ROSCONN STRATEGIC LAND LIMITED

ECOLOGYSOLUTIONS

Part of the ES Group

LAND WEST OF
ROBIN HOOD ROAD,
ELSENHAM

Ecological Assessment

September 2023
11607.EcoAss.vf

ecology solutions for
planners and developers

CONTENTS

PLANS

APPENDICES

1. INTRODUCTION

1.1. Background & Proposals

1.1.1. Ecology Solutions Limited was commissioned in June 2023 by Rosconn Strategic Land Limited, to undertake an ecological assessment of the Land West of Robin Hood Road, Elsenham, hereafter referred to as the application site (see Plan ECO1).

1.1.2. The development proposals are for the construction of 40 new residential dwellings, with associated access, infrastructure, landscaping and open space.

1.1.3. A Development Layout plan for the proposals has been produced by JCN Design and Planning, with a copy included at Appendix 1 of this assessment.

1.2. Application Site Characteristics

1.2.1. The application site is located to the west of Robin Hood Road and to the south of Rush Lane, Elsenham, Essex. Existing residential development is located to the north and west of the application site, with a railway line delineating the south-eastern boundary. An area of woodland adjacent to a watercourse (Stansted Brook) and existing residential development is located beyond the southern boundary.

1.2.2. The application site largely comprises grassland fields, with dense scrub, tall ruderal vegetation, hedgerows and treelines also present, typically associated with the boundaries.

1.3. Ecological Assessment

1.3.1. This document assesses the ecological interest of the application site as a whole. The importance of the habitats present is evaluated with regard to current guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)[1].

1.3.2. The report also sets out the existing baseline conditions for the application site, setting these in the correct planning policy and legal framework and assessing any potential impacts which may occur from the proposed development. Appropriate mitigation where necessary is identified such that it will offset negative impacts of the proposals, and where possible provide for the ecological enhancement of the application site, in accordance with relevant planning policy.

[1] CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.2*, updated April 2022. Chartered Institute of Ecology and Environmental Management, Winchester.

2. SURVEY METHODOLOGY

2.1. The methodology utilised for the survey work can be split into three areas, namely desk study, habitat survey and faunal survey. These are discussed in more detail below.

2.2. Desk Study

2.2.1. To compile background information on the application site and its immediate surroundings, Ecology Solutions contacted Essex Field Club (EFC).

2.2.2. Information has been provided by EFC and is included at Appendix 2 of this assessment. Desk study information is referenced throughout this report, where appropriate. Information regarding designated sites is also shown on Plan ECO1.

2.2.3. Further information on designated sites from a wider search area was also obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC)[2] database. This information is reproduced at Appendix 3 and illustrated where appropriate on Plan ECO1.

2.3. Habitat Survey

2.3.1. Habitat survey work was undertaken in June 2023 to ascertain the general ecological value of the application site and to identify the main habitats and associated plant species.

2.3.2. The application site was surveyed based around the extended Phase 1 survey methodology[3] and UK Habitat Classification (UKHab) methodology[4], as recommended by Natural England and DEFRA, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be examined in more detail.

2.3.3. Using the above method, the application site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified.

2.3.4. All the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent at different seasons. However, given that the survey was undertaken at an optimal time of year for the assessment of grassland habitats, it is considered that an accurate and robust assessment has been made.

[2] MAGIC website. Available at: http://magic.defra.gov.uk
[3] Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey – a Technique for Environmental Audit*. England Field Unit, Nature Conservancy Council, reprinted JNCC, Peterborough.
[4] UKHab Ltd (2023). *UK Habitat Classification Version 2.0* Available at [redacted]

2.4. Faunal Survey

2.4.1. General faunal activity observed during the course of the extended Phase 1 survey was recorded, whether visually or by call. Specific attention was paid to the presence or potential presence of any protected, rare, notable or Priority Species, and the extent to which the application site provides any potential opportunities for these species / groups. In addition, specific surveys were undertaken in respect of bats, Badgers and reptiles.

2.4.2. **Bats.** A ground level appraisal survey was undertaken in June 2023 to assess the potential of existing trees, buildings and structures within and immediately adjacent to the application site to support roosting bats. This work was undertaken by experienced bat workers and aimed to establish the likelihood of presence / absence of bats.

2.4.3. Field surveys were undertaken with regard to best practice guidelines issued by Natural England (2004[5]), the Joint Nature Conservation Committee (2004[6]) and the Bat Conservation Trust (2016[7]).

2.4.4. All trees present within and immediately adjacent to the application site were assessed for their potential to support roosting bats. For a tree to be classed as having some potential for roosting bats it must usually have one or more of the following characteristics:

- obvious holes, e.g. rot holes and old woodpecker holes;
- dark staining on the tree below a hole;
- tiny scratch marks around a hole from bats' claws;
- cavities, splits and/or loose bark from broken or fallen branches, lightning strikes etc.; and/or
- very dense covering of mature Ivy *Hedera helix* over trunk.

2.4.5. Consideration was also afforded to the habitats present within and adjacent to the application site in terms of the potential opportunities that they provide for foraging and commuting bats in the local area.

2.4.6. **Badgers.** Specific survey work was also undertaken in June 2023 to search for evidence of Badgers within and in the immediate vicinity of the application site. This survey work entailed two elements, the first of which was a thorough search for evidence of any Badger setts. For any setts encountered, each entrance would be recorded and plotted, even if the entrance appeared disused. The following information was recorded if appropriate:

i) The number and location of well used or very active entrances; these are clear of any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently.

ii) The number and location of inactive entrances; these are not in regular use and have debris such as leaves and twigs in the

[5] Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.
[6] Mitchell-Jones, A.J. & McLeish, A.P. (Eds.) (2004). *Bat Workers' Manual*. 3rd edition. Joint Nature Conservation Committee, Peterborough.
[7] Collins, J. (Eds.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition)*. Bat Conservation Trust, London.

entrance or have plants growing in or around the edge of the entrance.

iii) The number of disused entrances; these have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be and the remains of the spoil heap.

2.4.7. Secondly, evidence of Badger activity, such as well-worn paths and run-throughs, snagged hair, footprints, latrines and foraging signs, was also searched for in order to build up a picture of the use of the application site by Badgers.

2.4.8. **Reptiles.** Specific surveys to identify the presence or absence of common reptiles were undertaken at the application site by Ecology Solutions between July and August 2023.

2.4.9. Survey work was undertaken with regard to the standard methodology outlined in the Herpetofauna Workers' Manual[8]. A total of 64 artificial refugia or 'tins' (0.5m x 0.5m squares of roofing felt) were distributed across suitable reptile habitats within the application site and initially left in place for a suitable period of time to 'bed in'.

2.4.10. Subsequently, all natural and artificial refugia within the application site were inspected during suitable weather conditions, with details recorded of any reptiles encountered. Any reptiles observed within the application site whilst surveyors were walking between artificial refugia were also noted to supplement the survey effort. A total of seven check surveys were completed in suitable weather conditions.

2.4.11. The tins provide shelter and heat up quicker than the surroundings in the morning and can remain warmer than the surroundings in the late afternoon. Being ectothermic (cold blooded), reptiles use them to bask and raise their body temperature which allows them to forage earlier and later in the day.

2.4.12. Suitable weather conditions for carrying out the surveys are when the air temperature is between 9 and 18°C. Heavy rain and windy conditions were avoided.

[8] Gent, T. & Gibson, S. (2003). *Herpetofauna Workers' Manual.* JNCC, Peterborough.

3. ECOLOGICAL FEATURES

3.1.1. The application site was subject to an ecological survey in June 2023. The vegetation present enabled the habitat types to be satisfactorily identified and an accurate assessment of the ecological interest of the habitats to be undertaken.

3.1.2. The following main habitat types were identified within the application site boundary:

- Semi-Improved Grassland;
- Tall Ruderal Vegetation;
- Dense Scrub; and
- Hedgerows and Treelines.

3.1.3. The location of these habitats is shown on Plan ECO2. Each habitat present is described below with an account of its representative plant species (where relevant).

