

Site Name: Conkwell Grange, Conkwell, Winsley, Bath, BA2 7FD

Report Reference: WWE25226 PEA

Preliminary Ecological Appraisal and Preliminary Roost Appraisal

Date: 30/04/2026

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Introduction

Conkwell Grange, Conkwell, Winsley, Bath, BA2 7FD (Grid reference: ST 79018 61675) is subject to a full planning application for an extension to the existing barn, access driveway, and new landscaping. The proposed extension is limited to the eastern elevation external wall and will not affect the wider building structure.

Wildwood Ecology were instructed to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) by Holland and Green. The PEA and PRA was undertaken by Jessica Boddy (Consultant Ecologist) of Wildwood Ecology on 17/03/2026, following the Chartered Institute of Ecology and Environmental Management (CIEEM) Preliminary Ecological Appraisal (2017) guidelines and using UK Habitat Classification Version 2.0 codes (UK Hab, 2023) and following best practice in line with the Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edn. (Collins 2023).

The site (Figure 1) is located within the Conkwell Grange estate, Winsley, Wiltshire. It is situated approximately 3 miles southeast of Bath and 2.3 miles west of Bradford-on-Avon. The site consists of an agricultural building, grassland to the east and treeline to the south. The wider site comprises additional buildings, areas of grassland, and tree lines, with connectivity to Conwell Woods and the River Avon to the west, and agricultural and pastureland fields extending to both the east and west.



Figure 1 – Aerial image of the site. Red line shows the approximate site boundary. Image used under licence (@2026 Google). Image 03/2026.

Purpose of this report

The purpose of this report is to provide sufficient information for the local planning authority to fully assess the ecological impacts of the proposed development.

The key objectives of this PEA are to:

- Identify the likely ecological constraints associated with the proposed development;
- identify mitigation measures likely to be required, following the 'Mitigation Hierarchy';
- identify the opportunities for the proposed development to deliver ecological enhancement.

Survey methods

Habitat Survey

A field survey was undertaken on 21/01/2026.

All habitats present within the site with the suitability to support rare, protected, or otherwise notable species of flora or fauna were noted, as well as incidental observations of species.

A Habitat Plan was produced in QGIS, incorporating Target Notes used to highlight features of ecological interest.

Preliminary Roost Assessment

A field survey was undertaken on 21/01/2026. This was an external and internal building inspection survey, the purpose of which was to search for bats/evidence of bats and assess the likelihood of bats being present and the need for further survey and/or mitigation.

A systematic search was made of the building and the ground, especially below suitable access points where present. Such features include window-sills, windowpanes, walls, tiles, weather boarding, lead flashing, eaves, behind surfacing materials and under tiles, and other cracks and crevices that provide protection from the elements. Such features are known to be used by roosting bats.

Where roosting bats were found, the conservation significance of the bat roosts was assessed according to the Bat Mitigation Guidelines (p.33, Table 3.1); however, these are minimum valuations (in the absence of further survey). The minimum roost status is determined as either high, medium, or low according to the following criteria:

- conservation status of the species (common, rare, or rarest);
- type of roost (feeding perch, individual, small numbers, hibernation, or maternity); and
- if the site meets the guidelines for SSSIs, which only applies to high conservation status roosts.

Desk study

The data informing this report was collected from field survey and desk study. Desk study data was collected from the following sources on 22/04/2026:

- Wiltshire & Swindon Biological Records Centre; and
- Multi-Agency Geographic Information for the Countryside (MAGIC).

Designated sites

Results from desk study data showed that there were six international designated sites (SACs, SPAs, RAMSARs) within 20km:

- Salisbury Plain (SPA) 21km southeast of the site;
 - River Avon (SAC) 15km southeast of the site;
 - Mendip Woodlands (SAC) 18.40km southwest of the site;
 - Mells valley (SAC) 17.20km southwest of the site; and
 - Bath and Bradford on Avon bats (SAC) 1930m southeast of the site. The site falls within the Lesser Horseshoe 2000m buffer zone and Greater Horseshoe 4000m buffer zone (Figure 2).
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Plan 2 Inset map of the Bradford-on-Avon Bat SAC Core Roosts showing Core Areas (i.e. buffers) for each species

