



PRELIMINARY ECOLOGICAL APPRAISAL REPORT

SITE LOCATION

Hopwood Hall College,
Rochdale Road
Middleton
Manchester
M24 6XH

ISSUE DATE

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Seven Architecture

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EXECUTIVE SUMMARY

Site Address	Hopwood Hall College, Rochdale Road, Middleton, Manchester, M24 6XH
Grid Reference	SJ 54972 80747
Approximate Site Area	Comprising multiple areas equating to 2800m ²
Current Site Use	The buildings within the Animal Management area and surrounding habitats are currently used for the care of the species on campus by students and staff.
Designated Sites within Zone of Influence	The site falls within the impact risk zone of Rochdale Canal Sites of Special Scientific Interest (SSSI) and Special Areas of Conservation (SAC).
Notable Habitat Features	Broadleaved woodland habitat within and directly connected to the site.
Notable species applicable to this assessment	• Bats (potentially roosting, foraging and commuting) • Breeding birds • Great crested newt and common amphibians • Reptiles • Badger • Hedgehog • Brown hare
Mitigation Recommendations	• A nesting bird check should be undertaken prior to any works commencing in relation to the buildings and vegetation removal. • Precautionary Working Methods for roosting bats in relation to B6. • A sensitive lighting strategy should be adopted. • Reasonable avoidance measures reptiles, amphibians, bats, badgers and hedgehog. • Removal of non-native invasive species.
Recommended further surveys	Review the Arboricultural Impact Assessment to assessed extent of habitat loss and inform further surveys/mitigation for trees with bat roosting potential.
Recommended Ecological Enhancements	A Biodiversity Net Gain Report (1697A-BNG-V1-A) is to be produced alongside the Preliminary Ecological Appraisal.

Contents

1. Introduction.....	2
2. Methodology	3
3. Survey Results	7
4. Mitigation Recommendations	25
5. Further Surveys & Conclusion.....	32
6. Bibliography.....	33

Appendices

Appendix 1 Site Photographs

Appendix 2 Habitat Plan

1. Introduction

Scope & Purpose

- 1.1.1. Seed Arboriculture Ltd were commissioned by Seven Architecture to undertake a Preliminary Ecological Appraisal (PEA) at Hopwood Hall College, Rochdale Road, Middleton, Manchester, M24 6XH. This report has been prepared to inform a planning application at the site relating to a series of building demolitions and rebuilding, and existing building refurbishments.
- 1.1.2. The author of this report is Katie Brewer BSc (Hons), Ecological Project Manager. This report has been overseen by Katie Bird MEnvSci, ACIEEM, Associate Director. Katie is highly experienced managing schemes and has produced many ecological reports to inform planning management plans.

Location

- 1.1.3. Please refer to Figure 1.1 for the site location relating to four parcels.



Figure 1 - Site Location Plan

Objectives

1.1.4. The objectives of the Preliminary Ecological Appraisal are as follows:

- Identify the major habitats present.
- Ascertain the presence or potential presence of any legally protected or notable species or habitats.
- Identify any mitigation required and opportunities for strategic wildlife enhancements.

2. Methodology

Desk Study

2.1.1. An initial desk-based assessment of the site was undertaken to collate baseline data. The desk study included:

- A 1km local data search of notable flora and fauna, and locally designated sites obtained from Greater Manchester Ecology Unit (GMEU) and retrieved on 04/01/24.
- Review of Magic.gov.uk website for details of any designated sites, notable habitats and presence of European Protected Species Licences.
- Review of aerial and OS maps for habitat information, as well as determining locations of potential waterbodies to be considered in the assessment.
- Review of potential habitat links on and off site, to determine the potential zone of influence of the proposed development.
- On site consultation with the landowner which provided valuable information regarding historic land use and known species and habitats present within the site.

Vegetation & Habitat Assessment

2.1.2. An Ecological Appraisal of the site was undertaken by Katie Bird, Associate Director and Katie Brewer BSc (Hons) Ecological Project Manager. The survey was undertaken on the 12th January 2024. The weather was clear (0/8 oktas), with no precipitation, 0 wind speed and 5°C.

2.1.3. The walkover survey was undertaken broadly in line with standard UK HAB Methodology (2023). The assessment is undertaken with consideration of methodology as per “Preliminary Ecological Appraisal” (CIEEM, 2018).

2.1.4. A UKHAB Plan has been produced and is presented in the Appendix of this report. Standard methodology has been used, though adjustments have been made based on judgement to demonstrate habitats in a clearer manner, or where standard guidance does not fit the conditions found on site.