3.2. Semi-Improved Grassland

3.2.1. The majority of the application site comprises semi-improved grassland fields, separated by a post and wire fence.

3.2.2. Field F1 comprises the southern part of the application site and was recorded to support a very short sward height at the time of survey in June 2023, appearing to have been recently cut for silage. Species recorded within this field include Perennial Rye-grass *Lolium perenne*, Yorkshire Fog *Holcus lanatus*, Creeping Fescue *Festuca rubra*, Cock's-foot *Dactylis glomerata*, Rough Meadow-grass *Poa trivialis*, False Oat-grass *Arrhenatherum elatius*, Creeping Buttercup *Ranunculus repens*, Dandelion *Taraxacum officinale* agg., Red Clover *Trifolium pratense*, Daisy *Bellis perennis*, Broadleaved Dock *Rumex obtusifolius* and Ribwort Plantain *Plantago lanceolata.*

3.2.3. Field F2 comprises the northern part of the application site. The grassland sward within this field supported the same botanical species as field F1, with the addition of Field Bindweed *Convolvulus arvensis*, but was recorded to have a longer sward height at the time of survey in June 2023 (circa 20cm).

3.3. Tall Ruderal Vegetation

3.3.1. A band of tall ruderal vegetation is present along the south-eastern boundary of the application site. Species recorded in this area include Cow Parsley *Anthriscus sylvestris*, Common Nettle *Urtica dioica*, Creeping Thistle *Cirsium arvense*, Spear Thistle *Cirsium vulgare*, Ragwort *Senecio jacobaea* and Rosebay Willowherb *Chamaenerion angustifolium*.

3.4. Dense Scrub

3.4.1. An area of dense scrub primarily composed of Bramble *Rubus fruticosus* agg. is present along the northern boundary of the application site.

3.5. Hedgerows and Treelines

3.5.1. The north-eastern and north-western boundaries of the application site are defined by a species-poor hedgerow. This feature predominantly consists of Hawthorn *Crataegus monogyna*, with occasional Ash *Fraxinus excelsior*, Beech *Fagus sylvatica*, Blackthorn *Prunus spinosa*, Dogwood *Cornus sanguinea,* Field Maple *Acer campestre,* Hazel *Corylus avellana,* Elder *Sambucus nigra* and Holly *Ilex aquifolium*. A number of trees are also associated with this feature, with additional species including Horse Chestnut *Aesculus hippocastanum* and Alder *Alnus glutinosa.*

3.5.2. A treeline is present along the south-eastern boundary, merging into a copse that lies outside of the application site boundary. Species associated with this feature include Ash, Field Maple, Oak, Horse Chestnut, Copper Beech and Alder.

3.6. Background Information

3.6.1. The desk study undertaken with EFC did not return any records of protected or notable plant species from within or immediately adjacent to the application site boundary.

3.6.2. The nearest returned record of a protected or notable plant species pertains to Pyramidal Orchid *Anacamptis pyramidalis*, recorded at a location approximately 0.3km northwest of the application site in 2004.

3.6.3. No protected or notable botanical species were recorded to be present within the application site during the survey work undertaken and given the habitats present it is considered highly unlikely that any would be present.

4. WILDLIFE USE OF THE APPLICATION SITE

4.1. During the survey work, general observations were made with specific attention paid to the potential presence of protected species. Specific surveys were also undertaken in respect of bats, Badgers and reptiles.

4.2. Bats

4.2.1. As outlined in Section 2 above, all existing trees, buildings and structures present within and immediately adjacent to the application site were subject to assessment to identify any potential opportunities to support roosting bats.

4.2.2. There are no buildings or structures present within or immediately adjacent to the application site which provide opportunities for roosting bats.

4.2.3. A total of three trees associated with the boundary features at the application site were recorded as having potential to support roosting bats, with approximate locations shown on Plan ECO3. In each instance, opportunities are associated with a dense covering of Ivy, such that in line with guidance they are considered to have 'low' potential to support roosting bats.

4.2.4. The hedgerow and treelines within the application site provide some suitable opportunities for foraging and commuting bats in the local area. However, as noted above these features are typically associated with the boundaries, with the semi-improved grassland providing limited opportunities for this group.

4.2.5. **Background Information.** The data search received from EFC did not return any record of bat species from within or immediately adjacent to the application site boundary.

4.2.6. The nearest returned record pertains to a grounded Common Pipistrelle *Pipistrellus pipistrellus*, from a location approximately 0.1km northeast of the application site from 2011.

4.2.7. Records of other bat species returned from the wider search area include Brown Long-eared *Plecotus auritus*, Natterer's Bat *Myotis nattereri*, Noctule Bat *Nyctalus noctula*, Serotine Bat *Eptesicus serotinus* and Soprano Pipistrelle *Pipistrellus pygmaeus*.

4.3. Badgers

4.3.1. No evidence to indicate the presence of Badgers *Meles meles*, such as any setts, foraging pits, latrines, well used mammal pathways, footprints or hairs, was recorded within the application site or immediate vicinity during the survey.

4.3.2. .The habitats present within the application site provide superficially suitable habitat for Badgers, should they be present in the local area, although off-site areas such as the woodland to the south are likely to provide better opportunities for sett-building and potentially foraging.

4.3.3. Given the absence of any evidence to indicate current use by this species, it is axiomatic that the application site is highly unlikely to be of significance to Badgers in the local area. As such, no further consideration has been afforded to this species within this Ecological Assessment.

4.3.4. **Background Information.** The data search received from EFC did not return any records of Badgers from within or immediately adjacent to the application site.

4.3.5. The nearest returned record of Badger was recorded at a location approximately 0.1km north of the application site from 2010, although the type of record has not been determined by EFC.

4.4. Hazel Dormouse

4.4.1. Whilst the treelines and hedgerows present within the application site provide superficially suitable habitat for Hazel Dormouse *Muscardinus avellanarius*, the application site is relatively isolated from other suitable habitats in the local area such as woodland and hedgerows. There are also barriers to the movement of this species locally, including residential development to the north and west, the railway line to the south-east, Stansted Brook to the south and (further afield) the M11 motorway to the south-west.

4.4.2. Moreover, as outlined below, the desk study undertaken with EFC did not identify any records of this species from the local area.

4.4.3. As such, it is considered highly unlikely that Dormice would be present within the application site, and this species is not therefore considered further within this assessment.

4.4.4. **Background Information.** The desk study undertaken with EFC did not return any records of Hazel Dormouse from within the search area.

4.5. Reptiles

4.5.1. The majority of the application site comprises semi-improved grassland, much of which was recorded to support a short sward. However, areas of longer grassland and tall ruderal vegetation within the application site boundary provide suitable opportunities for reptile species. The extent of suitable reptile habitat currently present within the application site is marked on Plan ECO3.I

4.5.2. As such, specific survey work was undertaken to ascertain the presence or absence of reptiles within the application site, in accordance with the methodology set out in Section 2 above.

4.5.3. A total of 64 tins were utilised for the reptile survey, with the overall area of suitable reptile habitat within the site approximately 0.5 hectares in size. On this basis therefore, the density of the tins significantly exceeds the standard density of 10 per hectare.

4.5.4. The results of these surveys are summarised in Table 1 below.

Date	Survey Number	Weather Conditions	Reptiles Recorded
19/07/2023	1	100% cloud cover, 17°C	7 Female Adult Slow Worm 1 Juvenile Slow Worm
24/07/2023	2	100% cloud cover, 15°C	8 Female Adult Slow Worm 5 Juvenile Slow Worm
26/07/2023	3	20% cloud cover, 18°C	2 Female Adult Slow Worm 2 Juvenile Slow Worm
28/07/2023	4	95% cloud cover, 18°C	2 Male Adult Slow Worm 13 Female Adult Slow Worm 3 Juvenile Slow Worm
31/07/2023	5	90% cloud cover, 18°C	2 Male Adult Slow Worm 14 Female Adult Slow Worm 12 Juvenile Slow Worm
2/08/2023	6	85% cloud cover, 17°C	2 Male Adult Slow Worm 5 Female Adult Slow Worm 1 Juvenile Slow Worm
4/08/2023	7	100% cloud cover, 17°C	1 Male Adult Slow Worm 4 Female Adult Slow Worm 3 Juvenile Slow Worm

Table 1: 2023 Reptile Survey Results

4.5.5. The reptile surveys identified a breeding population of Slow-worm *Anguis fragilis*, with individuals recorded in locations throughout the application site. No other reptile species were recorded.

