



The Springfields Academy, Calne
Preliminary Ecological Appraisal (PEA)
For CMS Group

23rd May 2025

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Version

ISSUE DATE	23/05/25	
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APPROVED BY	Emma Parsons, Director / Principal	22/05/25

VERSION	AUTHOR	REVISION	DATE
CIC v1.0	Stewart Parsons	First draft	20/05/25
CIC v1.0	Stewart Parsons	Review & comments	22/05/25

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The report, and the information contained in it, is intended to be valid for a maximum of 12 months from the date of the survey, providing no significant alterations to the site have occurred.



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1. Introduction

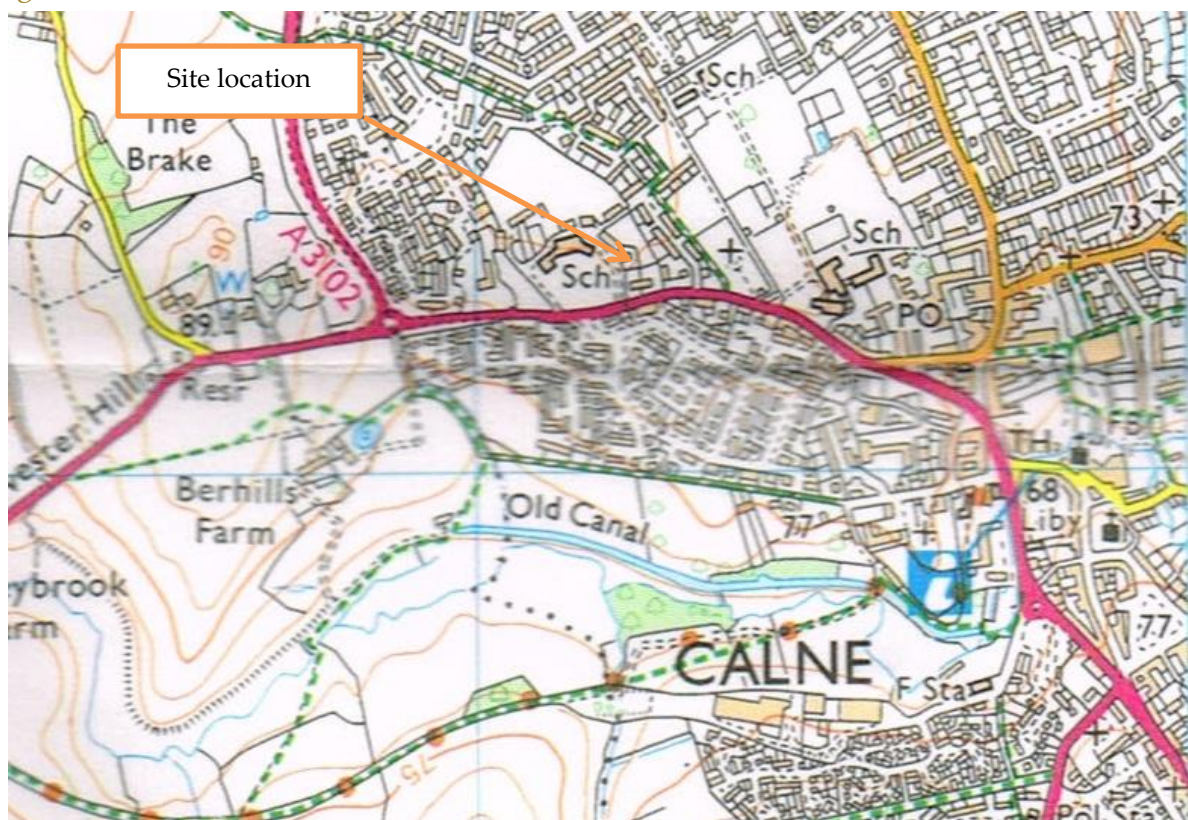
1.1 Commission

Ellendale Environmental Limited was commissioned by CMS Group, on behalf of their client, to undertake a Preliminary Ecological Appraisal (PEA) for an area of land and two buildings at The Springfields Academy, Springfield Drive, Calne, Wiltshire, SN11 0DS ('the site'). The survey has been undertaken in support of a planning application for the the installation of two new temporary modular units at the school ('the proposed development').

