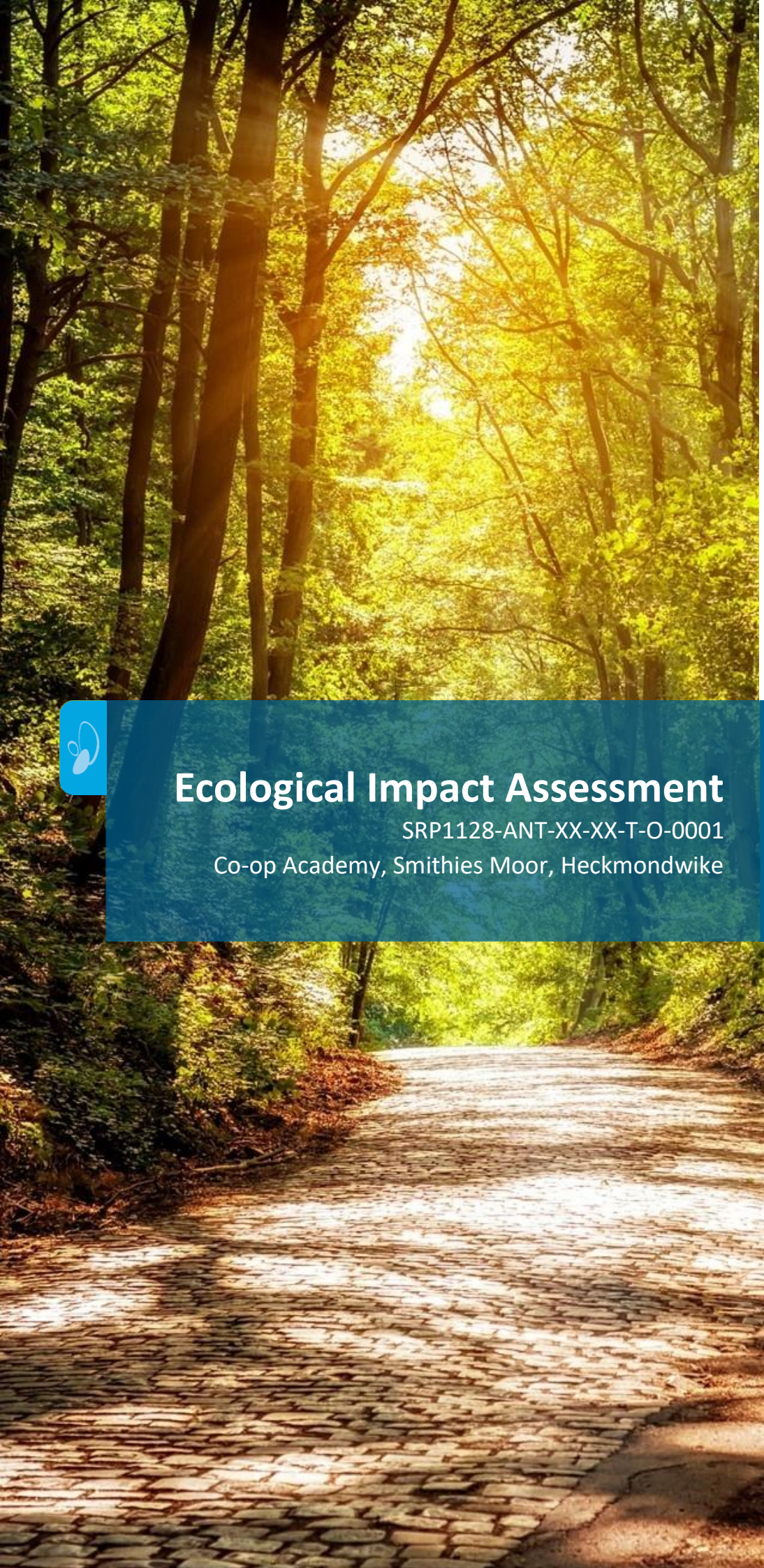

Ecological Impact Assessment

SRP1128-ANT-XX-XX-T-O-0001

Co-op Academy, Smithies Moor, Heckmondwike

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PREPARED FOR
Bowmer & Kirkland

ISSUED
16th June 2025

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Key Details

Client Name	Bowmer & Kirkland
Site Address	Co-op Academy, Smithies Moor, Leeds Old Road, Heckmondwike, WF16 9BB
Antea Group UK Contact	Peter Morrell (Peter.morrell@anteagroup.uk)
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Document Control

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1	Final	16th June 2025	

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Ecological Impact Assessment – Non-Technical Summary

Co-op Academy, Smithies Moor

This Ecological Impact Assessment (EcIA) has been undertaken by Antea Group UK ('Antea') of the proposals for redevelopment of the Co-op Academy Smithies Moor, Leeds Old Road, Heckmondwike, West Yorkshire, WF16 9BB (the 'Site'), with the construction of a new school and associated soft and hard landscaping and the demolition of the existing school. Temporary construction access is to be created from White Lee Road and reinstated following completion of the works (the 'Proposed Development'). This Assessment has been prepared on behalf of Bowmer & Kirkland (the 'Client').

This EcIA addresses the potential effects of the Proposed Development on ecology and nature conservation. It describes the methods used to assess the effects; the baseline conditions currently existing at the Site and within the immediate surrounding area; the mitigation measures required to prevent, reduce or offset any significant adverse effects and the likely residual effects after these measures have been adopted, as well as any proposed enhancement measures. A summary of the significance of any residual effects is provided overleaf.

An ecological desk study, undertaken in April 2025, identified no internationally designated statutory sites within 6 km of the Site, with one regionally designated statutory site within 2 km of the Site. Oakwell Park Local Nature Reserve (LNR) is situated at a distance of 1.72 km north of the Site. The Site falls within Derby Grange, Colliery Ponds, and Seckar Wood Site of Special Scientific Interest (SSSI) Impact Risk Zones (IRZ). However, the Proposed Development does not meet any of the criteria for which the Local Planning Authority (LPA) would need to consult with Natural England over risks posed by the development. One non-statutory designated site was identified within 2 km of the Site centre, Oakwell Park Local Wildlife Site (LWS) situated approximately 1.72 km north from the Site boundary. Taking into account the nature and scale of the Proposed Development and the distance of the LNR and LWS from the Site, there are not anticipated to be any adverse effects upon designated sites.

The habitats on-Site were surveyed and assessed for their value, and their suitability to support protected or otherwise notable species, by a suitably experienced ecologist on the 10th April 2025. The Site covers an area of 1.23 ha and supports predominantly developed land: sealed surface and buildings with the main blocks of modified grassland and scattered trees within the north-western, westerly, northern and eastern areas of the Site (for temporary access). In addition, there were strips of introduced shrubs in the western area of the Site and central courtyard area surrounded by the main building, whilst dense scrub had formed in areas no longer managed in the east of the main building, and along the eastern extent of the northern Site boundary. There were two lengths of hedgerow within the Site; an ornamental hedgerow in the west, and a native hedgerow at the eastern Site boundary. The entire Site was fenced around the boundaries.

The Proposed Development will result in the loss of modified grassland, ornamental planting, mixed scrub, and a small number of individual trees, with others retained at the western extent of the Site. Hedgerow and trees at the eastern boundary will also be lost to facilitate temporary access. However, these habitats are widespread on both a local and national scale, with none of the habitats being considered rare. Furthermore, this habitat loss is not anticipated to significantly contribute to the fragmentation of habitats across the landscape. The loss of habitat will be compensated for through the provision of new native/wildlife-friendly planting within the landscaping strategy. The Biodiversity Net Gain (BNG) calculations for the Site indicate that the proposed development has the potential to result in a BNG of at least 10 % on Site in accordance with national and local planning policy.

The Site was found to be suitable for nesting, foraging and sheltering bird species, particularly passerines, whilst it also offered low roosting potential alongside foraging and commuting opportunities for bats, and shelter and foraging for hedgehog, with an individual recorded on-Site at the time of the nocturnal bat survey in June 2025. Due to a combination of a lack of suitable habitats, the location of the Site and its surroundings, and a lack of records, Great Crested Newts (GCNs), reptiles and badgers are not anticipated to utilise the Site such that there are no potential impacts on them as a result of either the construction or operational phases of works.

Whilst an important bird assemblage was considered likely to be absent, the construction phase will result in the loss of suitable bird nesting habitat including a number of scattered trees, dense scrub and hedgerow. As all species receive legal protection during nesting, suitable habitat will be removed either outside the main nesting bird season, or subsequent to a nesting bird check by a suitably experienced ecologist immediately prior to removal. Loss of habitat will in part be compensated through additional tree, scrub, and hedgerow planting across the Site and a range of bird boxes (10 total) on retained trees/new build.