Protected & Notable Species Assessment

2.1.5. A search for signs of protected and notable species of fauna was undertaken during the site walkover. This included both field signs of species, as well as potential for species to be present based on habitat availability.

2.1.6. The searches broadly included the following:

- Assessment of waterbodies on site and within 250m of the site boundary, and terrestrial habitats for suitability to support notable amphibians.
- Searches for field signs of, and habitat suitability for bats.
- Suitability of habitats to support reptiles, and searches for incidental field signs.
- Searches for field signs of badger (*Meles meles*), including setts, mammal paths, snuffle holes, badger hair and latrines to indicate activity.
- Assessment of the suitability of the site to support notable bird species and recording any field sightings of birds during the walkover.
- Assessment of the sites ability to support notable invertebrates and flora.
- Searches for non-native invasive species.

Preliminary Roost Assessment

2.1.7. A Preliminary Bat Roost Assessment (PRA) and Ground Level Tree Assessment (GLTA) of the site was undertaken by Katie Brewer and Katie Bird who holds a Class 2 Bat Survey Licence from Natural England (Reference 2020-48950-CLS-CLS). Please refer to Figure 2 for the building references.



Figure 2 – Building References

- 2.1.8. The survey was undertaken following guidance set out in Collins (2023), see Figure 3. This includes undertaking a detailed internal and external inspection of any features to compile information on potential and actual bat entry/ exit points, roosting locations and evidence of bats.
- 2.1.9. The commuting and foraging assessment methodology is based on information contained within the Bat Conservation Trust guidelines 4th edition (Collins 2023).
- 2.1.10. The GLTA and Potential flightpaths and foraging habitats were assessed as per categories listed in Table 4.1, 4.2 and 6.2, demonstrated below (Collins 2023).

Table 4.1. Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

Potential suitability	Description	
	Roosting habitats in structures	Potential flight-paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible*	No obvious habitat features on site 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 on site 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 the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ³ and/or suitable surrounding habitat 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 ³).	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ³ and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths 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 larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ³ and 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 flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. 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.

Assessment Criteria for Bat Roosting Potential

Table 4.2. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement.

Suitability	Description
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

Table 6.2. Guidelines for categorising the potential suitability of PRFs on a proposed development site for bats, to be applied using professional judgement.

Suitability	Description
PRF-I	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	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

Figure 3 – Collins, 2023

Habitat Suitability Assessment

- 2.1.11. One pond was located within 250m of the site boundary (P1), demonstrated on Figure 4. The pond was to undergo a Habitat Suitability Index (HSI) assessment following the methodology set out in ARG UK Advice Notice 5. (Oldham et al., 2010).



Figure 4 - Offsite ponds in relation to the site

Survey Limitations

- 2.1.12. This survey does not constitute a full botanical survey. Key species for each habitat type have been identified to give a broad representation of habitats present within the site.
- 2.1.13. It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the natural environment. This survey does not constitute a full botanical survey. Plant species may have been under-recorded, unidentifiable or not visible due to a number of factors including the time of year the survey was carried out.
- 2.1.14. The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site. This is based on the suitability of the habitat, known distribution of the species in the local area (provided by data searches) and any direct evidence within the survey area.
- 2.1.15. The findings of this report represent the professional opinion of qualified ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited within this document.
- 2.1.16. January is a suboptimal time for carrying out a Habitat Survey due to being outside of the optimal plant growing season. Therefore, it is likely that some plants are present on the site but were not evident at the time of the survey and were not recorded. This is not considered to be a significant constraint with regards to the general Habitat Survey results due to the size and location of the site and limited extent of the habitats, it is considered very unlikely that any rare or priority plant species were missed.

3. Survey Results

Site Context

- 3.1.1. The site was located approximately 2.7km northwest from Middleton town centre and consisted of multiple parcels of an active college campus. The site was connected to surrounding woodland and grassland habitats with Trub Brook running through the surrounding habitats of the site. These surrounding habitats are anticipated to support local flora and fauna populations by providing suitable habitats and food resources. The site is generally well connected to surrounding habitats.

