Table 9), eight were assessed to be probable breeders and two as possible breeders.

5.3.14 Three Species of Principle Importance (SPI), as defined by Section 41 of the NERC Act were recorded, namely house sparrow, song thrush and starling. Three species that are included on the Birds of Conservation Concern (BoCC) Red list and five which are on the Amber list were also noted.

Table 9. Summary of Breeding Species Recorded.

Species		Breeding Status	Conservation status
Common name	Scientific name		
Blackbird	*Turdus merula*	Confirmed	
Blackcap	*Sylvia atricapilla*	Probable	
Blue tit	*Cyanistes caeruleus*	Confirmed	
Carrion crow	*Corvus corone*	Probable	
Chiffchaff	*Phylloscopus collybita*	Possible	
Dunnock	*Prunella modularis*	Confirmed	BoCC Amber List
Great tit	*Parus major*	Confirmed	
Greenfinch	*Carduelis chloris*	Probable	BoCC Red List
House sparrow	*Passer domesticus*	Confirmed	BoCC Red List; SPI
Jackdaw	*Corvus monedula*	Possible	
Jay	*Garrulus glandarius*	Probable	
Kestrel	*Falco tinnunculus*	Non – breeder	BoCC Amber List
Long-tailed tit	*Aegithalos caudatus*	Confirmed	
Magpie	*Pica pica*	Probable	
Pheasant	*Phasianus colchicus*	Probable	
Robin	*Erithacus rubecula*	Confirmed	
Song thrush	*Turdus philomelos*	Probable	BoCC Amber; SPI
Starling	*Sturnus vulgaris*	Probable	BoCC Red List; SPI
Swallow	*Hirundo rustica*	Confirmed	
Whitethroat	*Sylvia communis*	Confirmed	
Woodpigeon	*Columba palumbus*	Confirmed	BoCC Amber
Wren	*Troglodytes troglodytes*	Confirmed	BoCC Amber

5.3.15 Barn owl was noted leaving the barn on two occasions throughout the survey period, but there is no evidence it is breeding within the building; it is likely the structure is used as an occasional roosting site.

Water vole and otter

5.3.16 No evidence of the presence of water vole or otter was encountered.

Other Fauna

5.3.17 No other uncommon species, or species of a raised conservation concern were noted within the Site and the Site was assessed as having negligible potential to support such species.

6 EVALUATION

7 Definition of ecological value

7.1.1 A geographical scale of reference is used when evaluating ecological receptors within a Site, in line with the latest sectoral guidance presented by CIEEM (2018), as summarised in Table 10. The evaluation categories for each receptor have generally been reached by applying accepted criteria, such as naturalness, rarity, fragility and diversity, first proposed by Ratcliffe (1977) and commonly used in the assessment of both statutory and non-statutory sites.

7.1.2 Where sites have already been designated on ecological grounds, the assessment reflects the geographical context of the designations. For example, sites designated under international legislation or treaties are assessed to be of International value, whilst sites designated under UK legislation are of National value.

7.1.3 Consideration is also given to legal protection afforded to any ecological receptor within the Site, as are species or habitats identified as 'priorities' for biodiversity conservation in the UK. Local Planning Authorities will often have a duty to consider such species or habitats throughout the panning process, hence their presence within a site is a material consideration.

7.1.4 Further frames of reference for individual species are provided by the Red Data Book system, such as the Vascular Plant Red Data List for Great Britain (Cheffings and Farrell 2006) or for birds by reference to the Birds of Conservation Concern (Stanbury *et al.* 2021).

Table 10. Ecological Evaluation Criteria

Value/Importance	Criteria
International (European)	**Habitats** An internationally designated Site or candidate Site (Special Protection Area [SPA]), provisional SPA, Special Areas of Conservation (SAC), candidate SAC, Ramsar Site, Biogenetic / Biosphere Reserve, World Heritage Site or an area that would meet the published selection criteria for designation. A viable area of a habitat type listed in Annex I of the Habitats Directive, or smaller areas of such habitat, which are essential to maintain the viability of a larger whole. **Species** Any regularly occurring population of internationally important species, threatened or rare in the UK (i.e. a UK Red Data Book species) or, of uncertain conservation status or, of global conservation concern. A regularly occurring, nationally significant population/number of an internationally important species.
National (English)	**Habitats** A nationally designated Site (Site of Special Scientific Interest [SSSI], National Nature Reserve [NNR], Marine Nature Reserve [MNR] or a discrete area), which would meet the published selection criteria for national designation (e.g. SSSI selection guidelines). **Species** A regularly occurring, regionally or county significant population/number of an internationally/nationally important species. Any regularly occurring population of a nationally important species, threatened or rare in the region or county.