The Site itself offers low suitability for foraging and commuting bats, with small pockets of vegetated habitats fragmented by buildings, whilst the main school building complex offered low roosting potential in the form of gaps beneath uPVC fascia boards. No bats were recorded to emerge from the building during the two dusk emergence surveys completed by Indigo Survey in 2023 further to a building inspection by RSK Biocensus that determined the main building to offer moderate suitability for roosting bats, whilst the survey effort undertaken by Antea Group UK in June 2025 was reduced to a single dusk emergence survey further to an inspection of the main building complex prior to the survey, and activity was limited to occasional individual common pipistrelles commuting and foraging, predominately associated with the south of the Site adjacent to off-Site woodland. Three bat boxes will be installed either on trees to be retained or on the new building complex to compensate for the loss of potential roosting features from the Site.

At the time of the 2025 nocturnal bat survey, a single hedgehog was recorded within the unmanaged grassland to the north-east of the main building. A precautionary approach will be taken both during vegetation clearance and during the construction phase of works to ensure this species does not become trapped in open excavations during the construction works or become harmed during vegetation clearance. Furthermore, a series of gaps for hedgehogs will be provided within the boundary security fence of the new development to ensure that hedgehogs can not only access the Site to forage but also can continue to disperse through it to other suitable habitats.

Near the front entrance to the main school building, a small stand of wall cotoneaster was recorded. Wall cotoneaster is included on Schedule 9 of the Wildlife and Countryside Act (1981, as amended), such that it is illegal to facilitate its spread to off-Site habitats. An eradication plan will be put in place prior to the vegetation clearance works.

Summary of Residual Effects

Important Ecological Feature	Geographic Value	Characteristic of Unmitigated Impact	Significance Before Mitigation	Avoidance, Mitigation and Compensation	Residual Effect Significance
Habitats	Local	Habitat loss/compensation Damage to structure, roots and health of habitat in immediate surrounds to be retained	Minor adverse Non-significant	Adherence to BS5837:2012 during construction within a suitable CEMP	Minor beneficial Non-significant
Birds	Local	Habitat loss Nest destruction/ disturbance through noise and vibration	Minor adverse Non-significant	Sensitive timing of works and/or watching brief with regards to the removal of, and works within close proximity to, suitable nesting habitat. Installation of a range of nest boxes (10 in total) to be installed on retained trees/ new building complex.	Negligible, Neutral
Bats	Local	Loss of potential roosts Increased lighting on-Site	Minor adverse Non-significant	Precautionary approach to removal of uPVC fascias and hanging tiles. Lighting strategy designed to ensure no increase in lighting from current levels onto off-Site trees. Three compensatory bat boxes to be installed on retained trees/ new building complex.	Negligible, Neutral

Hedgehog	Local	Habitat loss Risk of killing/injury during Site clearance Injury from falling into open trenches Lack of dispersal opportunities through the Site due to security fencing	Minor adverse Non-significant	Awareness for the potential presence of this species during Site clearance activities No open trenches or pits will be left uncovered or alternatively without a mammal ramp in overnight Hedgehog gaps to be included at strategic locations in the new security fencing.	Negligible, Neutral
Invasive Weeds- Cotoneaster	N/A	Spread into off-Site habitats during vegetation clearance works.	Minor adverse Non- significant	An eradication plan will be put in place prior to vegetation clearance.	Negligible, Neutral

Ecological Impact Assessment

Co-op Academy, Smithies Moor

1 INTRODUCTION

1.1 REQUIREMENT FOR THE REPORT

Antea Group UK was instructed by Bower & Kirkland (the 'Client') to undertake an Ecological Impact Assessment (EcIA) of the proposals for redevelopment and demolition of the existing school building (the 'Proposed Development') at Co-op Academy Smithies Moor, Leeds Old Road, Heckmondwike, West Yorkshire, WF16 9BB (hereafter referred to as the 'Site').

The purpose of this report is to establish a baseline of ecological features at the Site and to determine any impacts that may arise as a result of the proposals. It provides details of ecological mitigation, compensation and enhancements, and how they may be secured and monitored as necessary, to ensure compliance with relevant nature conservation legislation and policies. Where appropriate, this will allow conditions or obligations to be proposed by the relevant authority.

The Site location and the Site boundary are shown in Figure 1.

1.2 SITE DESCRIPTION

The Site is centred at Ordnance Survey (OS) grid reference SE 22096 24948, to the north of Heckmondwike in West Yorkshire in a busy urban location. The Site covers an area of 1.23 hectares (ha) and comprises an educational facility with areas of soft and hard landscaping in the western area. A sports field extends from the centre of the Site to the eastern boundary.

Fairfield School is located immediately north of the Site, while residential housing is present to the east and west separated from the Site by Leeds Old Road and White Lee Road, respectively. Further sports fields are present to the south, separated from the Site by an area of woodland, while Leefield Road separates the Site from additional residential housing to the south-east.

The habitats present on-Site are shown in Figure 2.

1.3 PROPOSED DEVELOPMENT

The Site is proposed for redevelopment, with the construction of a new school and associated soft and hard landscaping and the demolition of the existing school. Temporary construction access is to be created from White Lee Road and reinstated following completion of the works.

2 LEGISLATION AND POLICY SUMMARY

2.1 NATIONAL LEGISLATION AND POLICY

Specific habitats and species of relevance to the Site receive legal protection in England under various pieces of legislation, including:

- The Environment Act 2021.
- National Planning Policy Framework (NPPF, revised 2024).
- The Conservation of Habitats and Species Regulations 2017 (as amended).
- The Wildlife and Countryside Act (WCA) 1981 (as amended).
- The Countryside and Rights of Way (CRoW) Act 2000.
- The Natural Environment and Rural Communities Act (NERC) 2006.
- The Hedgerow Regulations 1997.

Where relevant, this assessment takes account of the legislative and policy protection afforded to specific habitats and species. Note that we do not provide specialist legal advice. References to the original legislation are included in Appendix A.

2.2 LOCAL POLICY AND GUIDANCE

National planning policy forms the basis of local planning policy; the conservation of species protected under the above legislation and the protection of designated sites. However, relevant local policy and guidance documents are outlined below:

Kirklees Council Local Plan Strategy and Policy (Adopted February 2019)
Policy LP30: Biodiversity and Geodiversity
Biodiversity & Geodiversity
"The council will seek to protect and enhance the biodiversity and geodiversity of Kirklees, including the range of international, national and locally designated wildlife and geological sites, Habitats and Species of Principal Importance and the Kirklees Wildlife Habitat Network."

Local Designated Sites & Important Local Ecological Features
"Proposals having a direct or indirect adverse effect on a Local Wildlife Site or Local Geological Site, Ancient Woodland, Veteran Tree or other important tree, will not be permitted unless the benefits of the development can be clearly shown to outweigh the need to safeguard the local conservation value of the site or feature and there is no alternative means to deliver the proposal. In all cases, full compensatory measures would be required and secured in the long term."

Habitats and Species of Principal Importance
"Proposals will be required to protect Habitats and Species of Principal Importance unless the benefits of the development clearly outweigh the importance of the biodiversity interest, in which case long term compensatory measures will need to be secured."

Biodiversity and Development
"Development proposals will be required to:-

- result in no significant loss or harm to biodiversity in Kirklees through avoidance, adequate mitigation or, as a last resort, compensatory measures secured through the establishment of a legally binding agreement;
- minimise impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist;

- safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network at a local and wider landscape-scale unless the loss of the site and its functional role within the network can be fully maintained or compensated for in the long term;
- establish additional ecological links to the Kirklees Wildlife Habitat Network where opportunities exist; and
- incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone."

Policy LP33: Trees

Trees

"The Council will not grant planning permission for developments which directly or indirectly threaten trees or woodlands of significant amenity. Proposals should normally retain any valuable or important trees where they make a contribution to public amenity, the distinctiveness of a specific location or contribute to the environment, including the Wildlife Habitat Network and green infrastructure networks. Proposals will need to comply with relevant national standards regarding the protection of trees in relation to design, demolition and construction. Where tree loss is deemed to be acceptable, developers will be required to submit a detailed mitigation scheme."

3 METHODOLOGY

3.1 SCOPE OF THE ASSESSMENT AND ZONE OF INFLUENCE

This assessment considers designated sites, habitats and species of principal importance for conservation, and species of flora and fauna protected by wildlife legislation, as well as floral species that are listed as invasive under English wildlife legislation.

The zone of influence for the Site was taken to be the Site boundary and its immediate environs only. The exception for this was for designated sites and Great Crested Newt (GCN) *Triturus cristatus*. Details of the zone of influence for these features are provided below.

3.2 DESK STUDY

Consultation

In April 2025, the local records centre, West Yorkshire Ecology (WYES) was contacted to request available records of protected and notable species and non-statutory designated sites from within 2 km of the Site centre.

Web Search

A search for designated statutory sites for nature conservation was undertaken using the Multi-Agency Geographic Information for the Countryside (MAGIC) website. The search radius was 6 km from the Site for internationally designated statutory sites and 2 km from the Site for nationally and locally designated statutory sites. A search for non-statutory ancient woodland was undertaken within 2 km of the Site centre, and for Habitats of Principal Importance (HPIs) on or near the Site using MAGIC.