4.5.6. In line with the HGBI guidance, taking into account a maximum count of adults of 16 on any single survey visit, the application site supports a low population of Slow-worm (population of less than 50 per hectare).

4.5.7. **Background Information.** The desk study undertaken with EFC did not return any records of common reptile species from within or immediately adjacent to the application site boundary.

4.5.8. The nearest returned record pertains to Slow Worm, recorded at a location approximately 0.3km to the west of the application site in 2021. Records of Common Lizard *Zootoca vivipara* and Grass Snake *Natrix helvetica* were also returned from the search area.

4.6. Amphibians

4.6.1. There are no waterbodies present within or immediately adjacent to the application site that provide suitable breeding opportunities for amphibians, including Great Crested Newts *Triturus cristatus*.

4.6.2. A review of Ordnance Survey mapping identified a total of two waterbodies located within 500 metres of the application site boundary. Table 2 below notes the distance of these features from the nearest part of the application site (straight line distance), with their locations relative to the application site illustrated on Plan ECO4.

Pond Reference	Location relative to the application site boundary
P1	c. 25 metres West
P2	c. 380 metres South-East

Table 2: Locations of off-site waterbodies (see Plan ECO4)

4.6.3. Although it is known that Great Crested Newts can disperse up to 500 metres through suitable terrestrial habitat from their breeding pond, it is widely accepted that they tend to utilise suitable terrestrial habitat within a much closer distance. Activity is usually concentrated within 100 metres of breeding ponds, with key habitat is located within 50 metres (typically described by Natural England as 'core habitat').

4.6.4. One of these waterbodies, Pond P1, is situated approximately 25 metres to the west of the application site boundary at its nearest point. This waterbody appears to be a newly created attenuation basin associated with the residential development of the north of the application site. Given the absence of any records of Great Crested Newts from within 500 metres of the application site, as well as the paucity of ponds in the locality that could otherwise have provided a suitable 'source' from which newts could have colonised this waterbody, it is considered highly unlikely that they will be present within this recently created feature.

4.6.5. In addition, Pond P2 is separated from the application site by extensive areas of agriculturally managed land, areas of residential development and existing roads which collectively would act as barriers to movement. Given the distances involved, and the fact that any amphibians would have to traverse habitats which appear (from aerial photography) to offer terrestrial opportunities, it is therefore considered highly unlikely that any Great Crested Newts associated with this waterbody (if present) would utilise the application site.

4.6.6. No amphibian species were recorded within the application site during the course of the reptile survey work.

4.6.7. Whilst the habitats which comprise the majority of the application site provide potential terrestrial opportunities, for the reasons outlined above it is considered highly unlikely that Great Crested Newts would utilise the application site, in either their breeding or terrestrial phases. As such, no further consideration has been afforded to this group within this Ecological Assessment.

4.6.8. **Background Information.** The data search received from EFC did not return any records of amphibian species from within or immediately adjacent to the application site boundary.

4.6.9. The nearest returned record pertains to Great Crested Newt, recorded at a location approximately 0.8km to the south-west of the application site from 2018.

4.7. Birds

4.7.1. The trees, dense scrub and hedgerow habitats present within the application site provide some opportunities for nesting and foraging birds. However, the species-poor grassland which comprises the majority of the

application site provides limited foraging opportunities for this group at present.

4.7.2. **Background Information.** Several records of bird species were returned by EFC from within the search area, including numerous records from within the same 1km grid square as the application site. These pertain to Short-eared Owl *Asio flammeus*, Waxwing *Bombycilla garrulus*, Buzzard *Buteo buteo*, Cuckoo *Cuculus canorus* and Red Kite *Mlivus milvus*, all recorded between 2013 and 2022.

4.8. Invertebrates

4.8.1. Given the limited diversity of the habitats within the application site boundary, it is considered that a range of common and widespread invertebrate species are likely to be present. However, there is no evidence to indicate that the application site is likely to be of importance for any protected or notable invertebrate species or assemblages.

4.8.2. **Background Information.** The data search received from EFC returned a total of eleven records of invertebrate species from a grid reference that includes the application site. These include Meadow Brown *Maniola jurtina* and Small White *Pieris rapae*, Peacock *Aglais io*, Small Tortoiseshell *Aglais urticae*, Orange-tip *Anthocharis cardamines*, Large White *Pieris brassicae*, Comma *Polygonia c-album*, Gatekeeper *Pyronia Tithonus*, Red Admiral *Vanessa atalanta* and Painted Lady *Vanessa cardui* recorded between 2012 and 2015.

5. ECOLOGICAL EVALUATION

5.1. The Principles of Ecological Evaluation

5.1.1. The latest guidelines for ecological evaluation produced by CIEEM proposes an approach that involves professional judgement, but makes use of available guidance and information, such as the distribution and status of the species or features within the locality of the project.

5.1.2. The methods and standards for site evaluation within the British Isles have remained those defined by Ratcliffe[9]. These are broadly used across the United Kingdom to rank sites so priorities for nature conservation can be attained. For example, current sites of Special Scientific Interest (SSSI) designation maintains a system of data analysis that is roughly tested against Ratcliffe's criteria.

5.1.3. In general terms, these criteria are size, diversity, naturalness, rarity and fragility, while additional secondary criteria of typicalness, potential value, intrinsic appeal, recorded history and the position within the ecological/geographical units are also incorporated into the ranking procedure.

5.1.4. Any assessment should not judge sites in isolation from others, since several habitats may combine to make it worthy of importance to nature conservation.

5.1.5. Further, relying on the national criteria would undoubtedly distort the local variation in assessment and therefore additional factors need to be taken into account, e.g. a woodland type with a comparatively poor species diversity, common in the south of England, may be of importance at its northern limits, say in the border country.

5.1.6. In addition, habitats of local importance are often highlighted within a local Biodiversity Action Plan (BAP). The Essex Biodiversity Action Plan identifies and lists several priority species and habitats.

5.1.7. Levels of importance can be determined within a defined geographical context from the immediate site or locality through to the international level.

5.1.8. The legislative and planning policy context has also been given due regard throughout this assessment.

5.2. Designated Sites

Statutory Sites

5.2.1. There are no statutory designated sites of nature conservation interest within or adjacent to the application site. The nearest statutory site is Elsenham Woods Site of Special Scientific Interest (SSSI), located approximately 2.4km to the east of the application site at its closest point (see Plan ECO1).

[9] Ratcliffe, D A (1977). *A Nature Conservation Review: the Selection of Study areas of Biological National Importance to Nature Conservation in Britain*. Two Volumes. Cambridge University Press, Cambridge.

5.2.2. Elsenham Woods SSSI is designated on account of the Ancient woodland habitats that the site supports.

5.2.3. Given the limited scale of the proposed development and the significant separation from Elsenham Woods SSSI by open countryside, existing development and roads / railway lines, it is considered that the proposed development would not lead to any direct or indirect impacts either during the construction or operational phases of the development.

5.2.4. There are no international or European designated sites located within 10km of the application site. However, it is noted that Hatfield Forest SSSI / National Nature Reserve (NNR) is situated approximately 4.6km to the south of the application site at its closest point.

5.2.5. Hatfield Forest SSSI / NNR is designated on account of the Ancient Woodland habitats that the designated site supports. This site is understood to be subject to adverse effects arising due to recreational pressure, with a Zone of Influence of 10.4km identified.

5.2.6. Given the small scale of the proposed development (for 40 new residential dwellings), it is considered unlikely that the proposals would lead to a measurable increase in recreational pressure. It is therefore considered that no specific mitigation measures would be required in respect of this site. This position accords with the interim mitigation strategy agreed between Natural England and the affected local planning authorities (including Uttlesford District Council), which involves the requirement for bespoke, proportionate mitigation to be identified for schemes of 50 houses or more.