Designated Sites

- 3.1.2. One Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC) was located within 5km of the site boundary based on consultation with magic.gov.uk. Rochdale Canal SSSI and SAC is located approximately 1km east from the site (at nearest point). The Rochdale Canal contains important habitats for submerged aquatic plants and emergent vegetation, including extensive colonies of the nationally scarce SAC species floating water plantain (*Luronium natans*). The site also supports a diverse assemblage of aquatic flora, notably its assemblage of pondweeds, (*Potamogeton spp*); the nine species of which found in the canal represent a balanced community which reflects the quality of water. The canal also provides habitat for a number of waterside bird species. Coot (*Fulica atra*), moorhen (*Gallinula chloropus*) and mallard (*Anas platyrhynchos*) breed along the length of the canal, whilst grey wagtail (*Motacilla cinerea*) also breeds in smaller numbers and kingfisher (*Alcedo atthis*) regularly use the canal for feeding. The flora of the canal is very diverse, partly because mesotrophic water (which has a pH between 5.5 and 6.5, rarely up to 7) supports a continuum of species within a wide pH range. Thus, there are species which tolerate acid to moderately acid water (pH 4.5- pH 6.0) and a different group of species tolerant of moderately acid to alkaline conditions (pH 6.0 to pH 9.0).
- 3.1.3. The following Local Nature Reserves (LNRs) were located within 5km of the site boundary based on consultation with magic.gov.uk:
- Hopwood Woodlands LNR runs adjacent to and within the campus of Hopwood Hall College, located adjacent to the site boundary on the western aspect. The woodland is known to support a number of bird species and common toad.
 - Alkrington Woods LNR is located 2.9km southwest from the site boundary. This woodland consists of woodland, grassland, marsh, standing water and amenity areas.
- 3.1.4. **There were no further designated sites located within 5km of the site boundary based on consultation with magic.gov.uk.**
- 3.1.5. The data search returned records of the following Sites of Biological Importance (SBI) within 1km of the site boundary:
- Glade and Oaken Bank Woods SBI located at SD872084 and is located adjacent to the west of the most western parcels of site. The site consists of areas of semi-natural woodland, the majority of which has been identified as ancient woodland (in the Ancient Woodland Inventory, Natural England 2020). The site also supports a number of ponds some of which are also UK Biodiversity Priority Habitats. Oaken Bank Wood is divided into two by a trackway, Oaken Bank Road. South of the track the woodland is an even aged oak-birch woodland. A number of ponds occur in the south, which are surrounded by willows (*Salix sp.*). Bottle sedge (*Carex rostrata*) and common duckweed (*Lemna*

minor) have been recorded here. North of the track, Oaken Bank Wood supports similar oak-birch woodland although sycamore (*Acer pseudoplatanus*) is more frequent. A stream runs through the wood. Ponds occur in the east of Glade Wood and are surrounded by willows and have marginal vegetation. Common toad (*Bufo bufo*) and great crested newts (*Triturus cristatus*) have both been recorded in these ponds. Biodiversity Priority bird species have been recorded within the site which includes linnet (*Carduelis Cannabina*), bullfinch (*Pyrrhula pyrrhula*) and reed bunting (*Emberiza Schoeniclus*). 88 species of fungi have been recorded from Glade Wood with 109 species recorded in Oaken Bank Wood. Mammals recorded include red fox (*Vulpes vulpes*), brown hare (*Lepus europaeus*) (UK Biodiversity Priority Species), rabbit (*Oryctolagus cuniculus*), weasel (*Mustela nivalis*) and grey squirrel. Butterflies recorded include red admiral, speckled wood, small copper, orange tip, large white and green-veined white.

- Hopwood Clough SBI is located at SD877078 and is located approximately 50m east of the site. This site forms part of Hopwood Clough Nature Reserve with Glade and Oaken Bank Woods SBI and Lords Wood SBI. The site consists of woodland which is identified as ancient woodland (in the Ancient Woodland Inventory). It has been substantially interplanted with non-native trees and shrubs. Additional habitats include a small reservoir within the site boundary. The site's fungi have been well recorded by a local naturalist with a total of 79 species. Two species (*Pleurotus cornucopias* and *Resurpinatus rhacodium*) are locally scarce. Butterflies recorded from the site include orange tip (*Anthocharis cardamines*), large skipper (*Ochlodes sylvanus*), meadow brown (*Ochlodes sylvanus*), red admiral (*Vanessa Atalanta*), comma (*Polygonia c-album*) and green-veined white (*Pieris napi*). The site provides habitat for many woodland birds which includes (not limited to) breeding blue tit (*Cyanistes caeruleus*) and great tit (*Parus major*), wren (*Troglodytes troglodytes*), blackcap (*Sylvia atricapilla*), great spotted woodpecker (*Sylvia atricapilla*), sparrow hawk (*Accipiter nisus*), nuthatch (*Sitta*) and song thrush (*Accipiter nisus*). There are unconfirmed records of kingfisher nesting in the stream. Woodcock (*Scolopax rusticola*) is often flushed in the winter.
- Higher Boarshaw Clough SBI located approximately 400m south of the site. No citation was provided by GMEU.
- Lords Wood SBI is located approximately 410m east of the site. No citation was provided by GMEU.