The MAGIC website was reviewed for granted European Protected Species Licence (EPSL) applications. In addition, Ordnance Survey maps and aerial photographs were searched for waterbodies on, or within, 500 m of the Site boundary.

Review of Previous Reports for the Site

A review of the planning portal was undertaken to check for any recent (past five years) ecological survey reports pertaining to the Site or immediate surrounding plots. A review of the Preliminary Ecological Appraisal (PEA) survey prepared by RSK Biocensus in January 2023 was undertaken, together with a review of the subsequent nocturnal bat survey report prepared by Indigo Surveys for the Site in July 2023.

3.3 PRELIMINARY ECOLOGICAL APPRAISAL (PEA) SURVEY

The habitats on-Site were surveyed on the 10th April 2025, by a suitably experienced ecologist, Peter Morrell who has achieved FISC Level 4. The PEA comprised the following:

- Habitats classification and mapping to the standard UK Habitat Classification and methodology (UKHab Ltd, 2023). Dominant plant species were recorded in each different habitat, with plant species nomenclature following Stace (2019). The methodology used to compile the plant species list ensured that UK Habitat Classification types up to at least level 3 were achieved. All habitats of priority importance, where present, were recorded;
- Assessing and classifying habitats in terms of both their conservation importance and potential to support notable and/or protected species, and widespread invasive flora (based on habitat suitability and/or field signs/evidence); and
- Surveying habitats on-Site for any evidence of protected or notable bird species, amphibians, reptiles, mammals and widespread invasive flora. This included an external visual assessment from ground level of any structures or trees on the Site for potential bat roost features and/ or evidence of bat activity, and an assessment of the Site's suitability to support commuting and foraging bats (see Appendix B), in line with Collins, J. (ed, 2023).

3.4 BAT SURVEY

Further to the external visual assessment undertaken of the building, which assessed the main building to have low roost suitability, a subsequent presence / likely absence survey was undertaken since those completed in 2023 were considered out of date to inform a planning application in 2025. The survey was designed and led by Jennifer Britt who holds a Natural England survey licence (Ref: 2015-13633-CLS-CLS) and has over 14 years' experience. Table 1, below, provides details of the survey.

TABLE 1: TIMING, WEATHER CONDITIONS AND LOCATION OF SURVEYORS

Date	Start and Finish Times	Weather Conditions	Surveyor Location
05/06/2025	21:20-23:00 (sunset 21:33)	12°C, 8mph wind gusts, 95% cloud coverage	See Figure 3. One surveyor covering each aspect of the building, supported by an infra-red camera

With reference to Collins, ed (2023) and professional judgement, the weather conditions during the dusk survey visit was considered suitable for bats to be active.

The dusk survey commenced approximately fifteen minutes prior to sunset and ceased approximately one and a half hours following sunset. The surveyors were equipped with Echometer Touch 2 Pro bat detectors. Recordings were made of any bats seen and / or heard and the species, timing, activity, location and direction of flights. An infra-red camera was used to support surveyors during the surveys, with footage subsequently reviewed.

3.5 SURVEY LIMITATIONS

The baseline conditions described in this report were accurate at the time at which the survey was undertaken. Should at least two years pass by, and/or conditions on Site/Site usage change prior to the commencement of works, an update survey should be undertaken.

The central courtyard area of the main building could not be accessed at the time of either the PEA walkover or during the nocturnal bat survey. The previous report was relied on for the PEA, whilst during the nocturnal bat survey adequate coverage around the perimeter of the building meant that should a bat have emerged from the courtyard area it would have been recorded.

3.6 ECOLOGICAL IMPACT ASSESSMENT METHODOLOGY

An Ecological Impact Assessment (EcIA) has been carried out following the principles set out within the Guidelines for Ecological Impact Assessment in the UK and Ireland; Terrestrial, Freshwater, Coastal and Marine, updated by the Chartered Institute of Ecology and Environmental Management (CIEEM) in 2019 (see Appendix C for full details).

4 BASELINE ECOLOGICAL CONDITIONS

The following section outlines the results of the desk study and field survey findings. It assumes that the current management regime will not change up until the point of development, such that the baseline conditions within this Report indicate conditions on-Site at the commencement of the Proposed Development.

The conservation importance of all features identified have been evaluated using the geographical scale outlined in Appendix C.

4.1 DESIGNATED SITES

The statutory and non-statutory designated sites identified and considered relevant to the Site through the MAGIC data search and the WYES desk search are given in Tables 2 & 3, below, noting that there are no European/International statutory designated sites situated within 6 km of the Site centre.

TABLE 2: NATIONAL STATUTORY DESIGNATED SITE WITHIN 2 KM OF THE SITE BOUNDARY

Site Name	Designation	Distance and Direction from Site Boundary	Summary of Designation Criteria
Oakwell Park	Local Nature Reserve (LNR)	1.72 km north	Urban fringe, mixed trees, plants and fungi

The Site falls within Site of Special Scientific Interest (SSSI) Impact Risk Zones (IRZ) for Derby Grange, Colliery Ponds, Seckar Wood however, as the criteria listed are not relevant to the development proposals, there is no requirement for the LPA to consult Natural England and SSSI IRZ are not considered further within this Report.

TABLE 3: NON-STATUTORY DESIGNATED SITE WITHIN 2 KM OF THE SITE BOUNDARY

Site Name	Designation	Distance and Direction from Site Boundary	Summary of Designation Criteria
Oakwell Park	Local Wildlife Site (LWS)	1.72 km north	Urban fringe, mixed trees, plants and fungi

4.2 REVIEW OF PREVIOUS SURVEY

Preliminary Ecological Appraisal, RSK Biocensus, January 2023

A walkover survey was carried out in December 2022 by RSK Biocensus senior ecologist Tom West (full member of CIEEM (MCIEEM), holds Natural England Class 2 and Class 4 Licences for Bats) The survey recorded habitats present on and adjacent to the Site and recorded the presence, or likely presence, of protected species on or near the Site. The walkover survey found limited fragmented terrestrial habitats that would support amphibian and reptile species on or immediately adjacent to the Site. Further, the report indicates that the buildings, hedgerow, scrub and scattered trees at the time of the survey would offer potential nesting habitat for bird species in the summer, but wintering bird species would not be anticipated to utilise the on-Site habitats. The survey found that the buildings on-Site offer the potential for roosting bats and features included holes and gapping in the uPVC fascia boarding, missing mortar in the brickwork and lifted uPVC panels around the perimeter of the buildings, such that the main building complex was assessed as having moderate roosting potential. Overall, the survey found that the Site habitats were deemed low-quality for foraging and commuting bats. Badgers were scoped out of the report by RSK due to the lack of suitable habitat for badger to sett dig on-Site and within the surrounding areas.

Nocturnal Bat Survey, Indigo Surveys, July 2023

A dusk emergence and dawn return survey undertaken in May and June 2023, respectively, confirmed the absence of roosting bats within Building 1. Low numbers of individual common pipistrelles *Pipistrellus pipistrellus* were recorded flying around the Site and a single noctule *Nyctalus noctula* flew overhead during the dusk survey, whilst there were two passes of common pipistrelles flying to the north-west and south-west and three noctule passes overhead during the dawn survey.

4.3 HABITATS

4.3.1 DESK STUDY

The MAGIC data search indicates that deciduous woodland habitat of Principal Importance (HPI) is situated within 50 m of the Site.

4.3.2 FIELD SURVEY

Figure 2 shows the extent of the different habitat types occurring on-Site and the boundary features. Descriptions of the habitats and their dominant floral species are provided below. Habitat descriptions and codings follow the UK Habitat Classification: Habitat Definitions Version 2.01 (UKHab Ltd). Photographs of the Site survey are located in Appendix E.

The following habitats were recorded on-Site:

G4 – modified grassland

Large areas of modified grassland were located at the west, east, north-east and south of the main building complex (see Photograph 1). The dominant species was perennial ryegrass *Lolium perenne.* Yorkshire fog *Holcus lanatus*, and red fescue *Festuca rubra* occurred frequently, along with occasional daisy *Bellis perennis*, ribwort plantain *Plantago lanceolata*, and common dandelion *Taraxacum officinale*. On the northern aspect of the main building was a section of unmanaged grassland, with a wooden fence around the entire perimeter and a smaller metal fence running along the inside. Within this patch of unmanaged grassland species composition was consistent with elsewhere, with an individual horse chestnut tree positioned at the north-eastern corner of the building.

U1b5 – buildings

- B1: a two-storey brick built building, with uPVC fascia boarding and windows around the entire extent. The building has a flat felted roof (Photograph 2).
- B2: Small wooden tree house located inside the courtyard of B1.
- B3: Wooden first aid shed located inside the courtyard of B1.

U1b6 – developed land, sealed surface

The Site supported a tarmacadam sealed surface, occurring around the existing buildings to form the car parking area in the west, play areas and access (Photograph 3). Paved concrete slabs formed a footpath around the perimeter of the building.