1.2 Site Details

The site is located to the west of Calne, a town and civil parish in Wiltshire, south-west England, at the north-western extremity of the North Wessex Downs hill range at OS grid reference ST 99225 71312.

Figure 1: Site location



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1.3 Survey Objectives

On the basis of the brief provided by the client, Ellendale Environmental conducted an ecological survey of the site and a 50m buffer (where accessible and appropriate) to fulfil the following needs:

- Obtain baseline information on the current habitats and ecological features in and around the site;
- Identify any further specialist surveys that may be required;
- Identify the presence (or potential presence) of any protected species whose disturbance may require consent under The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) or the Wildlife and Countryside Act, 1981 (as amended); and
- Identify any species or habitats which may require special mitigation during the development of the site.



2. Methodology

2.1 Data Search

Publicly available databases, including MAGIC and the NBN Atlas, were consulted for historical evidence of:

- Statutory land-based designations;
- Non-statutory land-based designations; and
- Protected and notable species.

The data search was conducted within a 2km (5km for bats) radius of the site boundaries.

2.2 Phase 1 Habitat Survey

A Phase 1 Habitat survey of the site was undertaken, and the habitats present on the site were mapped following the Phase 1 survey methodology (JNCC, 2010), listing the plant species associated with each habitat. This methodology was a Phase 1 habitat survey, whereby all habitats were surveyed and recorded onto a base plan, and any habitats that were considered to be of potential interest to nature conservation were recorded through the use of target notes to annotate a Phase 1 habitat map.

2.3 Preliminary Protected Species Walkover

The site and surrounding areas were examined for signs of protected species. The presence/potential presence of protected or notable species of conservation concern was recorded using target notes, following the Chartered Institute of Ecological and Environmental Management guidance (CIEEM, 2012).

2.4 Preliminary Roost Assessment

An inspection of the buildings within the site was undertaken, looking for evidence of bats, bat roosting sites and possible bat access/egress points. In examining the building for bats, particular attention was given to any crevice in which bats may roost.



These were inspected for bat droppings, bat urine, feeding remains, oil staining from the fur of bats (indication of frequent use of a particular site), and wear of substrates caused by the movement of bats in and out over a long period of time.

2.5 Survey Area

The survey covered the entire site and areas within 50m (where accessible and appropriate).

2.6 Survey Limitations

The aim of this survey was not to record every species present on the site, as one survey acts as a snapshot, recording only those species which are present at the time or whose presence can be indicated through the occurrence of field signs, such as feeding remains, droppings or places used for shelter or foraging.

Evidence collected has been used to draw conclusions about the flora and fauna within the boundary of the site and to provide an assessment of their ecological and nature conservation value.

Weather was not a limiting factor to the survey. The prevailing conditions at the time of the survey are summarised in Table 1.

Table 1: Survey weather conditions

SURVEY DATE	TEMPERATURE (°C)	WIND SPEED (MPH)	CLOUD COVER / PRECIPITATION
09/05/25	Min. 17.5 Avg. 18.1 Max. 19.6	Min. 0.0 Avg. 0.0 Max. 0.0	30% cloud cover. Dry, bright, warm and still.

2.7 Surveyor

The survey was undertaken by Stewart Parsons, Director and Principal Ecologist of Ellendale Environmental, who is a full member of CIEEM and a Chartered Environmentalist (CEnv). Stewart has over 20 years' professional experience of ecological surveys across the UK.



3. Results

3.1 Data Search

A 2km data search for existing designated sites and biological records was undertaken from MAGIC¹ and the NBN Atlas².