Priority Habitats

- 3.1.6. Consultation with magic.gov.uk highlighted the presence of Priority habitats within and within the surrounding area of the site, demonstrated on Figure 5. Priority habitats onsite include Deciduous Woodland in relation to multiple parcels of the site.

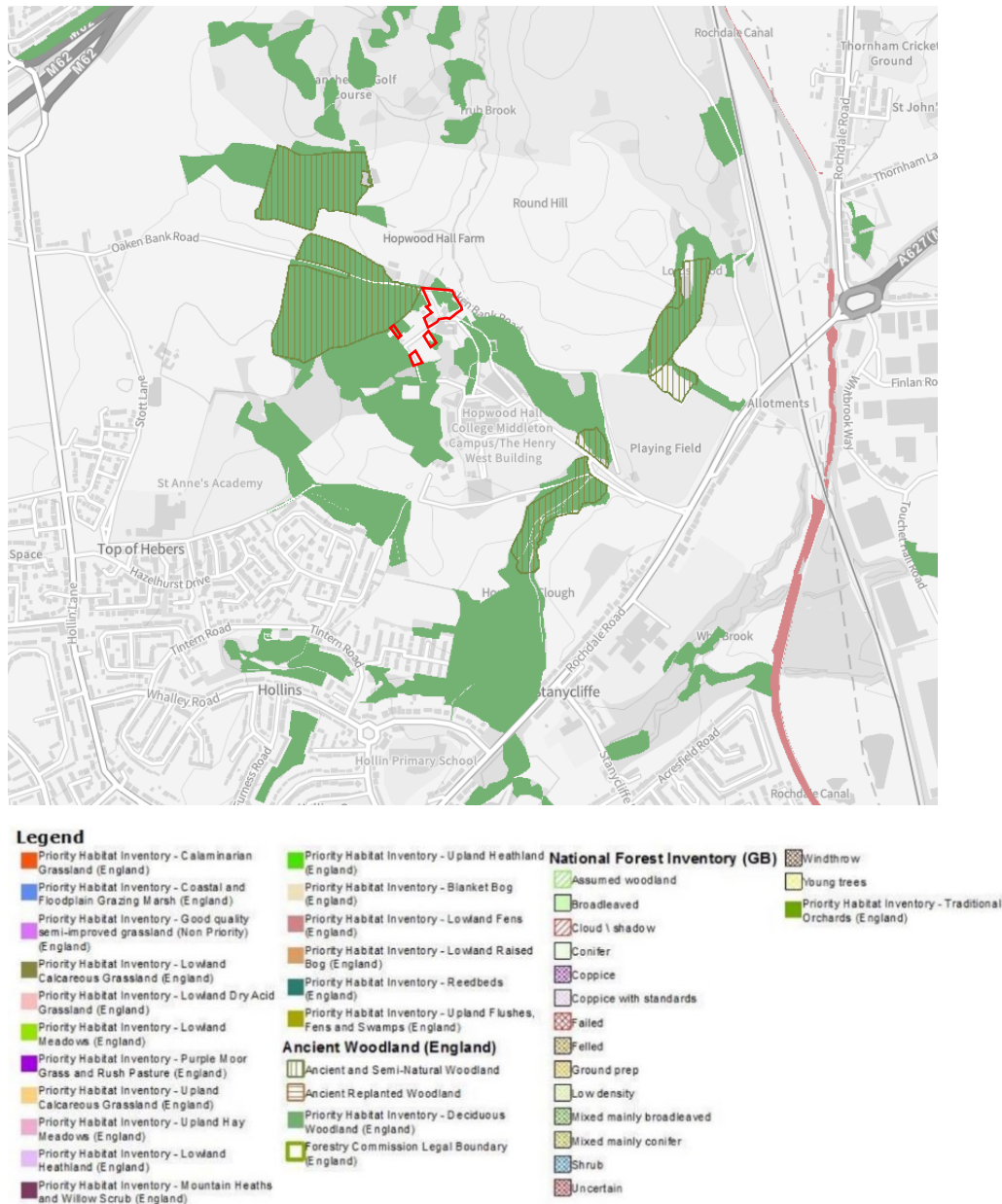


Figure 5 – Priority Habitats (Magic.gov.uk, 2024)

Habitats

- 3.1.7. Please refer to **Appendix 2** for the UK HAB Map for the site, and photographs are located within **Appendix 1**. The survey included all habitats within the red line boundary on the Map and have been separated in to parcel references 1 to 4.