H3h – mixed scrub

Mixed scrub was located along the eastern extent of the northern Site boundary (Photograph 4), beneath the canopy of trees that are immediately adjacent to the boundary, whilst dense scrub was recorded within two large patches adjacent to the eastern wall and north-eastern corner of the school building. The mixed scrub encroached onto the Site through the metal fencing and had rooted on-Site. Species included bramble *Rubus fruticosus* agg, dogwood *Cornus sanguinea*, and dog-rose *Rosa canina*.

H3d – bramble scrub
A patch of bramble scrub was located between the northeastern-eastern extent of the hardstanding by the school building and the northern Site boundary, with modified grassland to the east and west.

U1 – built-up areas and gardens (introduced shrubs)
Introduced shrubs were located across the western extent of the Site around the perimeter of the car parking area (see Photograph 5) and bordering the footpath that ran between the western site boundary and the western corner of the building. The shrubs along sections of the boundary fenceline had been heavily pruned back, whilst other areas formed a length of continuous habitat. Those species that could be identified included Portuguese laurel *Prunus lusitanica* and bay laurel *Laurus nobilis*.

A small stand of wall cotoneaster *Cotoneaster horizontalis* was recorded at the school entrance.

Individual trees
Along the northern Site boundary individual trees comprising Cappadocian maple *Acer cappadocicum*, goat willow S*alix caprea* , silver birch and common beech were located. Around the perimeter of the car parking area were European lime *Tilia × europaea*, and yew *Taxus baccata*. Within the south-western courtyard sycamore *Acer pseudoplatanus*, horse chestnut *Aesculus hippocastanum*, common whitebeam *Sorbus aria*, purple-leaved plum *Prunus Cerasifera 'Nigra'*, and cherry *Prunus* sp. was located. Beyond the eastern aspect of the school building were crack willow *Salix × fragilis*, pedunculate oak, dogwood *Cornus sanguinea*, and weeping birch *Betula pendula 'Youngii'*.

Along the eastern site boundary were Swedish whitebeam *Sorbus intermedia* and silver birch *Betula pendula* trees

U1f – sparsely vegetated urban land (bare ground)
Small patches of bare ground habitat were located outside the north-western extent of the building where ornamental planting had failed (Photograph 6), and beneath the canopy on the southern extent of the building.

H2 – Native hedgerow
A hawthorn *Crataegus monogyna* hedgerow formed the eastern boundary of the Site, with occasional elder *Sambucus nigra* and dog rose *Rosa canina.*

4.3.3 SITE ASSESSMENT
Those habitats covering the majority of the Site are considered to have negligible geographic value, including buildings, developed land, sealed surface, modified grassland and introduced shrubs. However, the individual trees at the Site, hedgerow and the mixed/ dense bramble scrub are considered to be of Local Value.

4.4 BIRDS

4.4.1 DESK STUDY
The local record centre West Yorkshire Ecology (WYES) provided record of one notable bird species within 2 km of the Site centre, swift *Apus apus* is listed on the Red List of BoCC (Stanbury et al., 2021). This record of swift was recorded approximately 1.6 km south-west from the Site boundary in 2016 and was a field sighting.

The local record centre WYES provided 15 records of dated bird records (1970-2012) within 2 km of the Site centre, which have not been included within this results section as they are not considered to provide an accurate representation of the current species composition locally.

4.4.2 SITE ASSESSMENT

Several birds were recorded during the survey, these were blackbird *Turdus merula*, dunnock *Prunella modularis*, robin *Erithacus rubecula*, wren *Troglodytes troglodytes*, starling *Sturnus vulgaris*, woodpigeon *Columba palumbus*, and chaffinch *Fringilla coelebs*. Of these, starling is a Red List BoCC species. It should be noted that this is not a comprehensive inventory of the bird species which may be present at the Site.

The flat roofs of the school building would offer potential nesting for species such as herring gull, however, this species was not recorded at the time of either the PEA or the nocturnal bat survey. The trees on, and immediately adjacent to, the Site, and areas of dense scrub and hedgerow provide nesting opportunities for a range of bird species. The Site was not considered suitable for ground nesting species given its urban nature and the ongoing anthropogenic disturbance.

The geographic value of birds at the Site is considered to be Local.

4.5 BATS

4.5.1 DESK STUDY

Data Search and Web Search

The local records centre, West Yorkshire Ecology (WYES) provided 30 records of five species of bat recorded within 2 km of the Site centre within the past 10 years, these are common pipistrelle *Pipistrellus pipistrellus*, brown long-eared bat *Plecotus auritus*, soprano pipistrelle *Pipistrellus pygmaeus*, lesser noctule *Nyctalus leisleri*, noctule bat *Nyctalus noctule* and two unidentified bat species, a pipistrelle and myotis *Myotis* sp. bat; . The closest record of bat was an audio recording of soprano pipistrelle recorded approx. 0.22 km north-west from the Site boundary in 2020. The most recent record of bat was a field observation of a lesser noctule bat recorded 0.8 km south-west from the Site boundary in 2022.

Two records of bat roost were provided by WYES, these were of common pipistrelle recorded 1.47 km north from the Site boundary in 2016, and 0.82 km north-east from the Site boundary in 2014.

Consultation of the MAGIC webpage identified that the closest granted European Protected Species Licence (EPSL) for bats is located over 3 km from the Site.

Review of Previous Surveys

A review of the PEA carried out in December 2022 identified the school building on-Site had several Potential Roosting Features (PRFs) which are as follows: on the southern aspect a slight gap in the felt overhand, service holes in the brickwork, gaps in mortar, and numerous broken hanging tiles with crevices. On the eastern aspect there were service holes, multiple lifts in the lead flashing, a lifted uPVC panel, gaps in the uPVC fascia, gaps in mortar, and a gap behind the school sign. On the northern aspect there were open vent panels, lifted roofing felt, and multiple window boardings. On the western aspect there were gaps in the fascia boarding, service holes, lifted roof felt, alarm box crevices and missing mortar in the brickwork. The school building was reported as having moderate roosting suitability.

4.5.2 FIELD SURVEYS

Preliminary Habitat Assessment

The Site itself offers low foraging opportunities for bats, with small pockets of vegetated habitats fragmented by buildings. Trees along the northern, eastern and southern boundaries may provide the potential for foraging bat species. Directional street lighting was noted at the western aspect of the Site along Leeds Old Road and around all aspects of the main building, which may limit bat activity in these areas to those more light tolerant species.

The PRA completed prior to the dusk emergence survey in June 2025 confirmed the majority of features identified in 2022 as PRAs to still be present, however, dismissed a number as being unsuitable to support roosting bats either due to their location, construction or likely climatic conditions.

Roost Presence Absence Survey

Dusk 5th June 2025

No bats were recorded to emerge from the building. Bat activity was limited to low levels of common pipistrelle activity mostly recorded at a distance and the majority likely associated with the woodland to the south. Table 4 provides the detailed results.

TABLE 4: RESULTS OF THE DUSK EMERGENCE SURVEY 5TH June 2025

Time	Species	Behaviour	Peak Count	Comments
Surveyor Position 1 (Figure 3).				
22:01	Common pipistrelle	Foraging	1	Foraging along woodland, repeat passes
22:08	Common pipistrelle	Foraging	1	Foraging along woodland, repeat passes
22:10	Common pipistrelle	Foraging	1	Foraging along woodland, repeat passes
22:26	Common pipistrelle	Foraging	1	Foraging along woodland, repeat passes
22:31	Common pipistrelle	Foraging	1	Foraging along woodland, repeat passes
22:37	Common pipistrelle	Foraging	1	Foraging along woodland, repeat passes
22:51	Common pipistrelle	Foraging	1	Foraging along woodland, repeat passes
Surveyor Position 2 (Figure 3).				
22:10	Common pipistrelle	Foraging	1	Foraging along woodland edge
Surveyor Position 3 (Figure 3).				
22:14	Common pipistrelle	Commuting	1	
Surveyor Position 4 (Figure 3).				
22:14	Common pipistrelle	Foraging	1	
22:19	Common pipistrelle	Foraging	1	HNS
22:48	Common pipistrelle	Foraging	1	HNS

4.5.3 SITE ASSESSMENT

Considering the suitability of the Site, the results of the nocturnal surveys and the low potential for the buildings to support a roost, the geographic level of bats at the Site is considered to be local.

4.6 AMPHIBIANS

4.6.1 DESK STUDY

Data Search and Web Search

The local records centre West Yorkshire Ecology (WYES) provided no recent records of amphibian species, but holds eight historic records of two species of amphibian recorded within 2 km of the Site centre. Smooth newt *Lissotriton vulgaris*, and common frog *Rana temporaria* recorded between 2004 and 2005. approximately 1.72 km north-west from the Site boundary. A review of ariel photographs and OS maps revealed no ponds within 500 m of the Site that may support breeding amphibians.

4.6.2 SITE ASSESSMENT

Whilst the Site may offer shelter and foraging opportunities, amphibian species are not anticipated to be supported on-Site due to the lack of suitable waterbodies within a dispersible distance of the Site with connectivity to it, such that, amphibians are not considered a constraint at the Site and are not considered further within this Report.