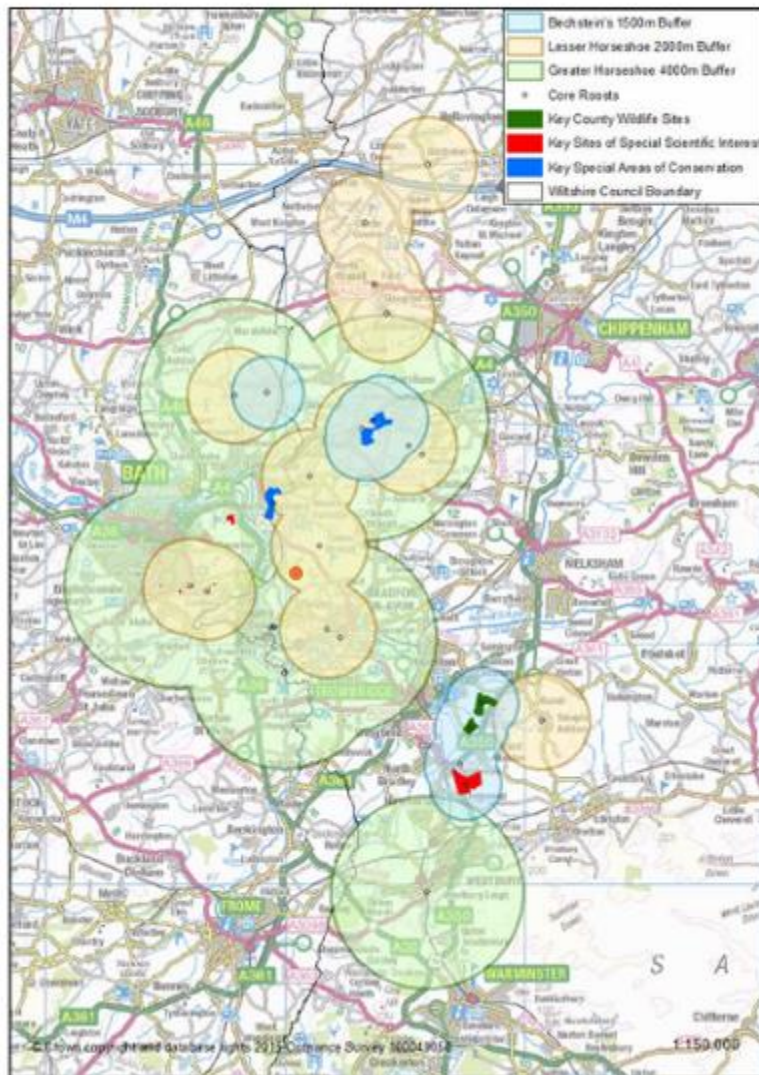


Figure 2 – Map of the Bradford-on-Avon Bat SAC Core Roosts and areas for each species. The orange dot indicates the approximate location of the site.

Three national designated sites (SSSIs, NNRs) within 2km of the site.

- Midford Valley Woods (SSSI) 1.03km west of the site;
- Inwood Warleigh (SSSI) 1.27km northeast from the site; and
- Winsley Mines (SSSI) 0.93km southeast from the site.

Two Local Wildlife Site (LWS) was located within 1km of the site:

- Conkwell Wood (LWS) 391m northwest from the site;
- Murhill Bank (LWS) 760m south of the site;

Priority and notable habitats

The following priority/notable habitats were noted within and adjacent to the site (Figure 3):

- Priority deciduous woodland located 27m south and 135m west of the site.
- Ancient, replanted woodland located 100m west from the site and ancient and semi-natural woodland located 280m west from the site.



Figure 3 – location of the priority deciduous woodland and ancient replanted woodland located adjacent to the west of the site.

Light Pollution

The site was situated in a rural area with low levels of light pollution (VIIRS Data Base (2024).

Waterbodies

There were no waterbodies within 250m or 500m of the site identified on aerial imagery or OS maps.

Priority and protected species

There were 65 granted European Protected Species (EPS) licences for bats within 5km of the site. Eleven of these licences allowed the damage or destruction of a breeding site. The closest licence was 620m north of the site for the destruction of a resting place for common pipistrelle and lesser horseshoe bats granted in 2019. The most recent licences granted was in 2019 for a licence for the damage and destruction of a lesser horseshoe and soprano pipistrelle resting site and a licence for a destruction of a common pipistrelle resting site.