5.2.7. In summary, the development proposals are therefore unlikely to lead to adverse effects to any statutory designated sites.

Non-statutory Sites

5.2.8. There are no non-statutory designated sites of nature conservation interest present within or immediately adjacent to the application site boundary. The nearest non-statutory site is Alsa Wood Local Wildlife Site (LWS), situated approximately 0.4km to the north-west of the application site at its closest point (straight line distance, see Plan ECO1).

5.2.9. As outlined on the citation, Alsa Wood LWS is designated on account of the Ancient Woodland habitat that the site supports.

5.2.10. As illustrated on Plan ECO1, there is a number of other non-statutory designated sites present in the local area, including:

- Alsa Wood LWS, situated approximately 0.4km to the north-west of the application site at its closest point;
- Durrel's Wood LWS, situated approximately 0.7km to the south-west;
- Wilkin's Plantation LWS, situated approximately 0.7km to the south;
- Auburey Buxton Reserve LWS, approximately 1.1km to the west;
- Alsa Lodge Pit LWS, approximately 1.7km to the north-west;
- Turner Spring LWS, approximately 1.5km to the south;
- Lady Wood/Regent Spring LWS, approximately 1.9km to the east; and
- Eastend Lane LWS, approximately 2.0km to the east;

5.2.11. There are no areas of Ancient Woodland situated within or immediately adjacent to the application site boundary.

5.2.12. The application site is separated from all non-statutory designated sites in the local area by open countryside, roads and areas of existing development. As a result, it is considered that the development proposals are unlikely to lead to any impacts via pathways such as physical disturbance or damage, lighting or noise, during the construction or operational periods.

5.2.13. The application site is located adjacent to a small stream (Stansted Brook) which provides a potential hydrological connection between the application site and a number of non-statutory designated sites in the local area, with a surface water drainage outfall proposed.

5.2.14. Mitigation measures will be employed throughout the construction phase in order to prevent contaminated run-off (including silts and other pollutants) from entering the watercourse. Measures such as storage of materials away from the watercourse and the use of interceptor fencing, where necessary, will ensure that adverse effects are avoided. These measures would be outlined within a Construction Environmental Management Plan (CEMP) secured in line with a suitably worded planning condition.

5.2.15. The drainage design of the proposed development will ensure that water quality associated with surface water runoff will be carefully controlled, with measures such as gully pots and interceptors forming part of the scheme as necessary to minimise the risk of potential contamination to the off-site watercourse. Furthermore, the proposals will control the rate of off-site discharge to no more than existing ('green field') run off rates. The final detail of the drainage strategy will be informed by further technical work and will be confirmed at the detailed stage.

5.2.16. The adoption of these measures will ensure that adverse effects to off-site habitats – including non-statutory designated sites which are hydrologically linked – will be avoided both during the construction and operational phases.

5.2.17. Given the scale of the development proposals it is considered unlikely that any other significant adverse effects would arise to non-statutory designated sites in the local area.

5.3. **Habitat Evaluation**

5.3.1. As outlined above, the majority of the application site comprises semi-improved grassland, supporting a relatively limited range of botanical species which are common and widespread in both a regional and local context.

5.3.2. Habitats of comparatively greater ecological value within the context of the site are the treelines and hedgerows associated with the boundaries. Areas of tall ruderal vegetation and dense scrub provide some opportunities for faunal groups, although they are limited both in extent and in terms of the botanical diversity that they support. As such, they are considered to be of value at the site level only.

5.3.3. Under the development proposals, areas of existing grassland habitat will be lost to facilitate the new development. Some losses are also required to hedgerows in order to facilitate access. However, the majority of boundary vegetation will be retained, in addition to open space in the southern and eastern parts of the development.

5.3.4. To prevent harm to retained treelines and hedgerows during construction, it is recommended that temporary protective fencing (Heras or equivalent) should be installed prior to the commencement of works, in accordance with the current British Standards, to prevent potential encroachment of machinery and personnel. Materials such as fuels and oils should be stored in bunded compounds away from such features, to minimise the risk of potential damage.

5.3.5. Full details of the measures to be adopted to protect retained habitats during construction can be provided in the CEMP, secured via an appropriately worded planning condition.

5.3.6. Within areas of green infrastructure, the proposals provide an opportunity to deliver enhancements through the provision of native species-rich habitats, such as wildflower grassland, scrub, hedgerows and trees.

5.3.7. In addition, new wetland habitats are proposed as part of the Sustainable Urban Drainage System (SuDS). Whilst the design of these features will focus on their primary function (drainage), they have been designed to hold standing water throughout the year, with marginal, aquatic and wet wildflower grassland planting proposed to maximise opportunities for wildlife

5.3.8. Through the use of native seed mixtures, in addition to the implementation of an appropriate management regime which seeks to maximise the ecological value of retained and new habitats, it is considered that biodiversity benefits will be achieved compared to the existing situation.

5.3.9. It is envisaged that detailed prescriptions for the creation and enhancement of new and retained habitats and subsequent long-term management can be outlined within a Landscape and Ecological Management Plan (LEMP), which may be secured via a suitably worded planning condition. Management of open space will be undertaken with due regard to the presence of protected species, including reptiles and nesting birds (see below).

5.3.10. The retention of existing habitats and provision of new species-rich planting will also provide improved opportunities for faunal groups including bats, reptiles, invertebrates and foraging birds. The use of native, nectar-rich and berry-bearing species of local provenance as part of the planting mixture would further enhance the biodiversity value of the site post-development.

5.3.11. In conclusion, whilst the development proposals will necessarily result in losses to existing habitats, the retention and enhancement of existing grassland, hedgerows and treelines, and the provision of new species-rich habitats within the site, together with long-term management, will mitigate for habitat losses and deliver enhancements compared to the existing situation at the site.

5.4. Faunal Evaluation

Bats

5.4.1. **Legislation.** All bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and included on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 ("the Habitats Regulations", as amended). These include provisions making it an offence:

- Deliberately to kill, injure or take (capture) bats;
- Deliberately to disturb bats in such a way as to be likely to significantly affect:-
- the ability of any significant group of bats to survive, breed or rear or nurture their young; or to hibernate; or
- to affect significantly the local distribution or abundance of the species concerned;
- To damage or destroy any breeding or resting place used by bats;
- To intentionally or recklessly obstruct access to any place used by bats for shelter or protection (even if bats are not in residence).

5.4.2. While the legislation is deemed to apply even when bats are not in residence, Natural England guidance suggests that certain activities such as re-roofing can be completed outside sensitive periods when bats are not in residence provided these do not damage or destroy the roost.

5.4.3. The words 'deliberately' and 'intentionally' include actions where a court can infer that the defendant knew 'the action taken would almost inevitably result in an offence, even if that was not the primary purpose of the act.

5.4.4. The offence of damaging (making it worse for the bat) or destroying a breeding site or resting place is an absolute offence. Such actions do not have to be deliberate for an offence to be committed.

5.4.5. Seven species of bat are Priority Species in England; specifically, Barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, Noctule, Soprano Pipistrelle, Brown Long-eared *Plecotus auritus*, Greater Horseshoe *Rhinolophus ferrumequinum*, and Lesser Horseshoe *Rhinolophus hipposideros*.

5.4.6. **Application Site Evaluation.** Survey work identified the presence of three trees associated with the northern boundary of the application site with low potential to support roosting bats.

5.4.7. The treelines and hedgerows associated with the boundaries of the application site offer potential opportunities for foraging and commuting bats in the local area. However, the semi-improved grassland present within the application site itself currently provides limited opportunities for this group.

5.4.8. **Avoidance, Mitigation and Enhancements.** All trees identified to have bat roosting potential are to be fully retained under the emerging development proposals. As a result, existing roosting opportunities for bats that these trees provide will be unaffected by the proposals. As outlined above, measures shall be adopted throughout the construction period to prevent

potential damage to retained trees, including the use of temporary protective fencing.