4.7 REPTILES

4.7.1 DESK STUDY

The local records centre provided no records of reptiles recorded within 2 km of the Site centre.

SITE ASSESSMENT

The Site supported a relatively small area of suitable foraging and sheltering habitat in the form of introduced shrub, hedgerow and where areas had been left recently unmanaged, dense bramble/mixed scrub, such that the Site offers limited suitable habitat for foraging, basking and sheltering reptiles and lacks the mosaic of habitats that they require. Furthermore, the local records centre held no records of reptile within 2 km of the Site centre in the past 10 years and, therefore, reptile species are not considered to be a constraint at the Site and are not considered further within this Report.

4.8 BADGERS

4.8.1 DESK STUDY

The local records centre provided no records of badger recorded within 2 km of the Site centre, furthermore, the Site centroid falls outside an area of increased probability of badger activity.

4.8.2 SITE ASSESSMENT

The habitats on Site provide limited opportunities for foraging and sett digging for badgers. No evidence of badger activity was recorded at the time of the survey. Furthermore, in general the Site is not located in an area where there is plentiful suitable habitat for badgers to thrive, with busy roads and dense residential development in the surrounding area, limiting opportunities for foraging or sett digging and, therefore, they are not considered to be a constraint at the Site and are not considered further within this report.

4.9 HEDGEHOG

4.9.1 DESK STUDY

The local records West Yorkshire Ecology (WYES) provided six records of hedgehog *Erinaceus europaeus* within 2 km of the Site centre within the past 10 years. The closest and most recent record of hedgehog was a field observation recorded approx. 0.74 km south-east from the Site boundary in 2023.

4.9.2 SITE ASSESSMENT

The Site supported bramble scrub, mixed scrub, ornamental planting, modified grassland, individual trees and scattered trees bordering the northern and western Site boundaries, such that it provides suitable opportunities for foraging and sheltering hedgehog. Furthermore, there is woodland located immediately adjacent to the southern site boundary which may provide dispersal for the species to the Site.

At the time of the nocturnal bat survey, a single hedgehog was observed foraging within the unmanaged grassland to the north-east of the building. Considering the suitability of the Site, the geographic level of hedgehogs at the Site is considered to be local.

4.10 INVASIVE NON-NATIVE SPECIES (INNS)

4.10.1 DESK STUDY

The local records centre West Yorkshire Ecology (WYES) provided two records of INNS within 2 km of the Site centre within the past 10 years. These are giant hogweed *Heracleum mantegazzianum*, and Himalayan balsam *Impatiens glandulifera*. Both records of INNS were recorded approx. 1.8 km south-west from the Site boundary and recorded in 2016.

4.10.2 FIELD SURVEY

Wall cotoneaster was located towards the entrance to the school building both during the PEA conducted by Antea Group in April 2025, and during the previous walkover by RSK Biocensus in December 2022. Wall cotoneaster is listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

4.11 SUMMARY OF IMPORTANT ECOLOGICAL FEATURES AND THEIR GEOGRAPHIC VALUE

The 'important ecological features' identified in the above section that have the potential to experience effects as a result of the Proposed Development are listed in Table 5 below, along with their geographic importance, and they will be the subject of the Impact Assessment in the following section. All other features have been scoped out due to their anticipated absence from the Site, or for other reasons given in the above section, such that they will be unaffected by the Proposed Development.

5IMPORTANT ECOLOGICAL FEATURES

Ecological Feature	Geographical Value
Non-Statutory/Statutory Designated sites	Local
Habitats	Local
Birds	Local
Bats	Local
Hedgehog	Local
INNS	Local

5 ASSESSMENT OF EFFECTS

The evaluation in this section is based on the baseline information presented above, a review of the design proposals, consultation with the design team, knowledge of likely construction practices to be employed, taking into consideration any measures inherent to the scheme which seek to avoid impacts altogether, and reasonable assumptions in regard to the operational phase.

It is assumed there has been no change in the condition of the Site since the Site survey (unless otherwise stated) for the purpose of this assessment.

5.1 IMPORTANT ECOLOGICAL FEATURES FOR WHICH NO EFFECT IS ANTICIPATED

Designated Sites

No adverse effects are anticipated on Oakwell Park LNR/ LWS, situated approximately 1.72 km north of the Site boundary, owing to the size and type of development, the urban location and the relative separation of the Site from these designated sites.

5.2 IMPORTANT ECOLOGICAL FEATURES AND POTENTIAL EFFECTS

5.2.1 HABITATS

Potential Impacts and Effects

During Construction and Operation

The habitats present on Site are widespread on both a local and national scale, with none of the habitats being considered rare. The development proposals will result in in the loss of modified grassland, ornamental planting, mixed scrub, and a small number of individual trees, with others retained at the western extent of the Site. Hedgerow and trees at the eastern boundary will also be lost to facilitate temporary access. However, this habitat loss is not anticipated to significantly contribute to the fragmentation of habitats across the landscape. Grassland within the eastern area of the Ste will be only temporarily lost to facilitate construction access and is to be reinstated following the works. Furthermore, a Biodiversity Net Gain (BNG) calculation has been undertaken using the Statutory Metric to calculate the baseline and anticipated post-development biodiversity value of the Site. The baseline value of the Site is 2.83 area units and 0.09 linear units. Overall, the development is anticipated to result in a BNG of at least 10 % on Site in both area and hedgerow habitats, unless amendments are made post-planning. The necessary BNG Assessment will be submitted to the LPA as a separate document to inform planning.

In the absence of protection during construction there is the potential for negative effects upon any retained habitats (e.g. scattered trees) and those immediately off-Site due to physical harm from Site clearance/construction works such as damage from machinery. For example, any construction works within proximity to the retained trees have the potential to cause damage to the structure, roots and health of the trees.

Without mitigation, the Proposed Development has the potential to have a minor adverse effect that is not significant.

Avoidance and Mitigation

During Construction and Operation

Trees to be retained and those immediately beyond the Site boundaries will receive appropriate protection during the construction phase of works through the use of tree root protection zones and barriers in accordance with BS5837: 2012 Trees in relation to design, demolition and construction, where appropriate. In addition, best practice measures will be followed with regards to dust and pollution prevention.

Standard environmental best practice measures will be applied with regards to dust suppression and pollution prevention measures. These can be secured through the implementation of a Construction Environmental Management Plan (CEMP).

The Proposed Development includes a variety of landscape features to enhance the biodiversity of the Site, including groundcover planting, pollinator planting, perennial flower planting, drought tolerant planting, shade tolerant planting and scattered trees. A Habitat Management and Monitoring Plan (HMMP) will be in place in order to ensure retained and planted habitats are managed for the benefit of biodiversity for at least the next 30 years.

Assessment of Residual Effects
Provided the above mitigation is completed, the potential residual effects are considered minor beneficial and of not significant.

5.2.2 BIRDS

Potential Impacts and Effects
During Construction
The construction phase will result in the loss of individual trees, bramble and mixed scrub habitats, as well as hedgerow. There is, therefore, the potential for direct adverse effects on nesting birds that are permanent in nature as a result of such clearance.

In addition, construction works being carried out within proximity to nesting birds may affect them indirectly, depending on the works being carried out, and the species of bird affected. Noise and vibration disturbance effects may result in birds being repeatedly flushed off nests, causing disruption to feeding activity, or even abandonment of nests. This is considered to be a temporary impact.

Further to the potential direct effects on birds whilst they are actively nesting, the removal of suitable vegetation will result in the direct loss of available bird nesting habitat, as well as a loss of foraging opportunities. This will offset by the planting of new trees and native scrub along the eastern boundary, together with a range of bird boxes that will be installed along the Site boundaries.

Without mitigation, the construction phase is considered to have a minor adverse effect that is not significant.

During Operation
During operation, if habitats retained and/or planted during construction are not managed appropriately, then there is the potential for additional biodiversity loss from the Site.

Without mitigation, this is considered likely to have a minor adverse effect that is not significant.

Mitigation and Compensation
During Construction
Where practicable, vegetation clearance at the Site will be undertaken outside of the main nesting bird season (i.e. clearance carried out between September and February inclusive).

If these works cannot be restricted to within this period, an Ecological Watching Brief will be maintained during the main bird breeding season to ensure that no nesting birds are adversely affected. This will entail checking all suitable habitat for nesting birds due to be removed, and a buffer of at least 10 m beyond that area, by a suitably qualified ecologist prior to the commencement of works. If, during the Ecological Watching Brief, birds are found to be within the area due to be cleared or the buffer zone, measures to prevent any disturbance to breeding

birds, including the cessation of tree and vegetation clearance, or construction works in areas close to breeding sites until the birds have completed breeding, will be put in place until the chicks have fledged.

During Operation

A HMMP will be in place in order to ensure retained and newly planted habitats are managed to maximise foraging opportunities for birds, and to prevent destruction or damage to nests in-use, for at least the next 30 years. In addition to replacement planting, ten bird boxes will be installed on either trees to be retained or the new building complex, at a minimum height of 3 m and avoiding a southerly aspect and anthropogenic disturbance, post-development to offer nesting habitat for a range of locally occurring species.