No EPS or class licences or great crested newt pond surveys 2017-2019 for great crested newt were returned within 2km of the site.

The search for granted EPSL within 2km of the site returned no licences for dormouse.

Priority and protected species records were returned from the Wiltshire & Swindon Biological Records Centre for species located within 2km of the site include the following:

- One record of great crested newt was returned, 1.35km southwest from the site.
- Over 400 records of bats were returned with the closest record 1.08km for Myotis species and Lesser Horseshoe bats southeast from the site.
- 51 records of reptiles were returned with the closest record for a common lizard 600m south from the site.
- 49 records of badgers were returned with the closest record 280m west from the site within Conkwell Woods.
- 31 records of water vole were returned with the closest record 620m west from the site within the Kennet and Avon canal.
- 24 records of beavers were returned with the closest record 730m west from the site in the River Avon.
- Nine records of otters were returned with the closest record 1.06km southwest from the site in the Limpley Stoke Weir.

- Other records of mammals returned included hedgehog, polecat, brown hare, harvest mouse and water shrew.
- Over 400 records of birds were returned including sparrowhawk, red kite, kestrel, kingfisher, peregrine, skylark, tawny and barn owls among other more common bird species.
- Records of protected and notable invertebrate species within the search area included black oil beetle, marsh fritillary, Dingy Skipper, Downy Emerald.

Field survey

Table 1 - Field survey timings and conditions

Date	Weather conditions			
	Temp [°C]	Cloud cover [Oktas]	Wind speed [Beaufort scale]	Rain
21/01/2026	7	5	2	Light rain

Field survey limitations

Many species of bat in the UK are crevice-dwelling, and bats or signs of bats can be difficult to find within a building. In addition, there may be areas that are inaccessible to the surveyor.

Although the extended UKHab Habitat Survey falls outside the recommended seasonal period for botanical surveys, the evaluation and habitat descriptions (and hence the impacts and their significance), are considered to be accurate for the following reasons:

- given the type of vegetation and habitats present, the valuation of the intrinsic interest is considered unlikely to change;
- access was possible to all areas of the site and the vegetation was clearly visible; and
- previous surveys carried out by others are both recent in origin and broadly consistent in terms of botanical interest.

No other limitations were identified, or assumptions have been made within this assessment.

Preliminary Ecological Appraisal

Habitats

Table 2 sets out descriptions of the habitats present within the site using UK habitat Classification Version 2.0 codes, along with a list of species present.

Table 2 - Habitats and linear features present within the site.

Habitat	Habitat description	Species present and abundance (DAFOR: Dominant, Abundant, Frequent, Occasional, Rare)	Ecological importance
g4 - Modified grassland Secondary codes: 114 – dry stone wall 32- scattered trees	Grassland field east of the building and to the south of the site. A stone wall was present on the eastern of the site boundary. Two trees to the south of the site that formed part of a line of trees outside the site boundary.	Grassland: perennial rye grass (A), chickweed (O), cranes spp., (O) common nettle (O), broad-leaved dock (O), red fescue (F), white clover (F), broad-leaved meadow grass (F), lambs tongue (O). Trees: Beech (F)	Site
u1b - Developed land; sealed surface	Hardstanding south of existing building	N/A	N/A
u1c - Artificial unvegetated, unsealed surface	Loose stone substrate adjacent to the existing building and grass field	N/A	N/A

The suitability of the site habitats for protected species relevant to the site habitats, the connectivity of the site and observed incidental evidence can be found in Table 3.