Value/Importance	Criteria
Regional (South east)	**Habitats** Sites that exceed County-level designations, but fall short of SSSI selection criteria. **Species** Any regularly occurring, locally significant population of a species listed as being nationally scarce, which occurs in 16 of 100 10km^2 squares in the UK. A regularly occurring, locally significant population / number of a regionally important species. Sites maintaining populations of internationally/nationally important species that are not threatened or rare in the region or county.
Authority Area (e.g. County or District)	**Habitats** Sites recognised by local authorities, e.g. Local Wildlife Sites (LWS). County/District Sites that the designating authority has determined meet the published ecological selection criteria for designation, including Local Nature Reserves (LNR). A diverse and/or ecologically valuable hedgerow network. Semi-natural ancient woodland greater than 0.25ha. **Species** Any regularly occurring, locally significant population of a considered regional rarity or localisation. Sites supporting populations of internationally/nationally/regionally important species that are not threatened or rare in the region or county, and not integral to maintaining those populations. Sites/features scarce in the County / District or that appreciably enrich the County/District habitat resource.
Local (immediate local area or village importance)	**Habitats** Areas of habitat that appreciably enrich the local habitat resource (e.g. species-rich hedgerows, ponds etc). Sites that retain other elements of semi-natural vegetation that due to their size, quality or the wide distribution within the local area are not considered for the above classifications. Semi-natural ancient woodland smaller than 0.25 ha. **Species** Populations/assemblages of species that appreciable enrich the biodiversity resource within the local context. Sites supporting populations of county/district important species that are not threatened or rare in the region or county, and are not integral to maintaining those populations.
Site level (Limited ecological importance)	Sites that retain habitats and/or species of limited ecological importance due to their size, species composition or other factors.

7.2

7.3 Site Evaluation

7.3.1 The semi- improved grassland which accounts for most of the Site area is of **Negligible** ecological value due to its limited ecological diversity and moderately intense management. The stripes either side of hedgerow H3 by contrast, support a moderated species assemblage and would be considered to be **Local** value.

7.3.2 The hedgerows would be assessed to be of **Local** value given their moderate species diversity and connectivity. All hedgerows within the Site would be classified as Habitats of Principle Importance under Section 41 of the NERC Act 2006.

7.3.3 The watercourse and associated scrub would be considered to be of Local value due the blue/green corridor they create.

7.3.4 The breeding bird assemblage would be considered to be of **Site** value only with no rare or uncommon bird species noted. Barn owl was recorded on Site, but was assessed to be using the barn as an occasional roost site.

7.3.5 Using the criteria presented by Reason & Wray (2023) the bat population recorded to date achieves a score of 11 so does not meet the threshold for County importance. Using Wray *et al* (2010), the foraging and commuting assemblage would be of **District** value principally as a result of the presence of Barbastelle's bat.

8 PREDICTED IMPACTS, MITIGATION AND ENHANCEMENTS

8.1 Predicted Impacts

Designated Sites

8.1.1 There would be no impact upon statutory or non-statutory sites as a result of the proposed scheme.

Habitats

8.1.2 The construction of the main development and associated landscaping would lead to the loss of the approximately 5.1ha, or 60% of the of the semi-improved grassland within the Site, which has been assessed to be of **Negligible** ecological value. Hence, its loss would have a **Negligible** impact with a non-significance effect.

8.1.3 The internal road network has been designed to utilise the existing farm accesses wherever possible, so any hedgerow loss within the Site is minimal. As such is has been assessed to have a **Negligible** impact.

8.1.4 Similarly, the location of the stream crossings will be located where the existing culverts are, again minimising the predicted impacts. As such is has been assessed to have a **Negligible** impact.

8.1.5 A minimum of a 30m buffer has been retained to the ancient woodland to the east of the Site, hence there would be no direct impact upon this feature. The woodland itself is currently highly degraded in terms of its ecological value, having been replanted with coniferous trees. Hence there would be a **Negligible** impact upon the ancient woodland.

8.1.6 The conversion of the barn is likely to result in the loss of several swallow nest sites. This, in the absence of mitigation, is likely to lead to an adverse impact as a **Site** scale of magnitude.

Species

8.1.7 The construction of the development and associated landscaping would lead to the loss of approximately a 5.1ha of the improved grassland, as well as small sections of hedgerow. The improved grassland may provide some limited sub-optimal foraging habitat for birds, particularly for swallow. Given the extent of the habitat removal, this loss, in the absence of mitigation, is likely to lead to an adverse impact at a **Site** level of significance on the local breeding bird population.

8.1.8 The construction of the development and associated landscaping would lead to the loss of approximately a 5.1ha of the improved grassland, as well as small sections of hedgerow. The improved grassland may provide some limited sub-optimal foraging habitat for bats. In the absence of mitigation, this loss and severance of commuting routes is likely to lead to a permanent, adverse impact at a **Site** level on the bat assemblage.