Assessment of Residual Effects

Following the application of mitigation measures during the construction phase of works, the potential residual impacts of the Proposed Development on birds are considered to result in a negligible effect, which is of neutral significance.

5.2.3 BATS

Potential Impacts and Effects

During Construction

The Site was assessed as offering low quality foraging and commuting habitat for bats, with higher quality habitat in the surrounding area (woodland to the south). Nocturnal surveys in 2023 (two) and in 2025 (one) recorded low activity of individual common pipistrelles on-Site and noctule bats flying overhead, and no bats were recorded to roost within the building.

Whilst no bats were recorded to emerge from the building during the surveys, bats are mobile animals and often change roost sites on a regular basis and during different times of year, there is, therefore, potential for the building complex to be used as a roost by individual bats or low numbers of males/ non-breeding females of a common and widespread species prior to demolition. There is the potential for a bat(s) to be disturbed or harmed during the removal of the fascias, and a roost site to be destroyed without mitigation in place.

Further to the potential impacts to a roosting bat(s), the demolition of the building will result in the loss of roosting opportunities. These

The construction phase of works has the potential to result in temporary disturbance to bats through increased lighting, noise, and vibration on foraging and commuting corridors. However, it is anticipated that during the main active bat season (April-October, inclusive), construction works will generally cease or be winding down before dusk when bats emerge and will not begin before dawn when bats return to roosts. Therefore, generally artificial lighting will not be required, and as such there are not anticipated to be any negative effects upon bat populations. In certain circumstances, however, in late autumn or early spring when daylight hours are limited but weather conditions may be suitable for bats to be active, there may be a brief overlap between bat activity and on-Site construction works. During this period, lighting may be required to enable the construction works to progress and this, along with any associated noise, may temporarily alter bats' foraging and commuting activity across an area of the Site. However, the combined effects of lighting and noise from construction works during these occasional circumstances would only be a temporary deterrent to foraging and commuting bats in a concentrated area, and not across the wider Site and this is not anticipated to have any adverse impact upon bats.

Whilst lighting, noise and vibration noise during the construction phase of the Proposed Development is considered to represent a negligible effect, which is of neutral significance, the demolition process is considered to have a minor adverse effect which is non-significant.

During Operation

During the operational phase of works, there is potential for disturbance to bats through increased lighting on-Site from current levels. This may deter bats from using both on-Site habitat and those bounding the Site, however, given the extent of opportunities within the surrounding area and the existing nature of the Site (i.e. already experiencing high levels of anthropogenic activity), this is considered to have a minor adverse effect, which is not significant.

Mitigation and Compensation

During Demolition

- As far as practicably possible, removal of the uPVC fascia boards and wooden hanging tiles on the southern aspect should be undertaken during the active bat season (April- October, inclusive, but weather dependent).
- Boarding and hanging tiles, will be removed by hand, lifted away from the supporting structure (not scraped/slipped horizontally against another tile, with the contractor first checking behind for evidence of bats, before removing them fully; and
- Should bats or evidence of bats be recorded, works in that area will stop immediately and the licensed bat ecologist from Antea Group contacted immediately to determine the best way forward.

Three crevice bat boxes will be installed on a southerly aspect on one of the trees to be retained or within the structure of the new building complex, at a minimum height of 3 m in a location that allows for a clear flight path towards vegetation and avoiding anthropogenic disturbance as far as possible.

During Operation

The proposed lighting scheme will be designed with reference to current guidance (BCT and ILP, 2023) and will avoid excessive up lighting and light spill onto off-Site vegetated corridors and newly planted corridors.

Assessment of Residual Effects

Subsequent to the application of mitigation and compensation, the impacts of the Proposed Development on bats are considered to result in a negligible effect, which is of neutral significance.

5.2.4 HEDGEHOG

Potential Impacts and Effects

During Construction

Hedgehogs utilise the habitat on-Site for foraging and possibly shelter. As such, there is the potential for this species to be harmed during Site clearance works. In addition, there is a direct risk of harm to hedgehogs should they fall into pits or trenches or become trapped in pipework left open overnight during the works. Should they become trapped they may be at greater risk of predation, starvation and susceptibility to extreme weather conditions. Furthermore, loss of grassland and scrub habitat at the Site will result in reduced opportunities for this species. Considering the size and location of the Site, in the absence of mitigation, the construction phase is considered to have a minor adverse effect which is not significant.

During Operation

Hedgehogs will not be able to access the Site for foraging, and dispersal routes used by individuals through the Site to other suitable habitats (avoiding roads), will not be possible. This is considered to have a minor adverse effect which is not significant.

Avoidance and Mitigation

During Construction

Site clearance will be undertaken with an awareness for the potential presence of hedgehog and removal of dense scrub vegetation offering hibernation opportunities should avoid the hibernation period (November-March, though weather dependent), furthermore, cleared vegetation should not be stored on-Site. Any hedgehogs found should be caught with gloved hands and moved to an alternative suitable habitat away from the proposed works. During the construction phase of works, no open pits or trenches will be left uncovered or alternatively without a mammal escape ramp overnight, and no pipework will be left uncapped overnight.

During Operation

A number of gaps will be created within the security fencing at strategic locations around the Site to facilitate the dispersal of hedgehogs through the area. They require gaps that are approximately 13 cm^2, therefore, not encouraging the movement of larger species of mammals through the Site.

Assessment of Residual Effects

Following the application of mitigation measures during the construction phase of works, the potential residual impacts on hedgehogs as a result of the Proposed Development are expected to be negligible and, therefore, neutral.

6 CONCLUSIONS

The habitats present on Site are widespread, in both a local and national context. During the design process, the mitigation hierarchy has been followed such that those habitats with the greatest ecological value are to be retained within the development, wherever possible. As such, individual trees within the western area of the Site have been identified for retention and will receive appropriate protection during the works. Furthermore, areas of grassland within the western area of the Site is to be retained/replanted and enhanced following the development. Grassland in the eastern area of the Site will be only temporarily lost to facilitate construction access and will be reinstated following the works.

The assessment has identified the potential for nesting birds, roosting, foraging and commuting bats, and hedgehogs on-Site which may be adversely impacted by development, such that mitigation and compensation has been proposed in relation to these. On the basis that the recommendations within this report are carried out in full, it is considered that the development of this Site can be undertaken in line with the requirements of UK legislation, guidance and local policy in this regard.

The assessment indicates that the proposed development has the potential to result in a BNG of at least 10 % on Site in accordance with national and local planning policy.

Whilst there is likely to be a temporal delay in achieving the biodiversity objectives for the Site (i.e. whilst new habitats become established), it is anticipated that in the long term there will be no significant residual effects on designated sites, habitats or protected species resulting from the Proposed Development in line with current local and national policy and UK legislation.

7 DISCLAIMER

The recommendations contained in this report represent Antea's professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the Client. The contract between Antea, and its Client outlines the scope of work, and only those tasks specifically authorised by that contract or outlined in this report were performed. This report is intended only for the use of Antea's Client and anyone else specifically identified in writing by Antea as a user of this report. Antea will not and cannot be liable for unauthorised reliance by any other third party. Other than as contained in this paragraph, Antea makes no express or implied warranty as to the contents of this report.