Statutory designated sites

There are no statutory designated sites within 2km of the site boundary.

Non-statutory designated sites

There are no non-statutory designated sites within 2km of the site boundary.

Protected and notable species

The following terrestrial protected species were identified within 2km of the site boundaries by the data search:

- Great crested newt *Triturus cristatus*³ (GCN) (26 records, the closest of which is located 1.9km south-east of the site, most recently recorded in 2022);
- Palmate newt *Triturus helveticus*⁴ (four records, the closest of which is located 0.6km north-east of the site, most recently recorded in 2021); and
- Water vole *Arvicola amphibius*⁵ (two records, the closest of which is located 0.65km south-east of the site, most recently recorded in 2024).

¹ Magic database. <http://www.magic.gov.uk/MagicMap.aspx> Accessed on 16/05/25.

² NBN Atlas database. [NBN Atlas - UK's largest collection of biodiversity information](https://www.nbnatlas.org/) Accessed on 16/05/25.

³ NBN Trust (2025). *Triturus cristatus* on the NBN Atlas: [Triturus cristatus](https://www.nbnatlas.org/species/Triturus_cristatus) on The National Biodiversity Network (NBN) Atlas. <https://ror.org/00mcxye41> [Page visited 19/05/2025].

⁴ NBN Trust (2025). *Triturus helveticus* on the NBN Atlas: [Triturus helveticus](https://www.nbnatlas.org/species/Triturus_helveticus) on The National Biodiversity Network (NBN) Atlas. <https://ror.org/00mcxye41> [Page visited 19/05/2025].

⁵ NBN Trust (2025). *Arvicola amphibius* on the NBN Atlas: [Arvicola amphibius](https://www.nbnatlas.org/species/Arvicola_amphibius) on The National Biodiversity Network (NBN) Atlas. <https://ror.org/00mcxye41> [Page visited 19/05/2025].



An additional four protected and notable species (excluding bats) were identified within 2km of the site boundaries; however, due to licencing restrictions the locations of these species cannot be included in this report: common toad *Bufo bufo*, hedgehog *Erinaceus europaeus*, European badger *Meles meles* and otter *Lutra lutra*.

The following bat species were identified within 5km of the site boundaries by the data search:

- Serotine bat *Eptesicus serotinus*⁶ (27 records, the closest of which is located 3.7km west of the site, most recently recorded in 2024);
- Common pipistrelle *Pipistrellus pipistrellus*⁷ (40 records, the closest of which is located 3.7km west of the site, most recently recorded in 2024);
- Noctule bat *Nyctalus noctule*⁸ (13 records, the closest of which is located 3.7km west of the site, most recently recorded in 2024); and
- Soprano pipistrelle *Pipistrelle pygmaeus*⁹ (12 records, the closest of which is located 1km south-west of the site, most recently recorded in 2021).

An additional five species of bats have been present within 5km of the site; however, due to licencing restrictions, the locations of these species cannot be included in this report: lesser horseshoe bat *Rhinolophus hipposideros*, brown long-eared bat *Plecotus auritus*, Daubenton's bat *Myotis daubentonii*, greater horseshoe bat *Rhinolophus ferrumequinum* and Natterer's bat *Myotis nattereri*.

⁶ NBN Trust (2025). *Eptesicus serotinus* on the NBN Atlas: [Eptesicus serotinus](https://ror.org/00mcxye41) on The National Biodiversity Network (NBN) Atlas. <https://ror.org/00mcxye41> [Page visited 19/05/2025].

⁷ NBN Trust (2025). *Pipistrellus pipistrellus* on the NBN Atlas: [Pipistrellus pipistrellus](https://ror.org/00mcxye41) on The National Biodiversity Network (NBN) Atlas. <https://ror.org/00mcxye41> [Page visited 19/05/2025].