8.1.9 Light spill from the operation of the scheme has the potential to adversely impact foraging and commuting bats, which, in the absence of mitigation, could lead to a permanent, adverse impact at a **Site** level.

8.1.10 Although difficult to quantify, the potential for localised increased levels of predation by domestic pets on birds is anticipated. In the absence of mitigation, this may result in an adverse impact at a **Site** scale on the breeding bird populations.

8.2 Mitigation and Enhancements

8.2.1 Habitat creation and ecological enhancements have been considered from the onset, with the landscape design being developed with input from the ecology team from the start. Overall, a significant proportion of the Site will be given over to green infrastructure and the creation of high-quality habitats.

8.2.2 The main features of ecological value within the application site boundary, namely the hedgerows, trees and stream will be retained and enhanced wherever possible.

8.2.3 Additional habitat of high ecological value that will be created though the landscape design include:

- Wildflower meadow;
- Wet meadow;
- Native scrub;
- New native hedges with trees;
- Improvements to the stream bank; and
- New tree planting

8.2.4 The location and extent of each of the above habitats is indicatively shown on the Illustrative Landscape Strategy prepared by EDP (ref. edp8571_d011).

8.2.5 The mitigation and enhancements are predicted to more than offset the potential impacts of the scheme with the residual impacts likely to be positive at a **Local** scale, given that over 4ha of the Site will contribute to the green and blue infrastructure. This is re-enforced by the provisional results of the Defra Biodiversity Net Gain metric which realised a 10.08% increase the biodiversity value of habitats, 12.39% in relation to hedgerows and 11.62% for water course within the site post development (Appendix 1).

8.2.6 An Habitat Management and Monitoring Plan will be devised for the site to ensure that the maximum ecological benefits are realised on a long term, sustainable manner and that the predicted increase in the BNG of the site is delivered.

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Legend

- Ancient woodland
- Woodland
- Scrub
- Hedgerow
- Watercourse
- Dry ditch
- SI — Semi-improved grassland
- Building