8 REPORT AUTHORISATION

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16th June 2025

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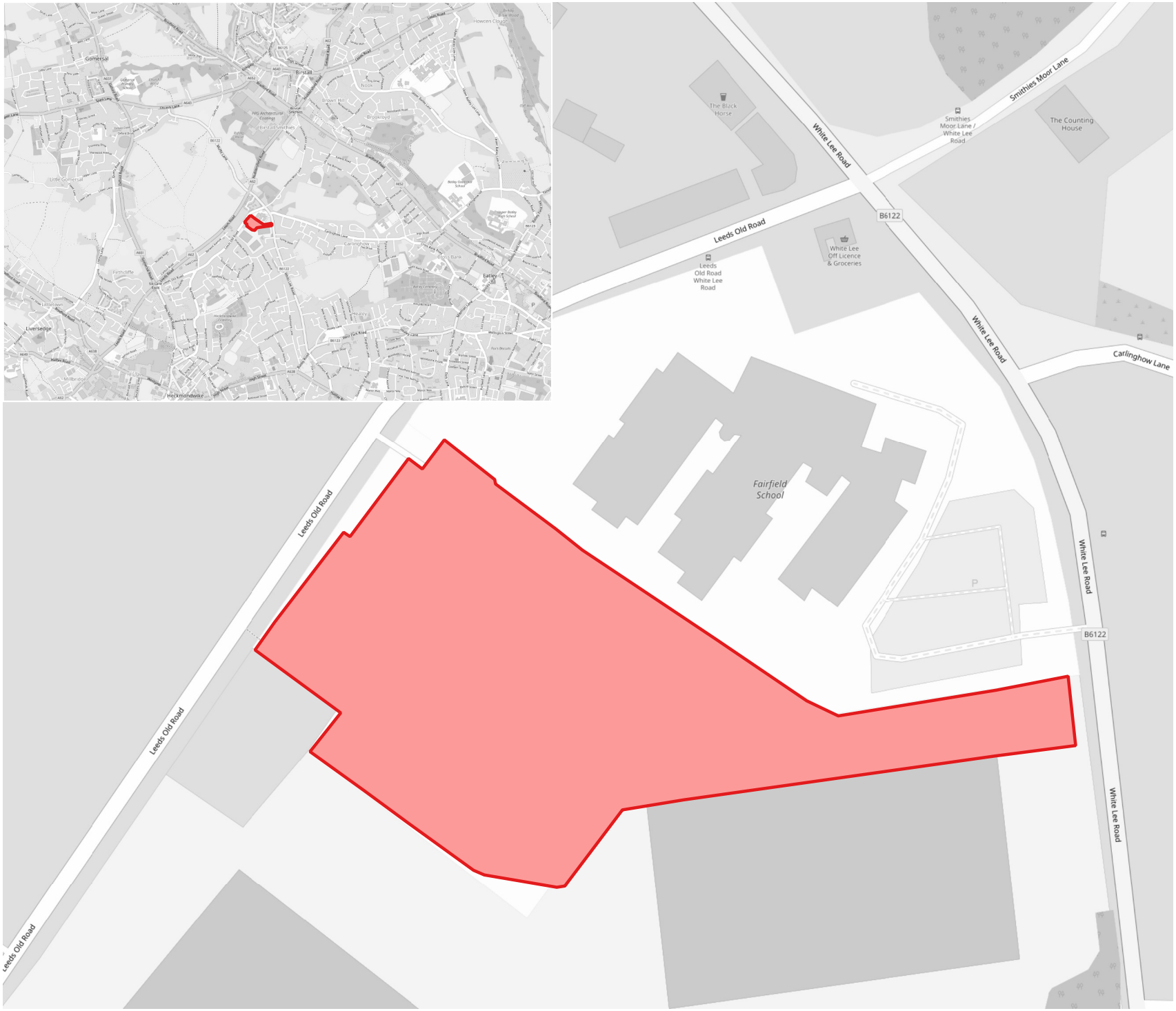

Legend

Site Boundary

0 9 18 27 36 45 54 m

N

Figure	Site Location Plan		
Project	Co-op Academy, Smithies Moor, Heckmondwike		
Figure No 1	Revision A	Date 13/06/2025	
Drawn OH	Checked	Project Number 2025-04-569099	

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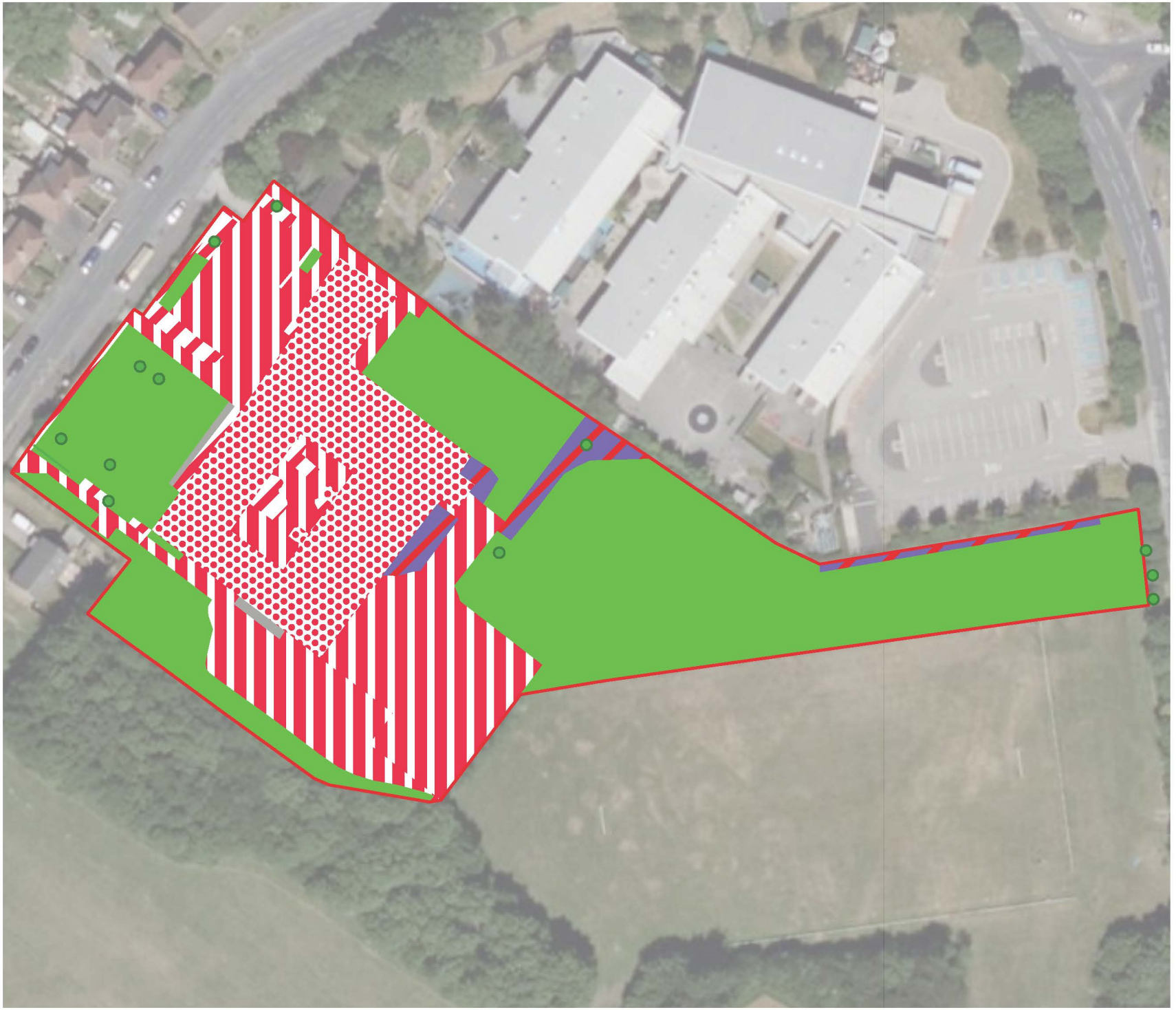

Legend

- Site Boundary
- Individual Tree
- Hedgerow
- g4 - modified grassland
- h3 - dense scrub
- u1 - introduced shrubs
- u1b - developed land. sealed surface
- u1b5 - buildings
- u1f - sparsely vegetated urban land

0 10 20 30 40 m

N

Figure	Habitat Plan
Project	Co-op Academy, Smithies Moor, Heckmondwike

Figure No	Revision	Date
2	A	13/06/2025
Drawn	**Checked**	**Project Number**
OH	JB	2025-04-569099

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Legend

- Site Boundary
- Surveyors
- Infrared Camera

0 10 20 30 40 m

N

Figure	Location of Surveyors and Infra Red Cameras on Dusk Emergence Survey 05/06/2025	
Project	Co-op Academy, Smithies Moor, Heckmondwike	
Figure No: 3	Revision: A	Date: 13/06/2025
Drawn: OH	Checked: JB	Project Number: 2025-04-569099

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Legend

- Site Boundary
- Surveyors
- Infrared Camera
- Foraging Bat Route

0 10 20 30 40 m

N

Figure	Results of the Dusk Emergence Survey 05/06/2025	
Project	Co-op Academy, Smithies Moor, Heckmondwike	
Figure No: 4	Revision: A	Date: 13/06/2025
Drawn: OH	Checked: JB	Project Number: 2025-04-569099

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Appendix A - References

References

Bat Conservation Trust and Institution of Lighting Professionals (2023) Guidance Note 08/23: Bats and artificial lighting in the UK. ILP, Rugby

Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. CIEEM, Winchester

CIEEM (2019) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester

Collins, J. (ed.) (2023) Bat surveys for Professional Ecologists: Good practice Guidelines (4th edition). The Bat Conservation Trust, London

Ministry of Housing, Communities & Local Government (revised 2024). National Planning Policy Framework

Multi-Agency Geographic Information for the Countryside (MAGIC) [online]. Available at: www.magic.gov.uk

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus). Herpetological Journal 10(4), 143-155.