Table 3 - Protected species potentially present onsite

Species or group	Habitat suitability	Site connectivity	Notable onsite features	Presence confirmed?
Amphibians, including great crested newt	Poor	Poor	No onsite waterbodies or waterbodies within 250m or 500m of the site. The nearest waterbody is the river Avon 540m west of the site. The onsite grassland and trees provided limited habitat for amphibians in their terrestrial phase.	Onsite terrestrial habitat was unsuitable but there was some connectivity to the surrounding landscape
Badger	Poor	Good	No setts or signs of badgers were observed onsite. Suitable foraging habitat was present within the open grassland area, with connects to wider suitable habitats including woodland to the west.	Onsite habitat was suitable and the site had some connectivity to the surrounding landscape
Bats: foraging and commuting	Good	Excellent/direct	The onsite grassland and scattered trees offer suitable commuting and foraging habitat for a range of bat species.	Onsite habitat was suitable and the site had some connectivity to the surrounding landscape
Fish	N/A	N/A	No onsite waterbodies.	N/A
Fungi	Poor	Poor	Grassland offered limited suitability due to the limited species diversity and sward height; the site was considered likely to only support common and widespread species	N/A
Hazel dormouse	Poor	Poor	No licenses granted within 2km of the site. No hazel scrub was present onsite, with most onsite habitats having very limited suitability for dormouse.	Onsite habitat was unsuitable but there was some connectivity to the surrounding landscape
Hedgehog	Good	Good	Suitable foraging habitat was present within the open grassland area with connectivity to the wider site.	Onsite habitat was suitable and the site had some connectivity to the surrounding landscape
Invertebrates	Poor	Poor	Grassland offered limited suitability due to the sward height. The site was considered likely to only support common and widespread species.	Onsite habitat was suitable and the site had some connectivity to the surrounding landscape

Nesting birds	Good	Good	The onsite trees provided suitability for nesting birds. Grassland offered limited suitability due to the sward height.	Onsite habitat was suitable and the site had some connectivity to the surrounding landscape
Otter	N/A	N/A	No suitable onsite features.	Onsite habitat was unsuitable and there was no connectivity to the surrounding landscape
Reptiles	Good	Good	The open grassland provided suitable habitat for reptiles with connectivity to adjacent habitats.	Onsite habitat was suitable and the site had good connectivity to the surrounding landscape
Water vole	N/A	N/A	No suitable onsite features.	Onsite habitat was unsuitable and there was no connectivity to the surrounding landscape

Invasive species

No species listed on Schedule 9 of the Wildlife and Countryside Act 1981 were present onsite.

Preliminary Roost Assessment

Structures

Descriptions of the structure surveyed during the PRA are summarised in Table 4. Structure locations can be seen in Figure 4.

Table 4 - Structures surveyed during the PRA.

Structure reference	Building description	Development plans
A	The building comprised a single-storey structure of traditional agricultural appearance, constructed from coursed natural stone beneath a pitched tiled roof incorporating ventilation features. Several windows were present, along with a main double door on the western elevation and single doors on the eastern and northern elevations. The roof structure appeared intact and uniform, with no visible dormers, displaced tiles, or significant gaps evident from ground level. The external stonework was generally well maintained, with no obvious crevices, voids, or other features providing potential roosting opportunities for bats. Internally, the walls were constructed of breeze blocks, and the vaulted roof comprised exposed timber and metal beams beneath a felted roof covering. No internal void spaces or external access points were identified.	The proposed extension is to be located on the eastern elevation, will sit below the existing roofline, and will be structurally independent. The existing building and roof structure will be retained.



Figure 4 - Structure locations and suitability.

Survey results, including the suitability of each structure for roosting bats and a description of potential roost features, can be found in Table 5.

Table 5 - Structure information and survey results.

Structure reference	Suitability for bats	Potential roost features and evidence of use identified	Hibernation suitability
A	Negligible	No features were noted to provide suitable roosting features for bats.	Due to the exposure of the internal space, which is unlikely to maintain a stable temperature during winter, combined with a lack of suitable access points and limited potential roosting features, the building was assessed as having low suitability to support hibernating bats.

Links to the surrounding habitat

Additionally, on-site features are likely to be used by foraging and commuting bats, particularly the grassland areas and associated tree lines. Adjacent off-site habitats, including additional grassland and woodland areas, are also likely to support bat foraging and commuting activity.

Impacts

Due to the proposed works, it is likely that in the absence of mitigation there will be adverse effects on the following designated sites, habitats and species:

- **Designated sites** – The site was situated within the Bath and Bradford Upon Avon Bats (SAC) Core Roosts Area for Lesser and Greater horseshoe bats. The proposed plans for the site will have minimal impact on the existing building and will involve the loss of a small area of grassland. Under the proposed BNG scheme the retained grassland will be enhanced with additional hedgerow and tree planting, which will improve habitat quality and connectivity for foraging and commuting bats.