Drawing Number: Figure 1

Title: Phase 1 Habitat Map

Date: January 2025

Project: Lunce's Hill

Client: Catesby & Rurban

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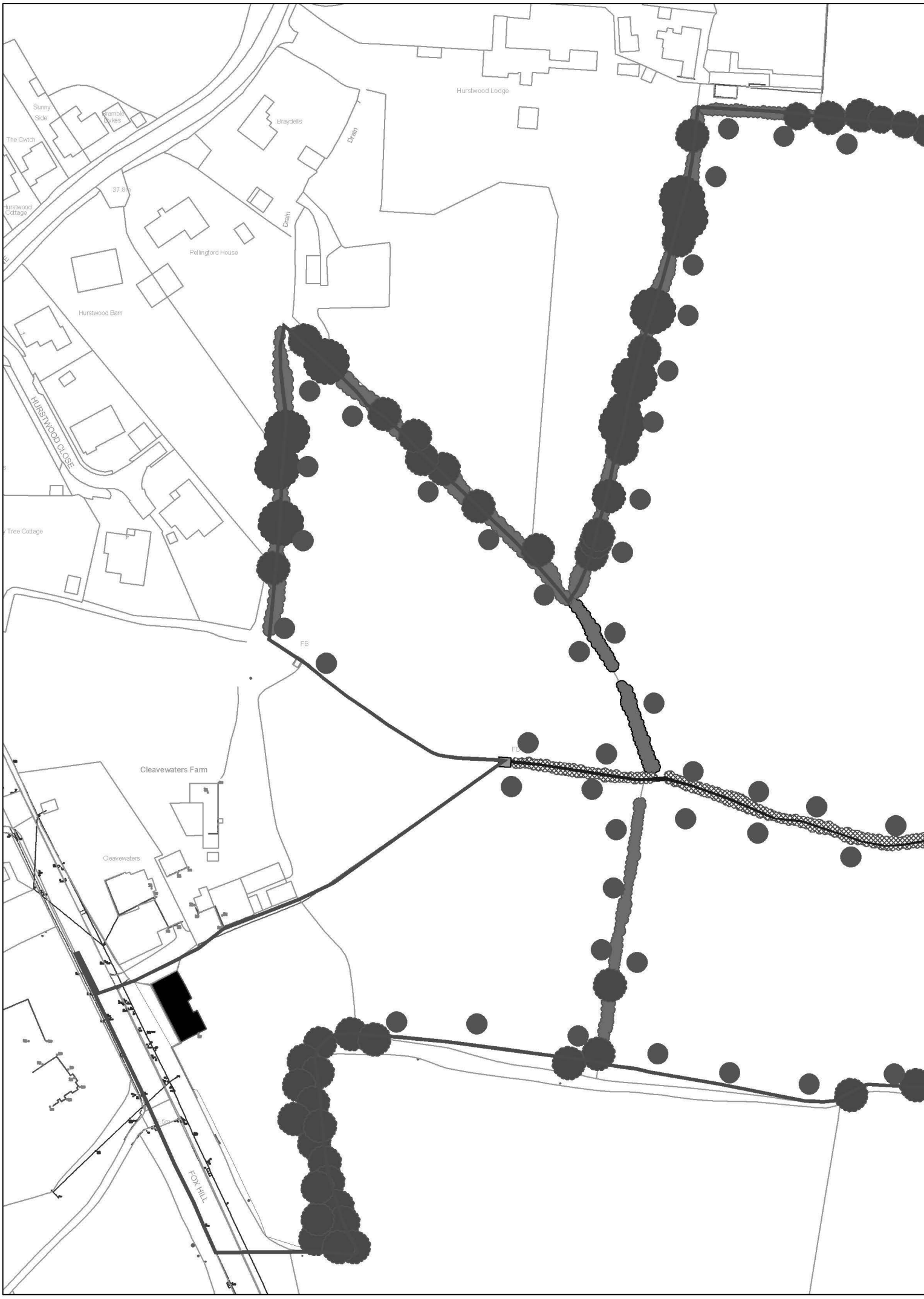
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Sunny Side
Bramble Rykes
The Cwtch
Braydells
Drain
37.8m
Hurstwood Cottage
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Pellingford House
Hurstwood Barn
HURSTWOOD CLOSE
Tree Cottage
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Cleavewaters Farm
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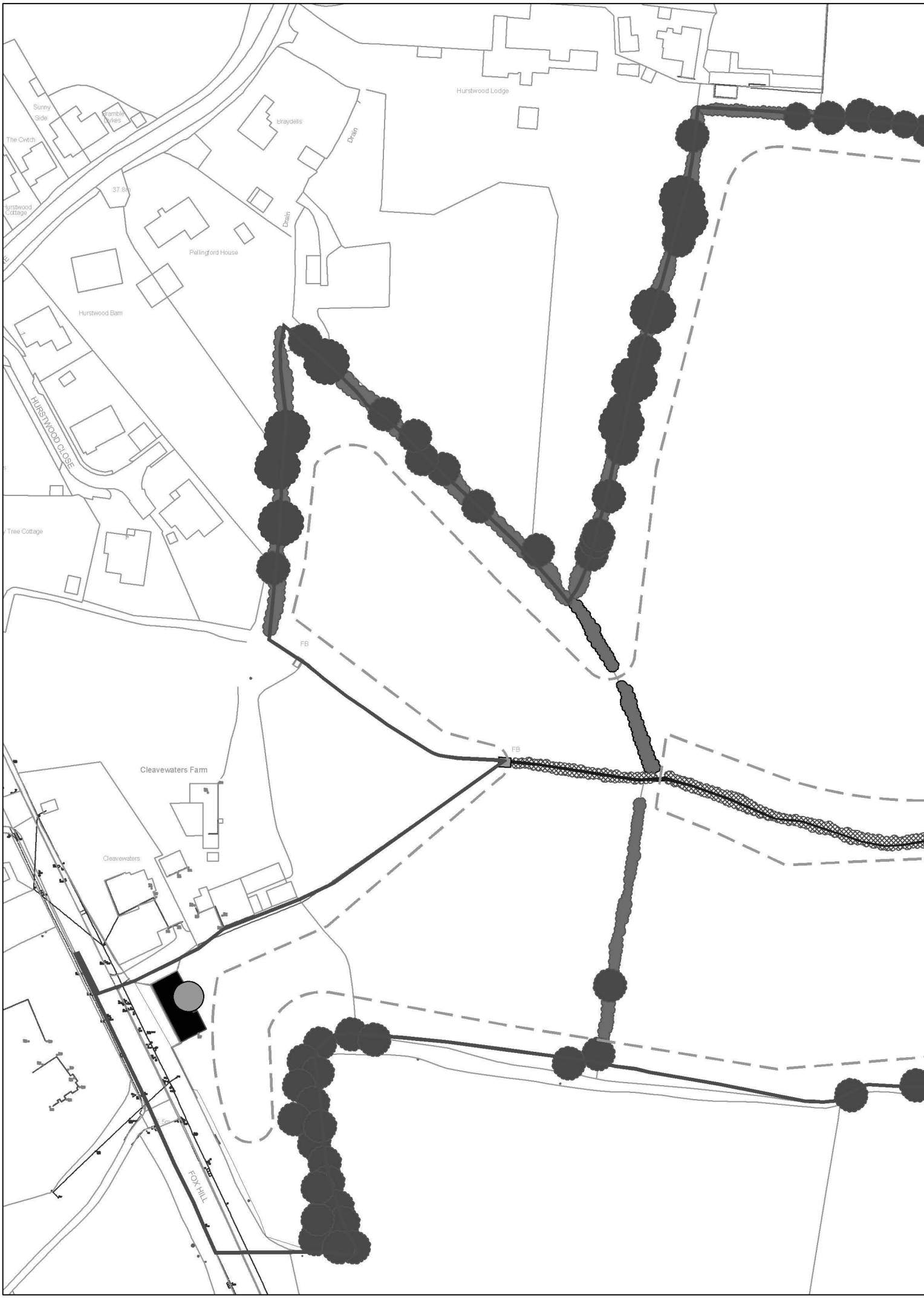
Hurstwood Lodge
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Hurstwood Cottage
Drain
Pellingford House
Hurstwood Barn
HURSTWOOD CLOSE
Tree Cottage
FB
FB
Cleavewaters Farm
Cleavewaters
FOX HILL