⁸ NBN Trust (2025). *Nyctalus noctule* on the NBN Atlas: [Nyctalus noctule](https://ror.org/00mcxye41) on The National Biodiversity Network (NBN) Atlas. <https://ror.org/00mcxye41> [Page visited 19/05/2025].

⁹ NBN Trust (2025). *Pipistrelle pygmaeus* on the NBN Atlas: [Pipistrelle pygmaeus](https://ror.org/00mcxye41) on The National Biodiversity Network (NBN) Atlas. <https://ror.org/00mcxye41> [Page visited 19/05/2025].



Bird species

Approximately 135 bird species have been recorded within 2km of the site and are shown on the NBN Atlas. None of these species are located within the site boundary.

3.2 Phase 1 Habitat Survey

The site is located within the grounds of The Springfields Academy in Calne and is surrounded to the north, east and west by residential properties; to the south there is Curzon Street. The site predominantly comprises amenity grassland which is managed through mowing, with some areas of introduced shrub and scattered trees.

There are seven Phase 1 habitat types recorded on the site, including boundary features, namely:

- J.4 Hardstanding/bare earth;
- J.2.3.4 Fence;
- J.1.2 Cultivated/disturbed land (amenity grassland);
- J.3.6 Building(s);
- J.1.4 Introduced shrub;
- A.3.1 Parkland/scattered trees (broad-leaved); and
- J.2 Hedgerow.

J.4 Hardstanding/bare earth

The site is accessed via a hardstanding path from the main access to the school which leads around the main building on the site which is being retained. In addition, a car park is located to the north of the site.

J.2.3.4 Fence

A wooden fence surrounds the site and divides the area of amenity grassland in two.

J.1.2 Cultivated/disturbed land (amenity grassland)

The main area of the site is dominated by an area of amenity grassland that is extensively managed through regular mowing. The grassland is divided in two by a



wooden fence with the main area of the site to the south and a smaller area to the north along the edge of the car park. At the time of the survey the sward height was low with species including perennial rye-grass *Lolium perenne*, dandelion *Taraxacum officinale* agg, daisy *Bellis perennis*, ribwort plantain *Plantago lanceolata* and creeping buttercup *Ranunculus repens* all recorded. The habitat was noted to be heavily used which reduces the species diversity.

Photograph 1: showing a view of the site



1.3.6 Building(s)

Two buildings are located on the site that will be removed and are further discussed in Section 3.4. A third building is located to the south of these two structures and will not be removed as part of the proposed development; as such, it is not considered further in this report.



J.1.4 Introduced shrub

Shrub planting is located along the southern side of the fence line and includes cotoneaster *Cotoneaster spp.*, clematis *Clematis spp.*, peony *Paeonia spp.*, hydrangea *Hydrangea spp.*, Mexican orange blossom *Choisya ternata* and barberry *Berberis spp.*

Photograph 2: showing a view of the fence and introduced shrub



A.3.1 Parkland/scattered trees (broad-leaved)

Scattered trees including silver birch *Betula pendula*, sycamore *Acer pseudoplatanus*, apple *Malus x domestica*, leylandii *Cupressus x leylandii* and elder *Sambucus nigra* are located within the amenity grassland habitat. These trees are assessed as being semi-mature.



1.2 Hedgerow

A hedgerow is located along the eastern boundary of the site. Species present here include hawthorn *Crataegus monogyna*, hazel *Corylus avellana*, common dogwood *Cornus sanguinea* and sycamore. Ground flora is limited due to regular mowing of the grassland.

Photograph 3: showing a view of the hedgerow



3.3 Preliminary Protected Species Walkover

The site and surrounding habitats were examined for signs of protected and notable species and the following assessment has been made for the potential for these species to be present.



3.3.1 Protected Species

Birds

The hedgerow, trees and introduced shrub have the potential to support common generalist breeding bird species such as robin *Erithacus rubecula*, wren *Troglodytes troglodytes* and blackbird *Turdus merula* for both breeding and foraging; however, no nests were found during the survey. The habitats were noted to be heavily managed and disturbed, and this may reduce the suitability for birds to use the habitats present.