Developed Land; Sealed Surface

- 3.1.8. A series of buildings were located within the site boundary and are detailed as part of the PRA (see Figure 2). Additional areas of developed land included roads and footpaths.

Modified Grassland

- 3.1.9. A series of parcels of modified grassland were present within the surveyed area.
- 3.1.10. Parcel 3 and 4 were grazed grassland areas which were heavily disturbed by animals, with bare ground areas. Species recorded within these parcels included; creeping buttercup (*Ranunculus repens*), mosses and rough meadow grass (*Poa trivialis*).
- 3.1.11. Parcel 1 contained a strip of modified grassland with bare ground patches and managed via strimming. Similar species recorded in Parcel 3 and 4 were recorded with the addition of rush (*Juncus* sp.), creeping thistle (*Cirsium arvense*), common dandelion (*Taraxacum agg.*), common daisy (*Bellis perennis*) and ragwort (*Jacobaea vulgaris*).
- 3.1.12. Two parcels of grassland were recorded within Parcel 2. The central parcel of grassland was strimmed and cut to a short sward height. Similar species recorded in Parcel 1 were noted with the addition of perennial rye grass (*Lolium perenne*). The southern parcel was tussocky, with no evidence of management and species recorded include rough meadow grass, cock's foot (*Dactylis glomerata*), ribwort plantain (*Plantago lanceolata*), common daisy, common mouse ear (*Cerastium fontanum*), perennial rye grass, hard rush (*Juncus inflexus*), *Fescue* sp., common dandelion, ragwort, germander speedwell (*Veronica chamaedrys*), herb Robert (*Geranium robertianum*), ground ivy (*Glechoma hederacea*), bulbous buttercup (*Ranunculus bulbosus*) and creeping thistle.

Bare Ground

- 3.1.13. A parcel of bare ground was recorded in relation to Parcel 3 where overgrazing and stomping from Shetland horses occurred.

Broadleaved Woodland

- 3.1.14. A parcel of broadleaved woodland was located to the east of Parcel 2. It comprised a series of mature trees, species recorded included sycamore (*Acer pseudoplatanus*), common beech (*Fagus sylvatica*), common lime (*Tilia × europaea*), goat willow (*Salix caprea*) and common ash (*Fraxinus excelsior*). The understorey comprised of rhododendron (*Rhododendron ponticum*), bramble (*Rubus fruticosus agg.*), holly (*Ilex aquifolium*), yew (*Taxus baccata*) and boxleaf honeysuckle (*Lonicera pileata*).
- 3.1.15. Ground flora included similar species as recorded within the tussocky grassland parcel, wood avens (*Geum urbanum*) and common ivy (*Hedera helix*).

Talls Forbs

- 3.1.16. Tall forbs were located to the north of Parcel 1 and included willowherb (*Epilobium* sp.), bramble, common nettle (*Urtica dioica*) and hard rush.

Introduced Shrub

- 3.1.17. Introduced shrub was located within Parcel 2 in association with an adjacent residential property, located offsite. Species recorded included holly, silver birch (*Betula pendula*), common lungwort (*Pulmonaria officinalis*), Darwin's barberry (*Berberis darwinii*), bramble, dogwood (*Cornus sanguinea*), common ivy, and willow (*Salix* sp.).

Artificial Unvegetated; Unsealed Surface

- 3.1.18. A large portion of Plot 2 comprised of artificial unvegetated; unsealed surface. This habitat related to a series of small animal holdings which were bare ground with small shelters for the associated animals.

Individual Trees

- 3.1.19. A series of individual trees were recorded within the site. The trees have not been plotted on the Habitat Map, however, please refer to the associated Tree Constraints Plan, produced by Seed Arboriculture, drawing reference; 697a-TCP-001-A. Tree species recorded included; sycamore, common lime and pedunculate oak (*Quercus robur*).

Native Hedgerow

- 3.1.20. A single hedgerow boarded the north of Parcel 4 (referenced as H1 within the Tree Constraints Plan). It comprised entirely of common beech with limited ground flora due to grazing.