5.4.9. In the instance that any of these trees will be subject to any works, including arboricultural management, in line with guidance a precautionary approach will be adopted. A 'soft' methodology shall be utilised for any limbs to be removed, with works to be undertaken in a systematic and stepwise manner by a suitably qualified and experienced professional. In the unlikely event that bats are encountered, works shall cease, advice shall be sought from a suitably qualified ecologist and a licence would be required from Natural England before proceeding.

5.4.10. As outlined above, the development proposals will retain the majority of existing treelines and hedgerows associated with the boundaries of the application site, with these features to be incorporated into habitat corridors. As such, any existing opportunities for bats associated with these features will therefore be safeguarded post-development. The provision of new species-rich planting within the application site, including wildflower grassland, wetland habitats, trees and hedgerows will provide improved foraging and commuting opportunities.

5.4.11. The lighting strategy for the application site shall incorporate measures to ensure that the level of light spill onto surrounding habitats (including trees with bat roosting potential) will be reduced. Lighting will be restricted only to areas where it is required, with measures such as hoods, cowls and louvres used to minimise light spillage and direct light below the horizontal plane. No artificial lighting is proposed on the southern or eastern boundaries, thereby retaining dark corridors for use by foraging and commuting bats.

5.4.12. As an enhancement for roosting bats, bat boxes will be installed in suitable locations on new buildings or suitable mature retained trees, such as those in the southern boundary of the application site. Examples of suitable boxes that may be provided are included at Appendix 4 of this Ecological Assessment.

5.4.13. With the adoption of the measures outlined above, the development proposals will avoid potential harm to bats and moreover are likely to result in enhancements for this group compared to the existing situation.

Reptiles

5.4.14. **Legislation.** All six British reptile species receive a degree of legislative protection that varies depending on their conservation importance.

5.4.15. Due to their abundance and more cosmopolitan habitat requirements in Britain, Common Lizard, Slow Worm, Grass Snake and Adder *Vipera berus* are only 'partially protected' under the Wildlife and Countryside Act 1981 (as amended), and as such only receive protection from:

- deliberate killing and injuring;
- being sold or other forms of trading.

5.4.16. **Application Site Evaluation**. As outlined above, survey work undertaken in 2023 confirmed the presence of Slow-worms within the application site,

with a small population recorded (maximum count of 16 adults). No other reptile species were recorded during the survey.

5.4.17. **Avoidance, Mitigation and Enhancements.** Given the presence of a population of common reptiles, a translocation exercise will be required prior to the commencement of works in order to safeguard this group.

5.4.18. The following paragraphs outline the key principles which will underpin a translocation exercise to safeguard reptiles from harm, in order to provide comfort that appropriate mitigation can be delivered. It is considered that the final detail of the reptile mitigation strategy may be secured by a suitably worded planning condition.

5.4.19. The translocation exercise should be undertaken with regard to the best practice guidelines produced by the HGBI.

5.4.20. Given area of existing suitable reptile habitat which is to be retained within open space to the south and east of the application site, it is considered that an on-site receptor area would be appropriate in this case. These habitats are connected to off-site areas to the south and east (along the railway line), such that the local reptile population could be maintained without any severance to the population. However, translocation of reptiles to a suitable off-site receptor location as an alternative would also be acceptable.

5.4.21. The receptor area shall be managed to provide optimal habitats for foraging and hibernating reptiles, including long grassland and areas of scrub. To increase the carrying capacity of the receptor site, enhancements will be provided including the provision of hibernacula and other features such as log piles, to provide hibernation and sheltering areas which are currently limited.

5.4.22. Any on-site receptor area would need to be protected throughout the duration of the construction period. Heras fencing (or equivalent) would remain in place on the development side of these features, to prevent any potential encroachment of machinery or personnel, with semi-permanent HDPE reptile fencing installed on the outside of the Heras fencing, to prevent any reptiles from re-entering the development site during the course of the construction period.

5.4.23. Reptile fencing would remain in place throughout the translocation exercise and construction period and would only be removed once construction works have been completed. This will ensure that reptiles are protected from harm and in due course will allow them to recolonise open spaces within the site.

5.4.24. The aim of the translocation exercise will be to remove reptiles from the application site, thereby safeguarding them from harm. Artificial refugia would be deployed throughout the site at high density and would be checked in the morning as they are heating up, and as they cool down in the afternoon / evening, but before they become cold. All reptiles encountered would be captured by hand and placed in cloth bags, providing a dark environment in which they will be held whilst the trapping round is completed. Once completed, they will be transferred to a vivarium filled with grass or other suitable vegetation before being transported to and released at a suitable location within the receptor site. The translocation exercise

shall proceed until a period of five clear days of no capture during suitable weather conditions is achieved.

5.4.25. Following the completion of the trapping exercise, the exercise will proceed to a destructive search, a further capture method designed to locate and capture any remaining reptiles. Any features which may provide refuge for reptiles, such as any brash piles, will be teased apart by hand or by appropriate machinery and thoroughly searched to ensure no reptiles are present. All areas of suitable reptile habitat will be stripped in a systematic manner with the use of machinery, with all site arisings to be thoroughly searched for the presence of reptiles prior to their removal from the application site. A supervising ecologist will be in place during these works in order to capture any remaining reptiles, which would also be translocated to the off-site receptor.

5.4.26. Following the completion of the destructive search, there will be no suitable habitat for reptiles to return to and it will be considered that the translocation exercise has been successfully completed. Given the proximity of suitable habitats in the local area, consideration will be afforded to the need to provide temporary fencing along the boundaries of the application site to prevent the potential recolonisation of the site from reptiles, although the removal of all suitable reptile habitat within the application site should render it unattractive.

5.4.27. The translocation exercise and destructive search would be undertaken during the active period for reptiles (from April to September / October inclusive), during suitable weather conditions (temperatures above 9C, avoiding heavy rain and strong winds). Works will be overseen by suitably qualified ecologists who have experience in undertaking reptile surveys and translocation exercises.

5.4.28. Subject to the adoption of a suitable translocation exercise in accordance with the overarching principles outlined above, which may be secured via a suitably worded planning condition, adverse effects will be fully avoided. It is noted that there is ample precedent for the full details of a reptile mitigation strategy to be secured via an appropriately worded planning condition.

Birds

5.4.29. **Legislation.** Section 1 of the Wildlife and Countryside Act 1981 (as amended) is concerned with the protection of wild birds, whilst Schedule 1 lists species that are protected by special penalties. All species of birds receive general protection whilst nesting.

5.4.30. **Application Site Usage.** The trees, dense scrub and hedgerow habitats associated with the boundaries of the application site provide opportunities for nesting and foraging birds, although the grassland which comprises the majority of the application site provides limited opportunities at present.

5.4.31. **Avoidance, Mitigation and Enhancements.** The majority of existing nesting habitat present within the application site will be retained under the development proposals. Where losses are required, it is recommended that the clearance of suitable bird nesting habitats should be undertaken outside of the main bird nesting season (March to July inclusive), where possible,

or alternatively following a check by a suitably qualified ecologist which has confirmed that there are no active nests.

5.4.32. The provision of new species-rich habitats including wildflower grassland, wetland habitat, trees and hedgerows within the application site is likely to compensate for losses that are required and moreover would provide improved opportunities for foraging and nesting birds compared to the existing situation.

5.4.33. In addition, providing new bird nesting boxes in suitable locations on suitable retained trees and/or new buildings will deliver further enhancements for this group. The use of nest boxes of various designs would serve to maximise opportunities, with scope to target key species. Examples of suitable bird nesting boxes are provided at Appendix 5 of this Ecological Assessment.

6. PLANNING POLICY CONTEXT

6.1. The planning policy framework that relates to nature conservation in Elsenham is issued at two main administrative levels: nationally through the National Planning Policy Framework (NPPF) and locally through the Uttlesford Local Plan. The proposed development will be judged in relation to the policies contained within these documents.