The buildings are suitable to support bird species such as swallow *Hirundo rustica* and house martin *Delichon urbicum*; however, no nests were found to indicate either species is using the site or its buildings.

Badger

Although the site theoretically has the potential to offer foraging and commuting opportunities for badger, it is surrounded on three sides by residential properties and a main road to the south which will restrict the movement of this species into and out of the site. Furthermore, the habitat within the site and wider school grounds are heavily managed and disturbed, making the site sub-optimal to support this species. No evidence of this species found within the site, such as latrines, snuffle holes or setts, and they are not considered to be present.

Dormouse

The hedgerow along the eastern site boundary is sub-optimal to support dormouse *Muscardinus avellanarius*, as it is relatively narrow and lacks features connecting suitable habitat out with the site such as large blocks of ancient woodland and/or scrub. This will limit the dispersal of this species and as such, a viable dormouse population is likely to be limited here. No evidence of dormouse, such as chewed nuts or nests, was found during the survey to indicate that this species is present.



Great crested newt

There are no ponds or waterbodies within the site that could support breeding amphibians such as great crested newt. The grassland habitat is heavily managed and disturbed and is not considered suitable to support terrestrial animals. This species is therefore considered to be absent from the site.

Water vole & otter

There is no habitat present on the site to support water vole or otter, and these species are not considered to be present.

3.3.2 Notable Species

Common amphibians & reptiles

There are no ponds or waterbodies within the site that could support breeding amphibians. The grassland habitat is also heavily managed and disturbed and is not considered suitable to support terrestrial animals. These species are therefore considered to be absent from the site. Similarly, the habitat within the site is not suitable to support common reptiles and these species are also considered to be absent from the site.

West European hedgehog

The site does not have the potential to offer nesting and sheltering opportunities for hedgehog and this species is therefore considered to be absent from the site.

3.4 Preliminary Roost Assessment

Two buildings located on the site will be removed as part of the development. 'Building 1' is an open wooden shelter and 'Building 2' is a brick-built garage building.

Building 1 is a wooden shelter constructed from a timber frame with wooden slats on the outer surface and a shallow sloped flat roof. The building is approximately 5m long by 3m wide and 2m tall. It is open along the upper walls allowing in wind and rain which makes the internal space suitable for roosting bats.



The building was noted to be damp at the time of the survey, further reducing the suitability for bats. The building has poor thermal properties, thus making it unsuitable for roosting bats.

No evidence of roosting bats was found within the building during the survey and bats are not considered to be present. The building is thus assessed as providing negligible roost potential for bats and no further surveys for bats are recommended.

Photograph 4: showing a view of Building 1



Building 2 is a stone structure approximately 5m long by 3m wide and 2m tall, with a pitched roof covered by tiles. Externally the wall of the building are rendered and was found to be in a good condition with no gaps or cracks which would provide suitable roosting for bat species. The external roof structure was covered in moss indicating that it is wet and unsuitable for bats which require dry and stable conditions for



roosting. In addition, no loose, lifted or missing tiles were noted which would provide opportunities or bats. No evidence of bat activity, such as droppings or feeding remains, was found on the external surfaces of the building.

The building was open on the western side allowing access to the internal space. Dense cobwebs were noted on the walls and ceiling of the building indicating that bats are not present. The open door reduces the suitability by reducing the thermal properties of the building and allowing in wind and rain. No evidence of bat activity was found within the building to indicate that it is used by bats. The building is thus assessed as providing negligible roost potential for bats and no further surveys for bats are recommended.

Photograph 5: showing a view of the inside of Building 2 (looking south)





Trees within the site are not mature and lack suitable roosting features such as cracks, crevices or cavities which would provide habitat for roosting bats. No evidence of roosting bats was found, and no further surveys of the trees are recommended.