Stace, C. (2019). New Flora of the British Isles 4th edition. University Press, Cambridge

The Conservation of Habitats and Species Regulations 2017 (as amended). HMSO

The Countryside and Rights of Way Act 2000. HMSO

The Environment Act (2021). HMSO

The Hedgerow Regulations 1997. HMSO

The Natural Environment and Rural Communities Act 2006. HMSO

The Protection of Badgers Act 1992. HMSO

UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at https:www.ukhab.org)

Wildlife and Countryside Act 1981 (as amended). HMSO

Appendix B - Assessment of Structures, Trees and Habitats for Bats

Assessment of Structures, Trees and Habitats for Bats

Guidelines for assessing the potential suitability of proposed development sites for bats

Suitability	Description	
	Roosting	**Commuting and Foraging**
None	No habitat features on site likely to be used by any roosting bats at any time of the year.	No habitat features on site likely to be used by any commuting or foraging bats at any time of year.
Negligible	An inspected structure which is considered to have no features likely to be used by roosting bats, however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion	No obvious habitat features likely to be used as flight-paths or by foraging bats, however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, inadequate space, shelter, protection and conditions, and/or the low suitability of surrounding habitats means that it is unlikely to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats).	Habitat that could be used by small numbers of commuting bats due to its quality and connectivity. For example, a gappy hedgerow or unvegetated stream that is isolated from the surrounding landscape. Alternatively, suitable but isolated habitats that could be used by small numbers of foraging bats such as a lone tree or a patch of scrub.
Moderate	A structure with one or more potential roost sites that are of adequate size, shelter and protection, with suitable conditions and surrounding habitat to support a bat roost but unlikely to support a roost of high conservation status (with respect to roost type not individual species conservation status).	Continuous habitat connected to the wider landscape that could be used by bats for flightpaths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by large numbers of bats on a more regular basis and potentially for long periods of time due to their size, shelter, protection, conditions and the surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flightpaths such as flowing waterbodies, hedgerows, lines of trees and woodland edges. High quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats, such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to, and connected to, known roosts.

NB: A structure may be identified to support a confirmed/suspected roost due to the presence of bat(s) and/or evidence such as droppings, staining and feeding remains, but will still be allocated a level of suitability from the table above.

Guidelines for assessing the suitability of trees on proposed development sites for bats

Suitability	Description
None	Either no Potential Roost Features (PRFs) in the tree or highly unlikely to be any
Further Assessment Required (FAR)	Further Assessment Required to establish if PRFs are present in the tree
Potential Roosting Feature (PRF)	A tree with at least one PRF present
PRF – L (Low Roost Suitability)	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats
PRF – M (High Roost Suitability)	PRF is suitable for multiple bats and may therefore be used by a maternity colony

The above tables have been adapted from Collins, J. (ed). 2023.

Appendix C – EcIA Methodology

Ecological Impact Assessment Methodology

The methodology for the EcIA follows the principles set out within the Guidelines for Ecological Impact Assessment (EcIA) in the UK and Ireland; Terrestrial, Freshwater, Coastal and Marine updated by the Chartered Institute of Ecology and Environmental Management (CIEEM) in 2019 and comprises a staged approach to assessing the potential impacts resulting from the proposed development on the ecological features within the ZOI.

The EcIA has involved the following stages:

- Determination of baseline conditions.
- Identification of important ecological features.
- Identification of potential impacts and effects.
- Identifying likely significant effects.
- Designing appropriate avoidance and/or mitigation for impacts and effects.
- Assessment of residual effect significance.
- Assessment of cumulative impacts and effects.
- Identification of compensation and enhancement measures.

Baseline Conditions

Baseline conditions have been established following the methodology outlined in the above sections.

Important Ecological Features

Important ecological features have been identified based on existing statutory, policy and conservation objectives. In accordance with the CIEEM Guidelines the value or potential value of an ecological resource has been determined within a defined geographical context in line with the table below.

Potential Impacts and Effects

The potential impacts on any important ecological features are identified during construction and operation, and prior to any mitigation, based on available baseline data, an assessment of design proposals and construction methods, and available information on the existing conservation status of the features in question.

Impacts are then characterised in terms of the following attributes:

- Positive or negative – i.e. a change that improves or reduces the quality of the environment.
- Magnitude – i.e. the size of an impact in quantitative terms where possible.
- Extent – i.e. the area over which an impact occurs.
- Duration – i.e. the time for which an impact is expected to last.
- Reversibility – i.e. is the impact permanent or temporary.
- Timing and frequency – e.g. related to breeding seasons.

The likely effects of potential impacts on important ecological features largely depend upon their sensitivity, whilst the level of certainty that an impact will occur as predicted is based on professional judgment. Only the impacts likely to result in significant effects have been described in detail within the report. Impacts that are either unlikely to occur, or if they did occur are unlikely to be significant have been scoped out and justification for scoping out provided.

Geographic Scale	Example Criteria for Classification at each Geographic Scale
International	Habitats meeting the criteria for Wetlands of International Importance (Ramsar), Special Area of Conservation (SAC) or Special Protection Area (SPA) site. A species present in internationally important numbers (>1% of international population). Notable species which is part of the cited interest of an SPA or SAC and which regularly occurs in internationally or nationally important numbers.
National	Habitats meeting the criteria for a Site of Special Scientific Interest, Marine Conservation Zone (MCZ), or National Nature Reserve (NNR). A species present in nationally important numbers (>1% of UK population). A species which is part of the cited interest of a SSSI and which regularly occurs in internationally or nationally important numbers. Rare breeding species (e.g. birds with <300 UK breeding pairs).
Regional	A local site with important regional habitats or significant populations of Species of Principal Importance (SPIs) under the NERC act. Species present in regionally important numbers (>1% of regional population). Species listed as priority species, which are not covered above, and which regularly occur in regionally important numbers. Sustainable populations of a species that is rare or scarce within a region. Species on the Birds of Conservation Concern (BoCC) Red or Amber List and which regularly occur in regionally important numbers.
County	A local site with a habitat that is characteristic of the county or rare on a county scale, or with significant populations of locally important species. Species present in county important numbers (>1% of county population). Species listed as priority species, which are not covered above, and which regularly occur in county important numbers. Sustainable population of a species that is rare or scarce within a county. A site designated for its county important assemblage of species. Species on the BoCC Red or Amber List and which regularly occur in county important numbers.
Local	A site which has wildlife corridors likely to be essential to allow viable movement of species or improve the biodiversity of the area. Species listed as priority species, which are not covered above, and are rare in the locality. Species present in numbers just under county importance (<1% of county population). Sustainable population of a species that is rare or scarce within the locality. A site whose designation is just under for inclusion for its county important assemblage of a particular species on site. Other species on the BoCC Red or Amber List and which are considered to regularly occur in locally important numbers.

Likely Significant Effects

In accordance with the CIEEM guidelines, an ecologically significant effect is 'an effect that either supports or undermines the biodiversity conservation objectives for 'important ecological features' or for biodiversity in general'.

Using an approach to valuing impacts that involves professional judgement and reference to available conservation objectives, neutral and minor effects are considered to be not significant, while moderate and major effects are assessed to be significant. The table below provides a comparison of the terms used.

Effect Significance	Type of Effect	Equivalent CIEEM Assessment
Significant	Major beneficial	Significant positive impact on biodiversity conservation objectives at given geographical context
	Moderate beneficial	Positive impact on biodiversity conservation objectives at given geographical context
Non-significant	Minor beneficial	Limited positive impact on biodiversity conservation objectives at given geographical context
Neutral	Negligible	No significant impact on biodiversity conservation objectives at given geographical context
Non-significant	Minor adverse	Limited adverse impact on biodiversity conservation objectives at given geographical context
Significant	Moderate adverse	Adverse impact on biodiversity conservation objectives at given geographical context
	Major adverse	Significant adverse impact on biodiversity conservation objectives at given geographical context

The evaluation of significant effects has been based on the best available scientific evidence. Where sufficient evidence is not available, the precautionary principle has been applied. Therefore, where it is not possible to robustly justify a conclusion of no significant effect, a significant effect has been assumed. Any uncertainty has been acknowledged within the report.

Avoidance and/or Mitigation

Negative impacts have been avoided and/or mitigated where possible, in line with the mitigation hierarchy as presented within the CIEEM Guidelines.

Assessment of Residual Effect Significance

Once the impacts of the proposed development have been assessed, and all attempts to avoid and mitigate ecological impacts have been finalised, an assessment of the residual impacts is undertaken to determine the significance of their effects upon ecological features.

Cumulative Impact Assessment

The following types of future development within the same zone of influence have been considered as part of the cumulative impact assessment in relation to each important ecological feature:

- Proposals for which consent has been applied which are awaiting determination and are visible on the local planning portal;
- Projects which have been granted planning consent, but which have not yet been started or which have been started but are not yet completed (i.e. under construction); and
- Proposals which have been refused permission but which are subject to appeal and the appeal is undetermined.

Compensation and Enhancement

Compensation measures were taken to offset residual effects resulting in the loss of, or permanent damage to ecological features despite mitigation, where required. Compensation has only been considered as a last resort, in line with the mitigation hierarchy.

Enhancement measures have been agreed over and above any mitigation or compensation measures, in order to provide a biodiversity net gain.

Appendix D –Photolog

Photo 1 – Amenity/Modified grassland in the east of the Site	
Photo 2 – B1	

Photo 3 – Tarmacadam sealed surface footpath located on the western site boundary	
Photo 4 - Mixed scrub habitat located along the north-eastern Site boundary.	

Photo 5 – Introduced shrubs and modified grassland around the perimeter of the car parking area.	
Photo 6 - Bare ground habitat located outside the north-western extent of the building with ornamental planting