Species

Flora

- 3.1.21. The data search returned no records of notable flora within 1km of the site boundary. However, they are known to be within the surrounding designated sites, this does not confirm their absence.
- 3.1.22. The majority of the site consisted of a series of well managed and disturbed habitats which has limited floristic diversity. There were no notable flora species identified within the site, however as the survey was undertaken in January, it is anticipated that additional flowering species within the grassland and woodland could be present.
- 3.1.23. The extensive management and the lack of notable flora, it is considered unlikely that notable plant species will be present onsite. As such, notable flora is not considered further within the assessment.

Invertebrates

- 3.1.24. The data search returned no records of notable invertebrates within 1km of the site boundary.
- 3.1.25. The site consisted of habitats which are anticipated to support local invertebrate populations. The unmanaged grassland and woodland habitats associated with Parcel 2, are anticipated to be of value for invertebrate lifecycles as the flowering species within these habitats are anticipated to provide suitable food resources.
- 3.1.26. The site is directly connected to surrounding woodland habitats and connected to other potential habitats of importance including ponds and Trub Book.
- 3.1.27. Overall, it is anticipated that notable invertebrates could be present onsite, but the site is not considered to be of significant value.

Amphibians

- 3.1.28. The data search returned records of great crested newt within the surrounding areas, this includes male, female and juvenile newts. Common toads, frog (*Rana temporaria*) and palmate newts (*Lissotriton helveticus*) were also recorded within 1km of the site boundary.

- 3.1.29. One Granted European Protected Species Licence was located within 5km of the site boundary for great crested newt based on consultation with magic.gov.uk. **Licence reference 2017-31535-EPS-MIT** – located approximately 1km northwest from the site boundary which allowed for the destruction of a resting place and breeding site for great crested newt between 31/10/2017 – 31/12/2017.
- 3.1.30. One great crested newt pond survey return was located approximately 0.7km northwest from the site boundary based on consultation with magic.gov.uk which found great crested newt to be present on 06/05/2014.
- 3.1.31. No ponds were located onsite. Based on OS mapping, one pond is located within 250m of the site boundary. As great crested newts' upper dispersal limit is generally considered to be up to 250m from a waterbody (though occurrence of greater distances does exist). Please refer to Figure 4 for the location of the ponds and Table 1 for the HSI summary P1.

Table 1 – Pond 1 HSI Results

Pond ref.	P1
Grid Reference	SD 87398 08191
SI1 – Location	0.5
SI2 – Pond Area	0.9
SI3 – Pond Drying	0.9
SI4 – Water Quality	0.33
SI5 – Shade	1
SI6 – Fowl	0.1
SI7 – Fish	0.67
SI8 – Ponds	1
SI9 – Terr'l Habitat	0.33
SI10 - Macrophytes	0.3
HSI Score	0.50
Pond Suitability	Below average

- 3.1.32. P1 has been assessed as having “Below Average” suitability for great crested newts. The following qualities contributed towards this score:
- Location is marginal.
 - Pond area is approximately 1550m².
 - Never dries.
 - Low invertebrate diversity (e.g. species such as midge and mosquito larvae). Few submerged plants.
 - Approximately 60% shaded.
 - Severe impact of waterfowl. Little or no evidence of submerged plants, water turbid, pond banks showing patches where vegetation removed, evidence of provisioning waterfowl.
 - No evidence of fish, but local conditions suggest that they may be present.

- Five ponds located within 1km.
 - Habitat with poor structure (e.g. amenity grassland, improved pasture and arable) that offers limited opportunities (less than 25% of available area) for foraging and shelter.
 - 0% Macrophyte cover.
- 3.1.33. It should be noted that P1 is currently used to house the flamingos that are present within the college campus and is not treated as a wildlife pond. No aquatic habitat within or on the bankside of the habitat was recorded due to the extensive poaching of the flamingos. As such, based on the use of P1 and the poor scoring, great crested newts are deemed likely absent from this pond and not considered further within the assessment.
- 3.1.34. No other ponds were located within 250m of the site boundary. As great crested newts' upper dispersal limit is generally considered to be up to 250 m from a waterbody (though occurrence of greater distances does exist), great crested newts are not anticipated to be present on site (English Nature, 2001).
- 3.1.35. The grassland and woodland habitats in association with Parcel 2 could be of value for common amphibians within their terrestrial phase. The unmanaged woodland habitats provide cover and foraging opportunities. However, the remaining habitats will be of limited value to the intensive management and grazing from associated animals. Common toads are anticipated to utilise these habitats and are known to be present within the Hopwood Woodlands LNR located adjacent to the site, to the west.