No external lighting is proposed as part of the development. The building design has been informed by ecological considerations to minimise potential impacts associated with artificial illumination. Windows and doors have been designed in keeping with the existing building and are orientated away from adjacent suitable habitats, thereby reducing the potential for light spill onto areas used by bats for foraging and commuting. In view of these embedded design measures, the development is not anticipated to result in adverse effects arising from artificial lighting on habitats suitable for bat activity within the SAC core roosts area.

- **Priority Habitats** – the site was adjacent to deciduous woodland priority habitat to the south and west and therefore it will be ensured that the proposed works do not adversely impact the priority deciduous woodland. However, no direct impacts to priority habitats are anticipated.
- **Onsite habitats** – The proposed works will result in the loss of approximately 152ha of modified grassland classified as being in 'good' condition. Loss of other habitats (developed land; sealed surface and artificial unvegetated, unsealed surface) are considered to be of negligible ecological value. A tree survey and Arboricultural Impact Assessment have been completed for the trees located to the south of the site (reference: GHA trees GHA/DS/120660:26).
- **European badger** – The onsite treeline and open grassland provided suitable foraging habitat for badger, with good connectivity to offsite grassland and woodland. As the proposed development will impact on a small section of vegetated garden, and the habitat in the surrounding area is extensive, it is considered that the development will not cause a significant reduction in foraging opportunities. Therefore, impacts on badger are considered low. However, in the absence of mitigation, there is the potential for killing/injury of badger during the construction phase.
- **Roosting, foraging and commuting bats** – The proposed extension is limited to the eastern elevation external wall and will not affect the wider building or roof structure. The buildings suitability for roosting bats was classified as negligible; therefore, no direct impacts to potential bat roosting features within the existing building are anticipated.

Habitat features within and adjacent to the site were assessed as offering moderate suitability for commuting and foraging bats. The grassland proposed to be impacted by the development forms part of a wider grassland area. The short sward grassland, characterised by a lack of well-connected linear features such as hedgerows, offers limited suitability for foraging lesser horseshoe and greater horseshoe bats. No external lighting is proposed as part of the development and, therefore, no increase in light spill is anticipated that would deter bats from using established flight paths or foraging areas.

Nesting birds – No active or historic bird nests were recorded on site; however, the on-site trees were considered suitable for nesting birds. Adjacent off-site habitats were also assessed as suitable for bird nesting and foraging. As the site provides suitable nesting habitat, any clearance of vegetation or groundworks undertaken during the bird breeding season could result in the disturbance or destruction of active nests and therefore may constitute an offence under relevant wildlife legislation.

- **Reptiles** – The site had suitability for reptiles in the form of treelines and grassland, which may provide limited cover and connectivity to further suitable habitat in the surrounding area. Limited onsite suitable reptile habitat will be removed due to the proposed works in the open grassland, however due to the short sward height and lack of scrub or hedgerows, it was considered unlikely that a significant population of reptiles would be present, and the BNG scheme associated with the project will enhance the grassland
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areas. However, in the absence of mitigation, there is the potential for killing/injury of reptiles in the short-term during the construction phase.

- **Hedgehog** – The grassland provided some foraging and commuting habitat for hedgehog. The BNG scheme associated with the project will enhance the grassland areas, there are considered to be no long-term impacts on hedgehog. However, in the absence of mitigation, there is the potential for killing/injury of hedgehog in the short-term during the construction phase.

Recommendations

Habitats and biodiversity enhancements

Local authorities have a duty to seek to maintain and enhance biodiversity in the exercise of their functions. Where possible, the existing onsite habitat of ecological importance should be retained to ensure that habitats and species that rely on them are not adversely affected by the development/works. Any works to the trees will be undertaken in accordance with the recommendations and specifications set out within the Arboricultural Impact Assessment (reference: GHA trees GHA/DS/120660:26).

Biodiversity net gain

As the proposed works will impact on more than 25m² of suitable habitat and the development does not qualify for any exemptions, a Biodiversity Net Gain (BNG) assessment was completed by Wildwood Ecology in April 2026 (habitat baseline plan, habitat proposed plans, BNG statutory metric and biodiversity gain plan). BNG will be achieved through native tree and native hedgerow planting and by enhancing the existing modified grassland to other neutral grassland. This will achieve a BNG score of 10.62%.