Appendix 1

BNG Report

Derek Finnie Associates®
CONSULTANT ECOLOGISTS

Land east of Lunce's Hill, Haywards Heath

Biodiversity Net Gain

January 2025

CIEEM
REGISTERED
PRACTICE 2024-2025

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COMMISSIONED BY

Catesby Strategic Land Limited and Rurban Estates Limited.
Orchard House
Papple Close
Houlton
Rugby
CV23 1EW

Land east of Lunce's Hill, Haywards Heath

Biodiversity Net Gain

January 2025

Report Ref: DFA24116V2

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APPENDICES

1 INTRODUCTION

1.1 Background

1.1.1 Derek Finnie Associates was commissioned by Catesby Strategic Land Limited and Rurban Estates Limited. to undertake an Ecological Assessment in relation to an area of land referred to as Land east of Lunce's Hill, Haywards Heath, herein referred to as the 'Site' (Figure 1). Catesby is seeking outline planning permission for the erection of up to 130 dwellings, together with the change of use of an existing barn for flexible community or commercial use along with associated outdoor space and landscaping, drainage infrastructure, hard and soft landscaping, parking, access and associated works (all matters reserved except for access).

1.2 Current Policy and Guidance

1.2.1 Within Section 98 of the Environment Act 2021, there is provision for achieving a 10% Biodiversity Net Gain (BNG) within a development, with the particulars being covered under Schedule 14 of the Act.

1.2.2 With this in mind, Catesby Strategic Land Limited and Rurban Estates Limited have sought to maximise the BNG potential of the Site from the onset, creating ecological valuable habitats within the extensive area of green space within the Site. The following report, therefore, sets out the vision for the Site and assesses the potential uplift in Biodiversity Units that could be realised from the scheme.

2 METHODOLOGY

2.1 Defra Metric

2.1.1 The Defra metric looks at the biodiversity value of a site prior to the proposed development by assigning values to each habitat type, the quality of the habitat and the extent of that habitat. This results in a combined value for the site presented in an arbitrary figure expressed as Biodiversity Units. A similar approach is also taken for linear features within a site, such as hedgerows and rivers. For rivers, a River Corridor Assessment (RCA) is undertaken using the MorPh5 methodology, which needs to be completed by a trained and certified surveyor.

2.1.2 A second calculation is then undertaken for the post development scenario, where professional judgement is used in determining the value of the habitats which will be created as a result of the proposed scheme. The difference in units pre and post development is then expressed as a percentage for habitats, hedgerows and rivers (where applicable).

2.1.3 If a significant increase in BNG value cannot be achieved within the Site, there is the potential to provide off site enhancements to complement on-site works.

2.1.4 The current assessment was undertaken using the Statutory Metric published in July 2024.

2.1.5 As the current scheme is an application for outline permission only it is not possible to provide a detailed assessment of the post development scenario as yet, as these details are not fixed. However, the Defra Guidance on an outline application is that decision maker may need to consider more broadly whether the biodiversity gain condition is capable of being successfully delivered within a site, rather than relying on details plans to demonstrate how it will be delivered. As the statutory framework for biodiversity net gain involves the discharge of the biodiversity gain condition following the grant of planning permission it would be generally inappropriate to refuse an application on the grounds that the biodiversity gain objective will not be met. (Defra Guidance 019 Reference ID: 74-019-20240214).

2.2 Site Assessment

2.2.1 A site assessment was made in July 2023 and March 2024 with the habitats present within the Site being assessed and assigned to a category within the *UKHabs V2* classification system. Where appropriate, the Condition of each habitat encountered was assessed using the condition scoring criteria as presented within the Metric.

2.2.2 All survey work was undertaken by Derek Finnie BSc DipCons MSc CEnv MIEnvSc MCIEEM, Managing Director of Derek Finnie Associates who has over 30 years' experience as a practicing ecologist and is a certified RCA surveyor.