Reptiles

- 3.1.36. The data search returned no records of reptile species within the local area.
- 3.1.37. The grassland and woodland habitats in association with Parcel 2 could be of value for local reptile populations. The unmanaged woodland habitats provide cover and foraging opportunities for local reptile populations. Trub Brook is located within the eastern woodland habitat which provides suitable commuting opportunities for grass snake (*Natrix helvetica*).
- 3.1.38. The remaining habitats will be of limited value to the intensive management and grazing from associated animals. Reptiles may be present, but mainly in association with Parcel 2's unmanaged habitats.

Birds

- 3.1.39. The data search returned records of birds within 1km of the site. Species identified includes bullfinch, curlew (*Turdus philomelos*), dunnock (*Prunella modularis*), herring gull (*Turdus philomelos*), house sparrow (*Passer domesticus*), lapwing (*Vanellus Vanellus*), lesser redpoll (*Carduelis Cabaret*), linnet, song thrush (*Turdus philomelos*) and starling (*Sturnus Vulgaris*).
- 3.1.40. The site provides potential breeding habitats for bird in association to the woodland habitat and individual trees throughout the animal management areas. Notable bird species from the data search could utilise these surrounding habitats for breeding and foraging purposes which are associated with woodland habitats.
- 3.1.41. All buildings were inspected for suitability of nesting birds. No field signs of nesting barn or suitability for nesting was identified during the surveys. Historic bird nests were recorded within the buildings associated with Parcel 3, whilst suitable nesting conditions were identified in association of the structure within Parcel 4.

3.1.42. Ground nesting birds are deemed likely absent from the site due to the frequent disturbance within the site will deter ground nesting birds from the campus.

Bats

3.1.43. The data search returned records of bats within the 1km of the site, species includes common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), unidentified pipistrelle (*Pipistrelle sp.*), brown long-eared bat (*Plecotus auritus*), natterers bat (*Myotis nattereri*), daubenton's bat (*Myotis daubentonii*) and noctule bat (*Nyctalus noctula*).

3.1.44. The data search also returned records of bat roosts within 1km of the site. Bat roosts were identified within the buildings on the wider Hopwood Hall Campus:

- One roost located within the Chapel building situated approximately 60m south of the site, in 2008 which consisted of one common pipistrelle emergence (Grid Reference: SD875082). It is understood that there have been no roost further locations identified and no works have been completed on the Chapel. No further detail of the roost was provided.
- A previous maternity roost was located within the campus (Grid Reference: SD 87600 08100) in the Rochdale building, situated approximately 180m south of the site, which was identified as a maternity roost for common pipistrelle in 2010. It is understood based on consultation with magic.gov.uk that a licence for this roost was obtained in 2011 which allowed for the damage and destruction of the breeding and resting place (EPSM2010-2397).
- Located within a large residential dwelling which is currently vacant (Grid Reference: SD87490830), located adjacent to Parcel 2. It is not owned by the college campus but is situated within the centre of the campus grounds. This was identified in 2022 as a satellite roost and day roost for common pipistrelle, brown long-eared bat and unidentified myotis species. Bat droppings, emergences and re-entries have been recorded on the building. It is understood that there have been no licences obtained for this roost location on site.

3.1.45. A review of EPSLs for bats within 5km of the site was completed utilising Magic.gov.uk, as detailed in Table 2.

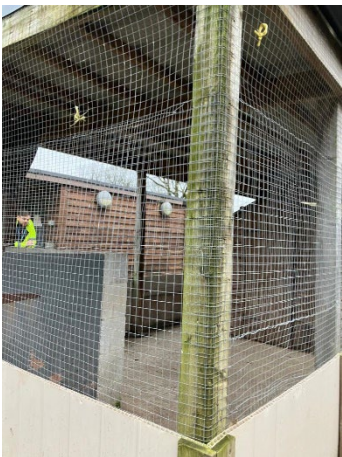
Table 2 – Bat licences within 5km based on consultation with magic.gov.uk, C-PIP = Common Pipistrelle.