Priority and protected species

It is recommended that a Precautionary Working Methods (PWMS) document should be produced, to set out the methods and mitigation measures to be in place during the proposed works, which should be issued to the principal contractor during works onsite. Recommendations below are made for general protection of wildlife, and in relation to specific species or habitats.

The following recommendations are made for general protection of wildlife, and in relation to specific species or habitats:

- To protect all wildlife, no trenches or excavations will be left open without a means of escape (ramps will be left at a 30-degree angle to allow escape);
- All materials, fuel, and chemicals will be kept safely away from animal access;
- If any protected species are encountered during the works, works must stop, and a suitably qualified ecologist contacted for advice

European Badger and hedgehog

Precautionary working methods will be implemented to prevent potential impacts on badger, herpetofauna, reptiles, and hedgehog that may move through the site. Measures include covering open trenches overnight or providing a means of escape, such as a secured plank, to prevent animals from becoming trapped.

Vegetation clearance will ideally be undertaken during September–October, avoiding the main hedgehog hibernation period (November–March) and peak breeding season (May–August), where practicable. Prior to vegetation clearance, a pre-works inspection should be undertaken by a suitably competent person to identify any nesting, resting, or hibernating animals.

Where suitable habitat for reptiles or hedgehogs is present, vegetation clearance should be undertaken using a two-stage cut. An initial cut should reduce vegetation to approximately 150 mm in height and be followed by a

minimum 24-hour period to allow animals to disperse naturally, after which a final clearance cut may be completed under ecological supervision if required.

Any log piles, brash piles, or refugia suitable for sheltering wildlife should be carefully dismantled by hand or under ecological supervision. Vegetation arisings should be relocated prior to removal or burning to prevent injury to sheltering animals. The installation of log piles to create reptile hibernacula is recommended as an enhancement along the tree and line to the west of the site.

To maintain habitat connectivity, it is recommended that hedgehog access gaps (minimum 13 cm × 13 cm) are incorporated into new fence lines where feasible, allowing continued movement across the site and preventing habitat fragmentation.

Foraging and commuting bats

All UK bats are nocturnal species, and some species are light-averse. Artificial lighting of foraging and commuting routes is known to act as a barrier to bats and fragment otherwise suitable habitats, causing a negative impact on their local populations. As habitats and commuting features suitable to support foraging and commuting bats were identified onsite, maintaining dark conditions around key foraging and commuting areas, such as the proposed grassland to the east and treeline to the south, is considered important to avoid impacts on local bat populations.

No external lighting is proposed as part of the development. The site lies within the Bradford on Avon Bats SAC 2000m buffer zone for Lesser horseshoe bats and the 4000m buffer zone for Greater horseshoe bats. However, in view of the proposed building design and absence of external lighting, no additional disturbance or habitat fragmentation associated with artificial light spill is anticipated. The development is therefore not expected to adversely affect the favourable conservation status of local bat populations.

Should any external lighting be required in the future, it would be subject to a sensitive lighting scheme and should be designed in accordance with Institute of Lighting Professionals Guidance Note 08/23: Bats and Artificial Lighting in the UK (ILP & Bat Conservation Trust), incorporating the following principles:

- LED luminaires will be used where possible;
- Warm white light sources (2700K or lower) will be adopted, to reduce the blue light component;
- Light sources will feature peak wavelengths higher than 550nm;
- Only luminaires with negligible or zero Upward Light Ratio will be considered; and
- Where appropriate, external security lighting will be set on motion sensors and set to as short as possible a timer (1 or 2 minutes).

Installation of bat roosting boxes on the retained trees or the newly constructed building is recommended as an enhancement of roosting opportunities for bats onsite. The precise number, location, and design of bat boxes will be determined with input from a suitably qualified ecologist. A preliminary recommendation is to install at least:

- 2x Schwegler 1FF, 2FN, or a similar design (such as the Beaumaris Woodstone Bat Box) installed on retained trees or the new building, at least 3m from the ground and following the manufacturer's instructions. If possible, built-in designs of bat box could be installed on the building instead (such as the Schwegler 1FR, 1FE, or a similar design).