6.2. National Policy

National Planning Policy Framework (2021)

6.2.1. The National Planning Policy Framework (NPPF) sets out the Government's requirements for the planning system and was adopted on 27th March 2012 and subsequently revised on the 24 July 2018, 19 February 2019 and 20 July 2021.

6.2.2. The key element of the NPPF is that there should be "*a presumption in favour of sustainable development*" (paragraphs 10 to 11).

6.2.3. The revised NPPF is comparable to previous versions (which it replaces), including reference to minimising impacts on biodiversity and provision of net gains to biodiversity where possible (paragraph 179) and ensuring that Local Authorities place appropriate weight to statutory and non-statutory nature conservation designations, protected species and biodiversity.

6.2.4. The NPPF also considers the strategic approach that Local Authorities should adopt with regard to the protection, maintenance and enhancement of Green Infrastructure, priority habitats and ecological networks, and the recovery of priority species.

6.2.5. Paragraph 180 of the NPPF comprises a number of principles which Local Authorities should apply, including:

- encouraging opportunities to incorporate biodiversity in and around developments;
- provision for refusal of planning applications if significant harm cannot be avoided, mitigated or, as a last resort, compensated for; and
- the provision for the refusal for developments resulting in the loss or deterioration of 'irreplaceable' habitats unless the need for, and benefits of, the development in that location clearly outweigh the loss.

6.2.6. National policy therefore implicitly recognises the importance of biodiversity and that with sensitive planning and design, development and conservation of the natural heritage can co-exist and benefits can, in certain circumstances, be obtained.

6.3. Local Policy

6.3.1. The current document for planning control purposes in Elsenham is the Uttlesford Local Plan (adopted 2005). There are a number of adopted planning policies which relate to ecology and nature conservation.

6.3.2. **Policy ENV3** of the Local Plan is concerned with Open Spaces and Trees. This policy states that the loss of traditional open spaces, other visually

important spaces, groups of trees and fine individual tree specimens through development proposals will not be permitted unless the need for the development outweighs their amenity value.

6.3.3. **Policy ENV7** of the Local Plan is concerned with The Protection of the Natural Environment – Designated Sites. This policy states that development proposals that adversely affect areas of nationally important nature conservation concern will not be permitted unless the need for the development outweighs the particular importance of their nature conservation value.

6.3.4. The policy also states that development proposals likely to affect local areas of nature conservation significance, such as County Wildlife Sites, Ancient Woodlands, wildlife habitats, sites of ecological interest and Regionally Important Geological/ Geomorphological Sites, will not be permitted unless the need for the development outweighs the local significance of the site to the biodiversity of the district. The policy also notes that the authority will consider the use of conditions or planning obligations to ensure the protection and enhancement of the conservation interest of designated sites.

6.3.5. **Policy ENV8** of the local plan is concerned with Other Landscape Elements of Importance for Nature Conservation. This policy states that development that may adversely affect these landscape elements hedgerows, linear tree belts, larger semi natural or ancient woodlands, semi-natural grasslands, green lanes and special verges, orchards, plantations, ponds, reservoirs, river corridors, linear wetland features, networks or patterns of other locally important habitats will only be permitted if the following criteria apply:

a. The need for the development outweighs the need to retain the elements for their importance to wild fauna and flora; and

b. Mitigation measures are provided that would compensate for the harm and reinstate the nature conservation value of the locality.

6.3.6. The policy also notes that appropriate management of these elements will be encouraged with conditions and planning obligations.

6.4. Discussion

6.4.1. Recommendations have been put forward in this report that would fully safeguard the existing ecological interest of the application site. Based on the survey and assessment work undertaken, the presence and potential presence of protected and notable species has been given due regard and measures have been put forward as part of the proposed development to avoid and mitigate for adverse effects and moreover deliver enhancements.

6.4.2. In conclusion, implementation of the measures set out in this report ensure that the development proposals fully accord with planning policy and guidance for ecology and nature conservation at all administrative levels.

7. SUMMARY AND CONCLUSIONS

7.1. Ecology Solutions Limited was commissioned in June 2023 by Rosconn Strategic Land Limited to undertake an ecological assessment of the Land West of Robin Hood Road, Elsenham.

7.2. There are no statutory or non-statutory designated sites of nature conservation interest present within or adjacent to the application site. For the reasons outlined above, it is considered that the development proposals would not be likely to lead to any adverse impacts to designated sites either during construction or operation.

7.3. Whilst the application site supports a range of habitats, the majority of the development footprint comprises species-poor semi-improved grassland which is of limited ecological significance. Features of relatively greater interest associated with boundaries will largely be retained and enhanced under the development proposals. Where losses are required, these will be offset through the delivery of enhancements to retained habitats, the provision of new species-rich native habitats and the implementation of a long-term management plan designed to maximise the ecological value of the application site.

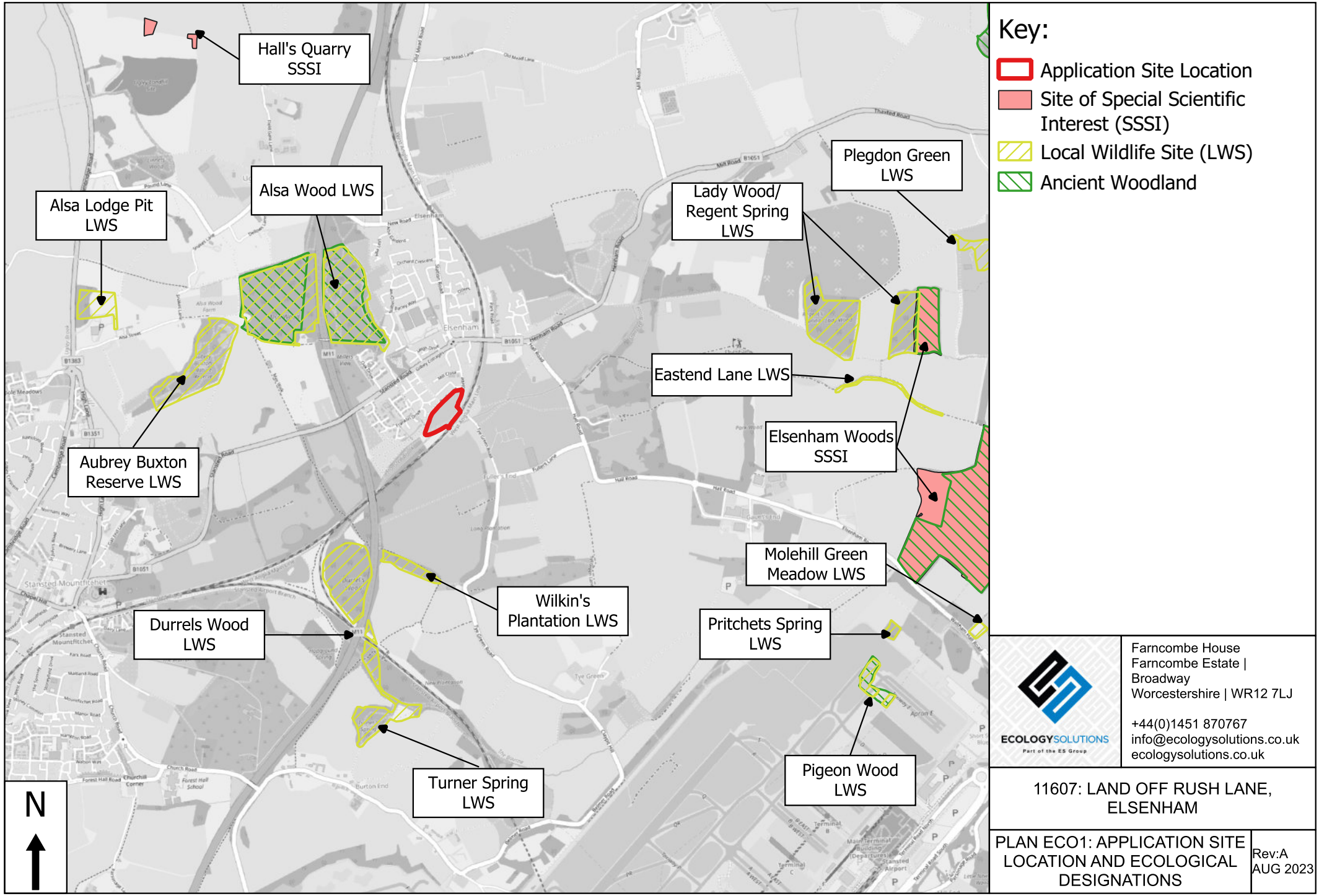
7.4. The application site also currently provides opportunities for foraging and commuting bats, birds and reptiles. Appropriate mitigation measures have been proposed in order to avoid harm and to safeguard existing opportunities for protected and notable species. Subject to the implementation of measures as outlined in this Ecological Assessment, adverse effects to protected species will be avoided and opportunities for key faunal groups will be retained and moreover enhanced post-development.