3 THE SITE

3.1 Current description

3.1.1 An 'extended' Phase 1 Habitat Survey was carried out on the 18th July 2023 and 23rd March 2024. The survey methodology followed that presented by the JNCC (2010). The Phase 1 technique aims to classify each habitat into categories based on the assemblage of plant species present, with the dominant plant species for each habitat being noted. In some cases, sub-divisions or modifications of the standard categories can be made where this is useful in providing further detail.

3.1.2 The Phase 1 survey provides sufficient information to allow the habitats present to be placed into a UKHabs V2 classification category, as used in the Defra Metric.

3.1.3 Additional information was also collected during the site survey to allow the condition of the habitats identified to be assessed based on pre-determined criteria.

3.1.4 The Site, which covers approximately 8.81ha, comprises several fields delineated by hedgerows. A small stream, Pellingford Brook, runs through the centre of the Site.

3.1.5 The fields themselves supports semi-improved grassland which are reportedly normally cut for silage/hay.

3.1.6 The following Phase 1 habitats were encountered within the Site:

- Broad-leaved trees (scattered);
- Hedgerows;
- Scrub;
- Semi-improved grassland;
- Dry ditch;
- Watercourse; and
- Buildings and hardstanding.

3.1.7 Further details of the habitat are presented within the Ecological Assessment (Derek Finnie Associates Report Ref: DFA24115) submitted with the application and hence are not repeated here. For reference, there are no irreplaceable habitats as defined by the Biodiversity Gain Requirements (Irreplaceable Habitats) Regulation 2024 on site. And there is no evidence that any form of adverse, or destructive, management has taken place within the Site which would affect the condition of the habitats present.

3.1.8 However, in terms of the BNG Metric, a summary of the habitats is present in Table 1.

Table 1. Summary of on-site habitats

Habitat	Condition	Area/length
Modified grassland	Moderate	8.25
Other neutral grassland	Good	0.1
Bramble scrub	Condition Assessment N/A	0.2
Developed land; sealed surface	N/A - Other	0.02

Habitat	Condition	Area/length
Rural tree	Moderate	0.24
Native hedgerow with trees	Moderate	0.168
Native hedgerow with trees	Moderate	0.2
Native hedgerow - associated with bank or ditch	Moderate	0.15
Native hedgerow	Moderate	0.05
Native hedgerow	Moderate	0.09
Native hedgerow with trees	Moderate	0.1
Native hedgerow with trees	Moderate	0.095
Other rivers and streams	Moderate	0.25

3.2 Post development

3.2.1 From the onset, consideration has been given to creating high quality, species rich habitats within the Site to ensure there is a long-term ecological benefit as a result of the development. There has also been a drive to manage the retained habitats in a more ecological sympathetic manner, with the aim of providing long term, sustainable benefits.

3.2.2 Within the landscape strategy for the Site, the creation of new, species rich habitats using native species wherever possible has been one of the principal drivers. These include:

- Creation of 0.35ha of new broad-leaved woodland;
- Creation of 3.6ha of species rich grassland, both dry and damp;
- Creation of 0.2ha of mixed scrub;
- Planting of 0.6ha of amenity grassland; and
- Planting of 100 new trees;
- Enhancements to the river corridor; and
- Creation of 180m of new hedgerows,

3.2.3 The location and extent of the habitat creation and enhancement is depicted on the Landscape Strategy drawing submitted with this application.

4 RESULTS

4.1 Headline Results

4.1.1 The headline results from the Biodiversity Metric for presented in Table 2.

Table 2. Headline Results

Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	3.73
	Hedgerow units	0.85
	Watercourse units	0.29
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00
FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	3.73
	Hedgerow units	0.85
	Watercourse units	0.29
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	10.08%
	Hedgerow units	12.39%
	Watercourse units	11.62%
Trading rules satisfied?		Yes ✓

4.1.2 As can be seen from Table 2, a net increase in the biodiversity value of the Site is achieved for the habitat's component (10.08%), the hedgerows (12.39%) and 11.62% for watercourses. The full Metric has been submitted as a separate Excel workbook.

5 DISCUSSION

5.1.1 As can be seen from Table 2, the proposed development is predicted to result in a net biodiversity gain when the habitat creation and enhancement scheme is implemented. It is proposed that a Habitat Management and Monitoring Plan (HMMP) be prepared for the scheme to ensure the long-term management of the habitats is undertaken, with appropriate monitoring and remedial works as necessary.

Legend

- Ancient woodland
- Woodland
- Scrub
- Hedgerow
- Watercourse
- Dry ditch
- SI — Semi-improved grassland
- Building

Drawing Number: Figure 1

Title: Phase 1 Habitat Map

Date: January 2025

Project: Lunce's Hill

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Appendix 1

Condition Sheets

Condition Sheet: INDIVIDUAL TREES Habitat Type

Habitat Types

Individual trees – Urban trees
Individual trees – Rural trees
Complete a condition sheet for each tree or block of trees.