The vegetation and boundaries within the site provide suitable foraging habitat for bats and should be retained and enhanced where practicable.



4. Conclusions

4.1 Conclusion

The site is located within the grounds of The Springfields Academy in Calne and is surrounded to the north, east and west by residential properties; to the south there is Curzon Street. The site predominantly comprises amenity grassland which is managed through mowing, with some areas of introduced shrub and scattered trees. There are seven Phase 1 habitat types recorded on the site, including boundary features

The hedgerow, trees and introduced shrub have the potential to support common generalist breeding bird species for both breeding and foraging; however, no nests were found during the survey. The habitats were noted to be heavily managed and disturbed, and this may reduce the suitability for birds to use the habitats present. The buildings are suitable to support bird species such as swallow and house martin; however, no nests were found to indicate either species is using the site or buildings.

Although the site theoretically has the potential to offer foraging and commuting opportunities for badger, it is surrounded on three sides by residential properties and a main road to the south which will restrict the movement of this species into and out of the site. Furthermore, the habitat within the site and wider school grounds are heavily managed and disturbed, making the site sub-optimal to support this species. No evidence of this species found within the site, such as latrines, snuffle holes or setts, and this species is not considered to be present.

There are no ponds or waterbodies within the site that could support breeding amphibians, including GCN. The grassland habitat is also heavily managed and disturbed and is not considered suitable to support terrestrial animals. These species are therefore considered to be absent from the site. Similarly, the habitat within the site is not suitable to support common reptiles and these species are also considered to be absent from the site.

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The buildings are unsuitable for roosting bats and do not provide suitable roosting features. Both buildings are open in places allowing in wind and rain and will have poor thermal properties, further reducing the suitability for bats. No evidence of roosting bats was found within the buildings during the survey and bats are not considered to be present. The buildings are thus assessed as providing negligible roost potential for bats and no further surveys for bats are recommended.

Trees within the site are not mature and lack suitable roosting features such as cracks, crevices or cavities which would provide habitat for roosting bats. No evidence of roosting bats was found, and no further surveys of the trees are recommended. The vegetation and boundaries within the site provide suitable foraging habitat for bats and should be retained and enhanced where practicable

Overall, the site is assessed as providing low suitability to support protected species (excluding nesting birds) and no evidence of protected species was detected during the survey.

Recommendations have been made for modest post-construction ecological enhancements at the site that are proportionate with the low level of environmental impact from the proposed development.

4.2 Mitigation

General

Site personnel should be made aware of protected species and if any are recorded on site, all works should stop, and a suitably qualified ecologist contacted.

Nesting birds

Should any vegetation of the site require removing, this should be undertaken out with the breeding bird season (March – August, inclusive), as all nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended).



If works are undertaken within this period, a nesting bird survey would be required no more than 24 hours prior to the works. If nesting birds were found, these areas of the site would need to be protected from disturbance until the young have fledged naturally.

Bats

Given the findings of the survey, it is very unlikely that bats are roosting in the buildings. However, it is advised that precautionary working methods are undertaken during works to the buildings, including:

- Site personnel will be made aware of the potential presence of bats through a toolbox talk;
- If a bat is found, or the presence of bats is suspected, all work must stop immediately, and a licensed bat worker must be contacted for advice;
- Bats must not be handled under any circumstances; and
- An ecologist will assess a potential roost space (if identified/found) and inform Natural England of the proposed actions to be undertaken.