7.5. In conclusion, the development proposals for the site will avoid potential adverse ecological effects and moreover deliver significant enhancements compared to the existing situation. On this basis, the development proposals accord with all legislation and planning policy of relevance to ecology and nature conservation.

PLANS

PLAN ECO1

Application Site Location and Ecological Designations



ECOLOGYSOLUTIONS
Part of the ES Group

Farncombe House
Farncombe Estate |
Broadway
Worcestershire | WR12 7LJ

+44(0)1451 870767
info@ecologysolutions.co.uk
ecologysolutions.co.uk

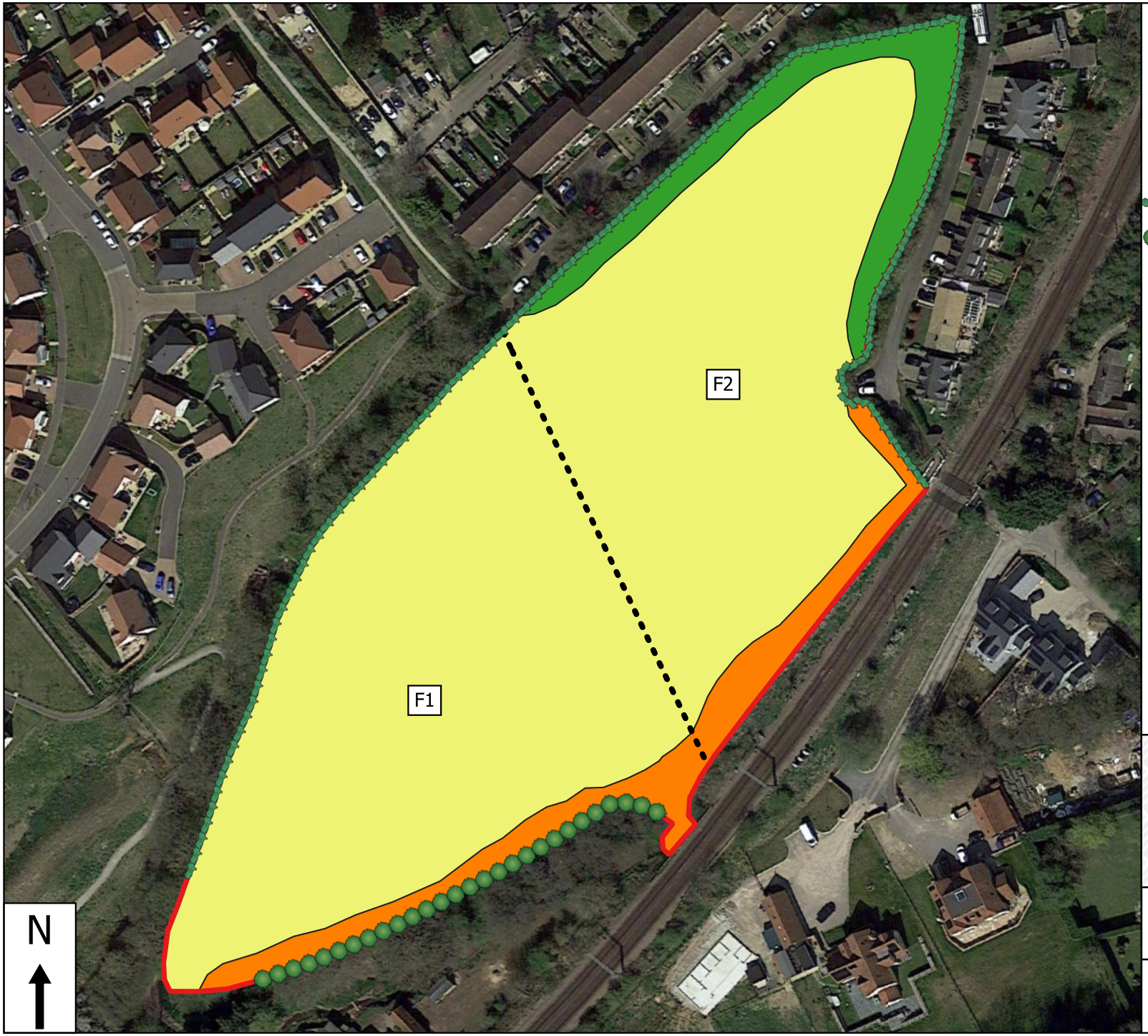
11607: LAND OFF RUSH LANE, ELSENHAM

PLAN ECO1: APPLICATION SITE LOCATION AND ECOLOGICAL DESIGNATIONS

Rev:A
AUG 2023

PLAN ECO2

Ecological Features



Key:

- Application Site Boundary
- Semi-Improved Grassland
- Tall Ruderal
- Dense Scrub
- Hedgerow
- Treeline
- Post and Wire Fence