Please see the separate Line of trees condition sheet for a line of rural trees. You should only use the Line of trees condition assessment and record that habitat type in rural locations.

Habitat Description

Individual trees (description applied to the urban or rural environment):
Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.

Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):
Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.

On-site or off-site, site name and location	Lunces Hill	**Survey date and Surveyor name**	D Finnie March 2024
		Survey reference (if relating to a wider survey)	
Limitations (if applicable)		**Habitat parcel reference**	1
		Grid reference	

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	y	
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	n	
C	The tree is mature (or more than 50% within the block are mature)[1].	y	
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	y	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	n	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	y	
	Number of criteria passed		

Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved ×/✓
Passes 5 or 6 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	x
Passes 2 or fewer criteria	Poor (1)	

Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.							
Suggested enhancement interventions to improve condition score[2]							

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
On-site or off-site, site name and location	Lunces Hill	**Survey date and Surveyor name**	D Finnie. March 2024
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference		**Habitat parcel reference**	
Habitat Description			
Semi-improved grassland. Graminoid species include those commonly associated with agriculturally improved grassland such as perennial rye grass Lolium perenne, cock's-foot Dactylis glomerata, Yorkshire fog Holcus lanatus			
ukhab – UK Habitat Classification			

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m^2 present, including at least 2 forbs (these may include those listed in Footnote 1). **Note - this criterion is essential for achieving Moderate or Good condition.** Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m^2 (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	Yes	Sward dominatwed by a few grass species
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	No	Sward generally even due to mowing
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	No	No scrub present
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Yes	
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Yes	Minimal bracken presetn art periphery of some fields.
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	None noted
	Essential criterion achieved (Yes or No)		Yes
	Number of criteria passed		Five

Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved ×/✓	

Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	x	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)		

Suggested enhancement interventions to improve condition score

Footnotes

Footnote 1 – Creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, white clover *Trifolium repens* and cow parsley *Anthriscus sylvestris*.

Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.

Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.

Footnote 4 – Wildlife and Countryside Act 1981 (as amended).

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)

UK Habitat Classification (UKHab) Habitat Types

Grassland - Lowland calcareous grassland
Grassland - Lowland dry acid grassland
Grassland - Lowland meadows
Grassland - Other lowland acid grassland
Grassland - Other neutral grassland
Grassland - Tall herb communities (H6430) [Not to be confused with the Tall forbs secondary code – see UKHab guidance for details.]
Grassland - Upland acid grassland
Grassland - Upland calcareous grassland
Grassland - Upland hay meadows
Sparsely vegetated land - Calaminarian grassland

On-site or off-site, site name and location	Lunces Hill	**Survey date and Surveyor name**	D Finnie, March 2024
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference		**Habitat parcel reference**	

Habitat Description

More species rich grassland with sweet vernal grass Anthoxanthum odoratum and marsh foxtail Alopecurus geniculatus were also present, as were sneezewort Achillea ptarmica, meadowsweet Filipendula ulmaria, hedge bedstraw Galium mollugo, black knapweed Centaurea nigra, bird's-foot trefoil Lotus corniculatus and teasel Dipsacus fullonum.

ukhab – UK Habitat Classification			

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description).[1] **Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.**	Yes	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Yes	Limited varitation but sme present
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens[2].	Yes	Verey little bare ground
D	Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.	Yes	Limited bracken

E	Combined cover of species indicative of suboptimal condition[3] and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species[4] (as listed on Schedule 9 of WCA[5]) are present, this criterion is automatically failed.	Yes	
Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m^2 present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). **Note - this criterion is essential for achieving Good condition for non-acid grassland types only.**	Yes	
	Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		
	Number of criteria passed		

Condition Assessment Result	Condition Assessment Score	Score Achieved ×/✓
Acid grassland types (Result out of 5 criteria)		
Passes 5 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	
Passes 2 or fewer criteria	Poor (1)	
Non-acid grassland types (Result out of 6 criteria)		
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)	Yes
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)	
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)	

Suggested enhancement interventions to improve condition score

Notes

Footnote 1 - Professional judgement should be used alongside the UKHab description.

Footnote 2 – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover.