4.3 Suggested Biodiversity Enhancements

It is important that, where possible, opportunities to create new ecological features or enhance existing ones are fully explored. The following measures would benefit the development by introducing ecological enhancements and should be encouraged:

- Sowing wildflower or species-rich grassland seed within the site following completion of the development should be undertaken to encourage a species-rich habitat to establish providing a range of habitats for a number of species such as invertebrates (including early pollinators), small mammals and birds. Annual mowing/grazing in the autumn should be undertaken to remove the vegetation and help generate and manage the species-rich habitat to ensure it does not become rank and to prevent further successional changes such as scrub establishing;
- Planting of native shrubs in appropriate areas of the site, such as around the boundaries, will bolster the existing habitat and provide connectivity between existing habitats. Species beneficial to wildlife include hawthorn, hazel *Corylus avellana*, holly *Ilex aquifolium* and cherry *Prunus avium*.



- The plantation of native local trees, i.e., oak *Quercus robur* and beech *Fagus sylvatica* will increase the site suitability to support a range of species, such as bats and birds. Trees can be incorporated in a variety of forms, including individual trees or within hedgerows as standard trees. Fruit trees can also be considered as they provide important resources to early season pollinators and other invertebrates, but also to birds and mammal species;
- Bird nesting boxes (both small-hole and open-fronted) should be placed within the site to create nesting opportunities for small bird species; and
- Bat boxes should be placed on or around the site boundaries, if possible, to create roosting opportunities for bat species. In addition, pole-mounted bat boxes could be used in suitable areas of the site and are an ideal solution when no suitable building or tree is available to mount a bat box.

It is recommended that an ecologist contributes to any detailed landscape designs, planting lists and post-construction management to ensure a biodiversity net gain for the site.



5. Target Notes

5.1 Botanical Target Notes (TN)

TN1 – A car park to the north of the site.

TN2 – An area of amenity grassland to the north of the site.

TN3 – A hedgerow along the eastern boundary of the site.

TN4 – A fence line dividing the grassland habitat within the site.

TN5 – Introduced shrub along the southern side of the fence line.

TN6 – An area of amenity grassland to the north of the site.

TN7 – Building 1, a wooden structure on the site.

TN8 – Building 2, a brick built structure used for storage.

TN9 – An area of amenity grassland to the north of the site.

TN10 – Hardstanding access.

TN11 – A building present that is being retained.

5.2 Animal Target Notes (AN)

AN1 – The hedgerow provides suitable habitat for nesting birds.

AN2 – Scattered trees within the site provide foraging and nesting for small birds.

AN3 – Scattered trees within the site provide foraging and nesting for small birds.

AN4 – Introduced shrub may provide habitat for foraging and nesting birds.

AN5 – Scattered trees within the site provide foraging and nesting for small birds.

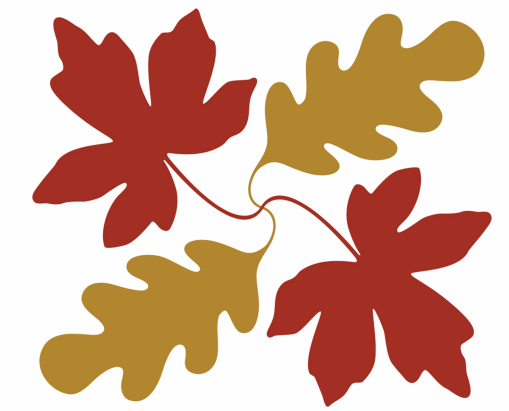
AN6 – No evidence of roosting bats was found in Building 1.



AN7 – No evidence of roosting bats was found in Building 2.



6. Extended Phase 1 Habitat Map



ELLENDALE
ENVIRONMENTAL

Drawing Title;
Springfields School
Extended Phase 1 Map

Client;
CMS Architects

Date;
21/05/25

Drawn By;
SP

Project Number;
EEL981

Version Number;
v1.0

- Target Note
- TN
- Animal Note
- AN
- Woodland and Scrub
- Scattered Tree (Broad-leaved)
 - Woodland (Broad-leaved)
- Miscellaneous
- Fence
 - Hedgerow
 - Building/Sctructure
 - Anemity Grasland
 - Introduced Shrub
 - Hard Standing/Bare Earth