N

ECOLOGYSOLUTIONS
Part of the ES Group

Farncombe House
Farncombe Estate |
Broadway
Worcestershire | WR12 7LJ

+44(0)1451 870767
info@ecologysolutions.co.uk
ecologysolutions.co.uk

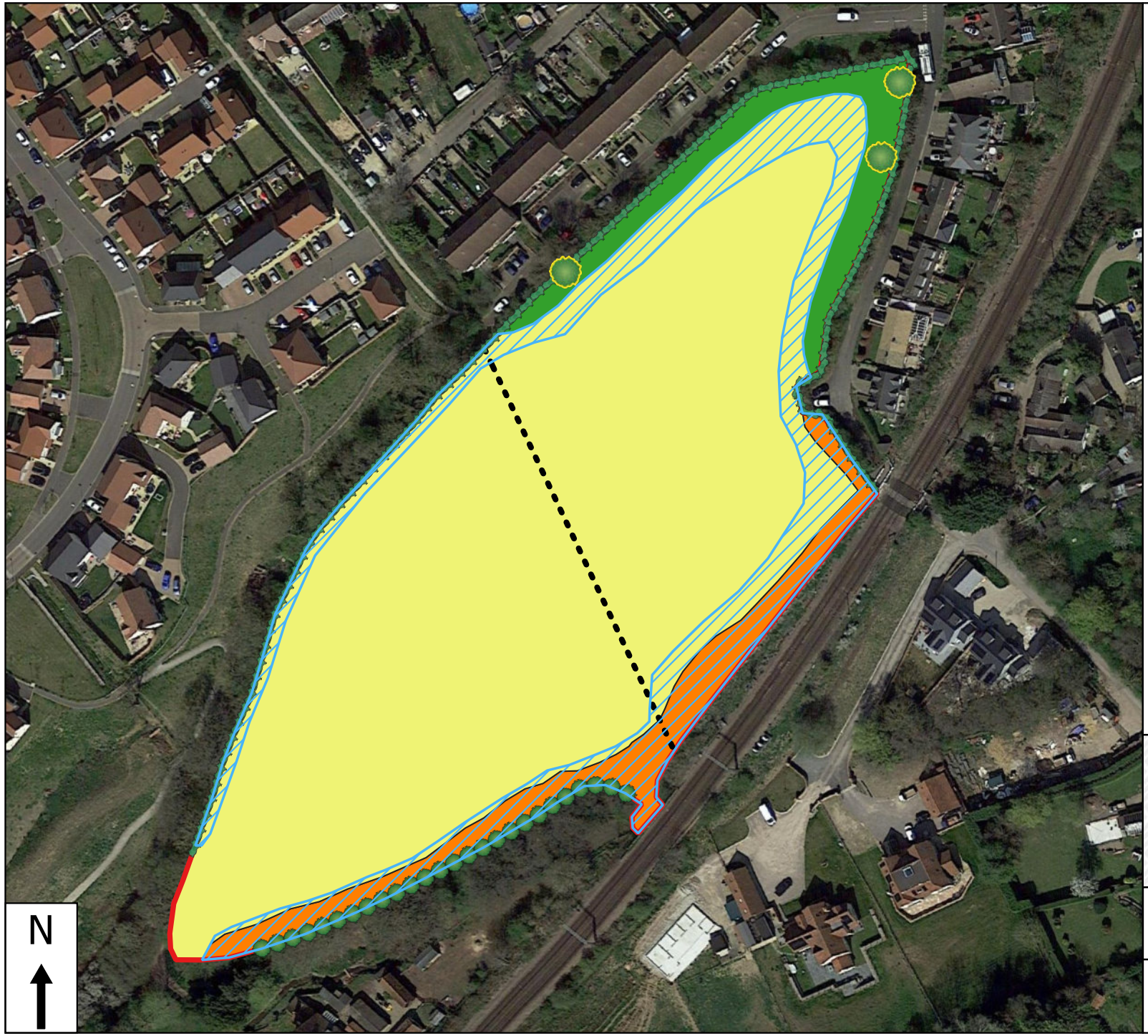
11607: LAND OFF RUSH LANE, ELSENHAM

PLAN ECO2: ECOLOGICAL FEATURES

Rev:A
AUG 2023

PLAN ECO3

Protected Species



Key:

- Application Site Boundary
- Trees with Low Bat Roosting Potential
- Suitable Reptile Habitat

N

ECOLOGYSOLUTIONS
Part of the ES Group

Farncombe House
Farncombe Estate |
Broadway
Worcestershire | WR12 7LJ

+44(0)1451 870767
info@ecologysolutions.co.uk
ecologysolutions.co.uk

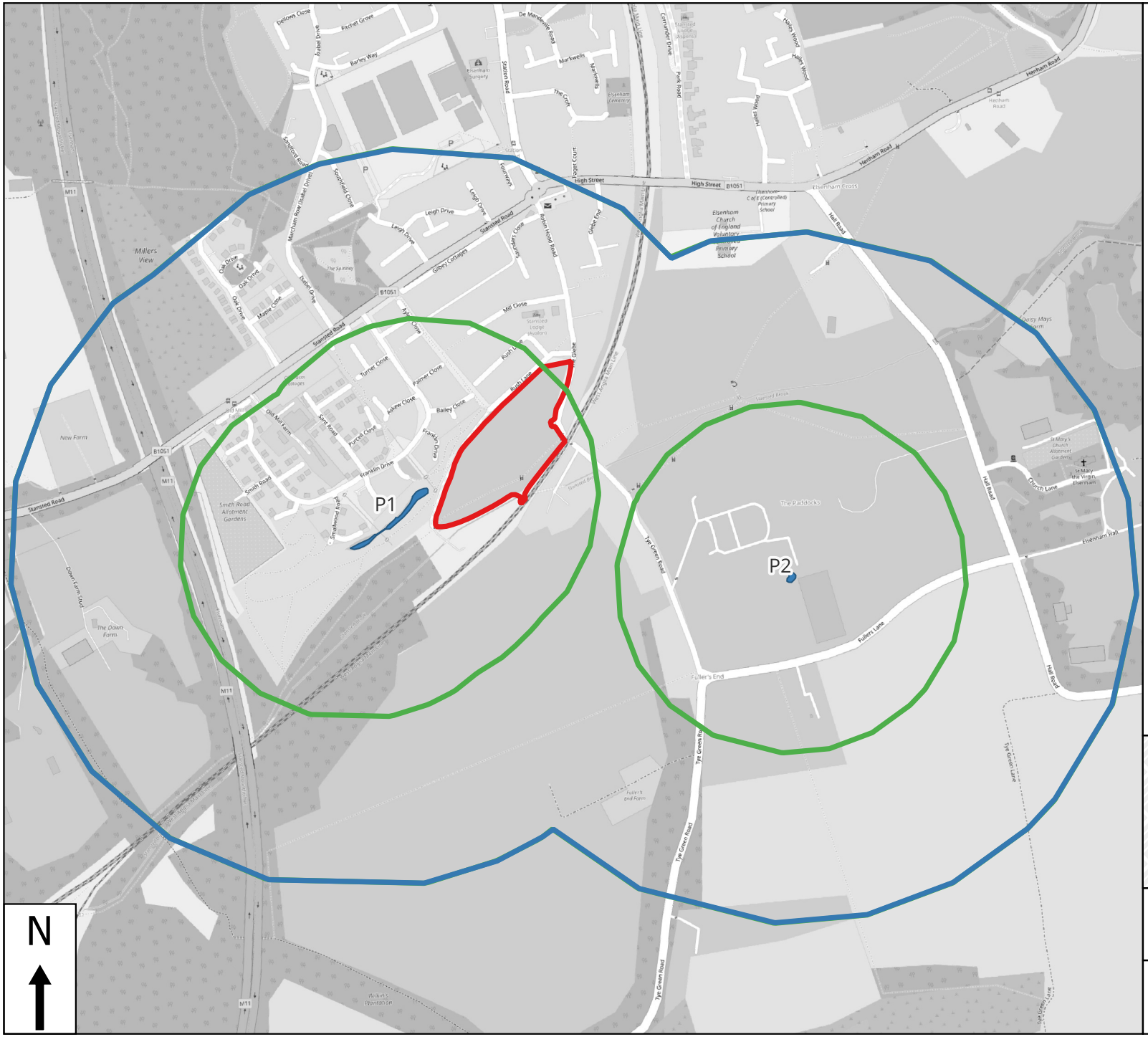
11607: LAND OFF RUSH LANE, ELSENHAM

PLAN ECO3: PROTECTED SPECIES

Rev:A
AUG 2023

PLAN ECO4

Location of Off-site Waterbodies



Key:

- Application Site Boundary
- Off-site Waterbodies
- 500m Buffer from Waterbody
- 250m Buffer from Waterbody

ECOLOGYSOLUTIONS
Part of the ES Group

Farncombe House
Farncombe Estate |
Broadway
Worcestershire | WR12 7LJ

+44(0)1451 870767
info@ecologysolutions.co.uk
ecologysolutions.co.uk

11607: LAND OFF RUSH LANE, ELSENHAM

PLAN ECO4: LOCATION OF OFF-SITE WATERBODIES

Rev: A
AUG 2023

APPENDICES

APPENDIX 1

Development Layout (Drawing No. BW289a-PL-02 Rev D) (JCN Design & Planning)

JCN DESIGN & PLANNING

Accommodation Schedule

Private Dwellings

	No	Variant	Reference	Beds	Storey	M4(2)	M4(3)
1B	2		WO	2	1	✓	
3 Beds	3		CS	3	2	✓	
	4	9	HI	3	2	✓	
	2		FM	3	2	✓	
4 Beds	2		PG	4	2	✓	
	2	13	LU	4	2	✓	
	5		AR	4	2	✓	
	4		JE	4	2	✓	
	24						

Affordable Dwellings

	No	Variant	Reference	Beds	Storey	M4(2)	M4(3)
2 Beds	2	9	2B Disable Dwelling	2	1		✓
	7		BA	2	2	✓	
3 Beds	6	7	TI	3	2	✓	
	1		PW	3	2	✓	
	16						
Total	40						

ROSCONN STRATEGIC LAND

Project:-
Land West of Robinhood Road
Elsenham
CM22 6TF

Description:-
Development Layout

Date:- August 2023

Drawing Scale:- 1-500 - A1

Drawing number:- BW289a-PL-02

Revision:- D

APPENDIX 2

Information Obtained from Essex Field Club