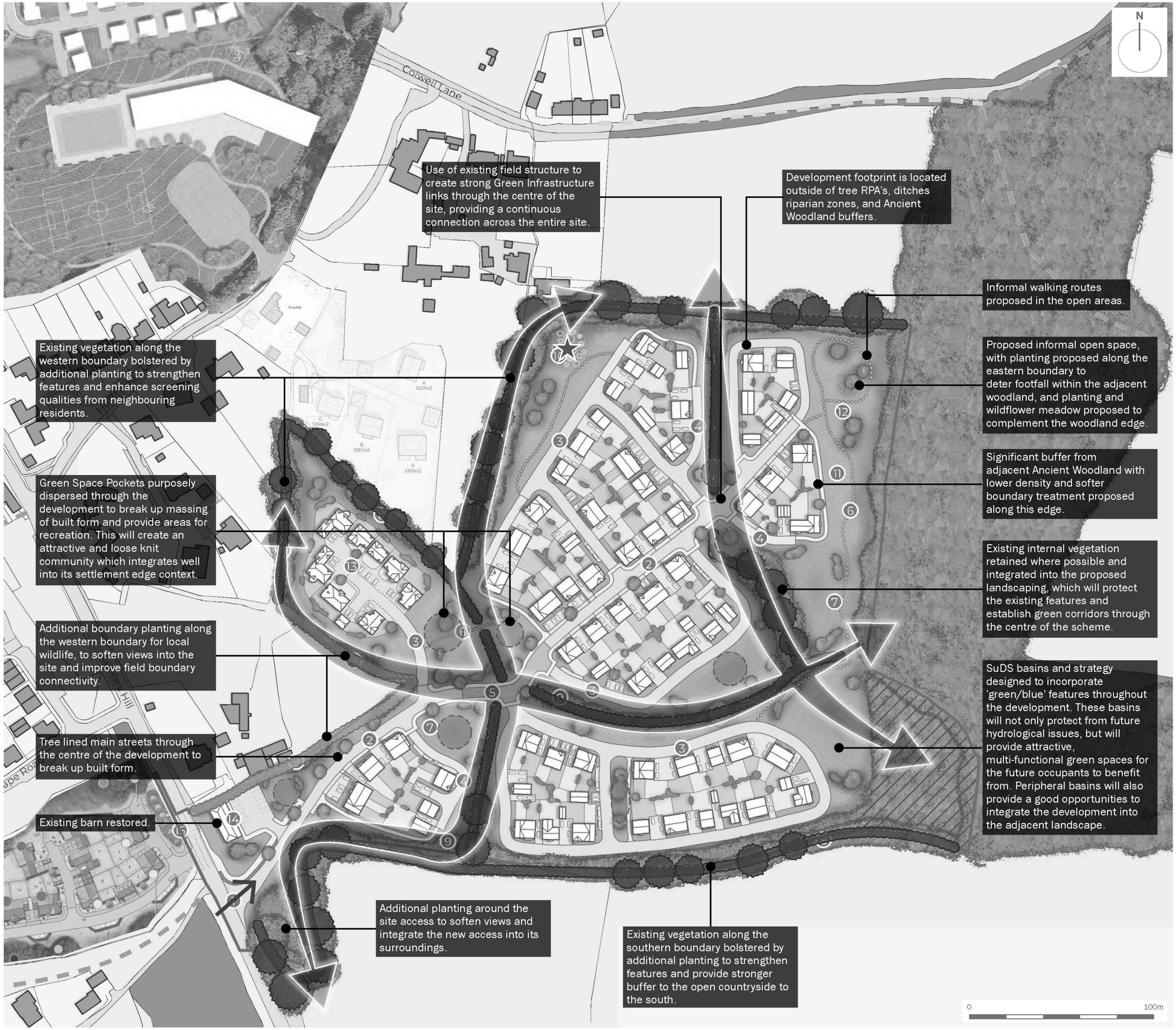
Footnote 3 - Species indicative of suboptimal condition for this habitat type include: creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, white clover *Trifolium repens* and cow parsley *Anthriscus sylvestris*. There may be additional relevant species local to the region and or site.

Footnote 4 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement.

Footnote 5 – Wildlife and Countryside Act 1981 (as amended).

Appendix 2

Landscape Strategy



Site Boundary

New and Enhanced Green Infrastructure Corridors

Existing Vegetation Retained Where Possible and Enhanced Through Additional Planting and Improved Management

Proposed Boundary Planting to Increase Connectivity for Local Wildlife and Strengthen Boundaries

Proposed Woodland in the South-east Corner of the Site to Connect with Adjacent Habitat and Extend Woodland into the Site

Proposed Green Space Pockets to Break up Built Form

Proposed LEAP

Proposed Vehicular and Pedestrian Access

Based on: 604_P01- Illustrative Masterplan

client

Catesby Strategic Land Limited and Rurban Estates Limited

project title

Land East of Lunce's Hill

drawing title

Illustrative Landscape Strategy

date	**10 JANUARY 2025**	drawn by	**GYo**
drawing number	**edp8571_d011b**	checked	**MBe**
scale	**1:2,000 @ A3**	QA	**DJo**

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