Nesting birds

Site clearance works will commence outside of the bird nesting season or, if work has to be carried out during the nesting season (generally from 1st March until 31st August, although birds are known to nest outside of these dates in suitable conditions), a nesting bird check will be required and must be carried out by a suitably qualified ecologist. Active nests will be protected by a suitable buffer, as instructed by the ecologist, until the young have fledged, as confirmed by the ecologist. Where a Schedule 1 species (as defined in the Wildlife and Countryside Act) is confirmed to be present, compensation for impacts, e.g., loss of nesting sites, will be devised and implemented.

Additionally, installation of bird nesting boxes on the retained trees or on the building are recommended as an enhancement to the nesting opportunities for common birds onsite. The precise number, location, and design of bat boxes will be determined with input from a suitably qualified ecologist. A preliminary recommendation would be to install at least:

- 2x General purpose, small bird species (Schwegler 1B, Schwegler 2M, Woodstone Nest Box - 32mm / 28mm, or a similar design, installed on retained trees or the on the building, following the manufacturer's instructions.
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Habitat plan



Key

— Red line boundary

🌳 Trees x2

Baseline habitats

■ G4a and G4b- modified grassland (0.532ha and 0.048ha)

▨ U1b1 - developed land; sealed surface (0.014ha)

▩ U1c - artificial unvegetated, unsealed surface (0.008ha)

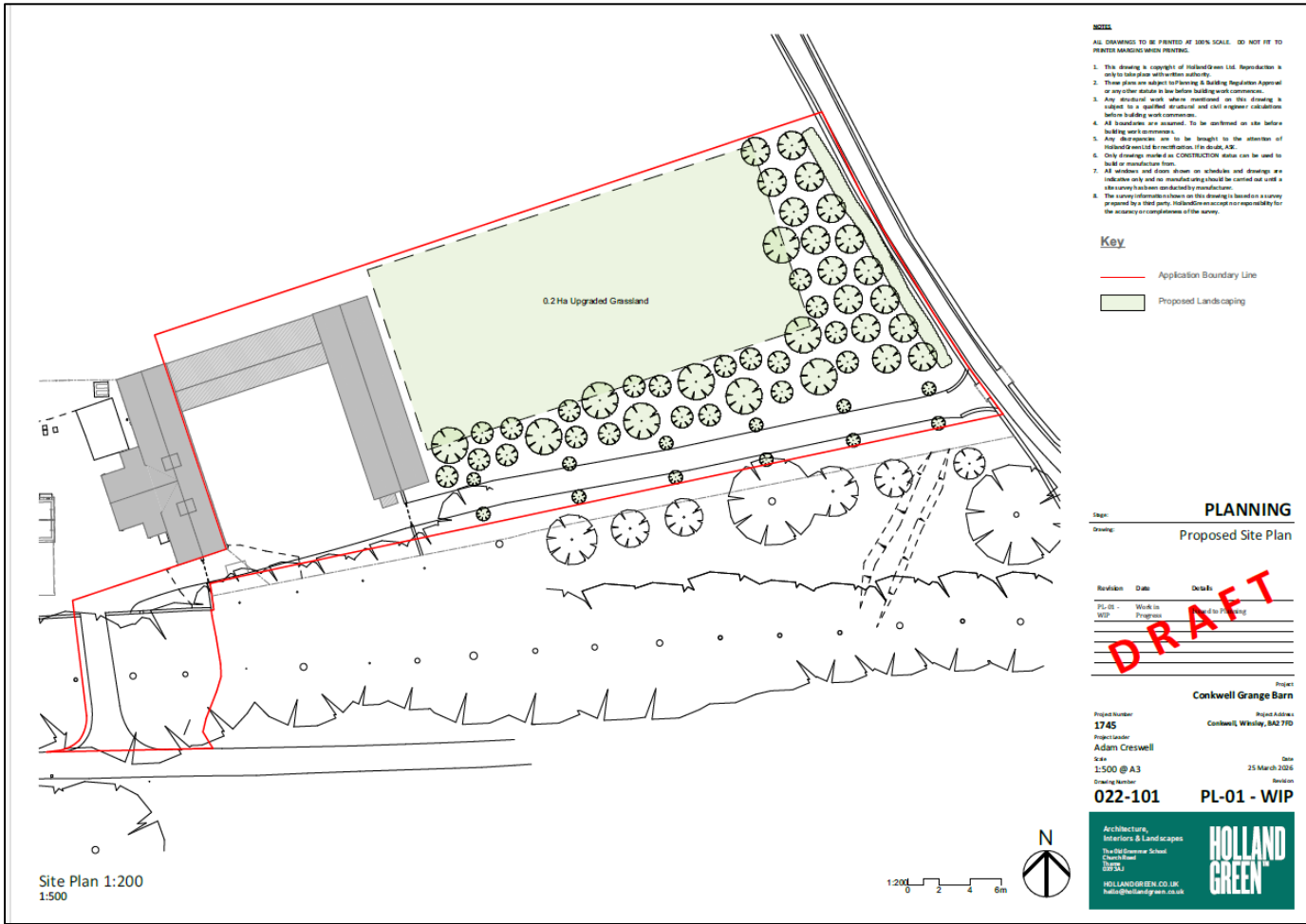
■ U1e - built linear features (0.006ha)

Pre-development habitat
plan

Wildwood Ecology
Rev A
02/04/2026

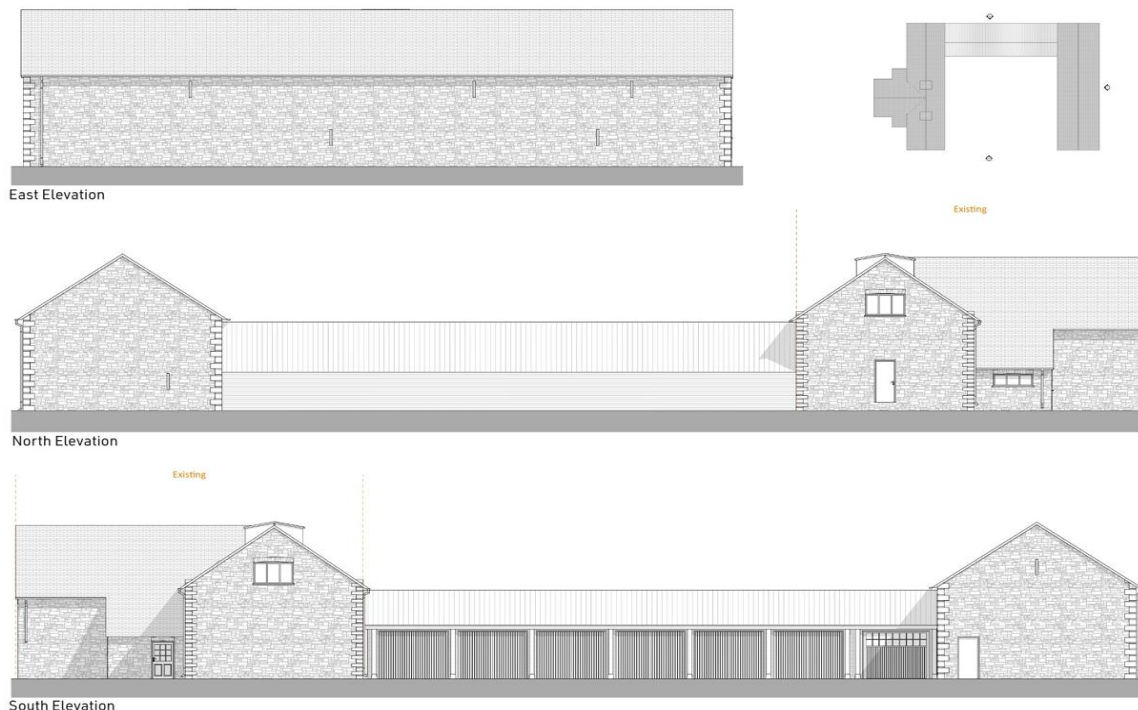
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Proposed development plan



Proposed Elevations - Overview.

North, East & West Elevations.



Survey images



Figure 5 - east elevation of the building.



Figure 6 - southern elevation of the building.



Figure 7 - onsite modified grassland.



Figure 8 - onsite modified grassland and treeline to the south.



Figure 9- east elevation of the building and adjacent grassland.



Figure 10 - north elevation of the building.



Figure 11– west elevation of the building.



Figure 12– west elevation of the building.



Figure 13- south elevation of the building.



Figure 14 – interior of the building.



Figure 15 – interior of the building.



Figure 16– tree line to the south.



Figure 17 – stone wall and overview of the field from Blackberry Lane to the south.