Case reference of granted application	Species on the licence*	Distance from site (KM)	Licence Start Date	Licence End Date	Does the Licence				
					impact on a breeding site?	allow damage of breeding site?	allow damage of a resting place?	allow destruction of breeding site?	allow destruction of a resting place?
2015-8774-EPS-MIT	C-PIP	1.4	13/04/2015	01/06/2020	Y	N	N	Y	Y
2016-20262-EPS-MIT	C-PIP	3.4	01/03/2016	28/02/2021	N	N	N	N	Y
EPSM2010-2397	C-PIP	0	10/01/2011	31/10/2013	Y	-	-	Y	Y
2018-36862-EPS-MIT	C-PIP	3.7	01/09/2018	31/10/2019	N	N	N	N	Y
2018-38254-EPS-MIT	C-PIP	4.4	18/12/2018	09/12/2023	Y	N	N	Y	Y
2019-42233-EPS-MIT	C-PIP	4.9	06/09/2019	31/01/2020	N	N	N	N	Y
2019-42984-EPS-MIT	C-PIP	4.4	09/10/2019	30/09/2023	Y	N	N	Y	Y
2019-42233-EPS-MIT-1	C-PIP	4.9	05/02/2020	31/03/2020	N	N	N	N	Y
2020-48009-EPS-MIT	C-PIP	2.5	08/09/2020	30/11/2020	N	N	N	N	Y
2015-16228-EPS-MIT	C-PIP	4.3	12/11/2015	31/12/2015	N	N	N	N	Y
EPSM2012-5119	C-PIP	3.4	13/11/2012	30/11/2013	N	-	-	N	Y
EPSM2010-2617	C-PIP	4.5	10/01/2011	31/12/2012	N	-	-	N	Y
2014-2836-EPS-BDX	C-PIP	3.8	25/08/2014	25/09/2014	Y	Y	N	Y	N

3.1.46. All buildings were subject to a PRA and are detailed in Table 3.

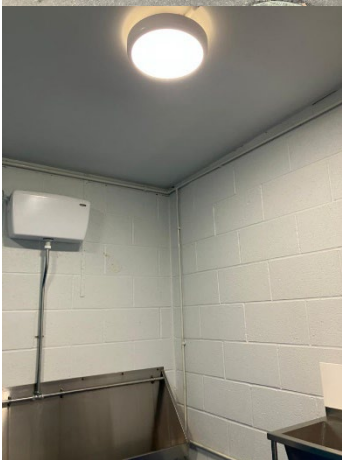
Table 3 – Preliminary Roost Assessment Results

Building Ref	Description	Photograph
Meerkat Enclosure (B1)	The meerkat enclosure consisted of breeze block and red brick walls. No PRFs were identified within the brick work. Glass windows were located on the eastern aspect of the enclosure to allow for public viewing, which were in good condition and sealed. There were large open areas along the top of the brick walls and the corrugated plastic roof. These provide access points internally. The corrugated plastic roof was supported by wooden beams, with no roosting features identified along the plastic roof structure. Wooden board paneling was situated on the southern aspect of the building. The wooden boarding was well sealed with no PRF identified. A small breezeblock room was located on the western aspect of the enclosure, providing an indoor area for the meerkats. This consisted of breeze block walls and a wooden panel roof. This room was well sealed with no access points identified other than the small flap at the bottom of the door to allow internal and external access for the meerkats. There were no access points into the indoor area for bats. There were also no PRFs identified internally that could support roosting bats. Overall, bats can access the meerkat external enclosure however, there were no roosting features identified. The Meerkat house provided 'None' bat roosting potential.	

Empty enclosure (B2)	A wooden enclosure was located west of the meerkat enclosure. This consisted of metal mesh walls with supporting wooden beams and wooden panels on the base of the walls. The roof consisted of corrugated plastic sheets with supporting wooden beams. There were no gaps or crevices identified within the enclosure that could support roosting bat species. A wooden shed was located within this enclosure. However, the enclosure was well sealed and it is anticipated that bats are unable to access the internal aspect. No evidence of bats was identified. The disused enclosure provided ‘None’ bat roosting potential.	
Alpaca Shed (B3)	A wooden shed used as an Alpaca shelter consisted of wood throughout the external walls with a flat plastic roof. All wooden slats and the plastic roof were in good condition with no gaps or crevices identified. An opening was located on the western aspect which allowed the alpacas to access the shed, potentially providing internal access for bats. Internally the walls consisted of breeze blocks which were in good condition with no missing mortar throughout. The ceiling consisted of wooden panels with supporting wooden beams which were in good condition with no gaps identified. There were no PRF's identified within the alpaca shed and no evidence of bats identified. The alpaca shed provided ‘None’ bat roosting potential.	

Cattery (B4)	Internally, the cattery was made up of PVC walls, glass windows and a polycarbonate roof. The building was made up of numerous rooms with an access corridor to house the cats. Small vents were located throughout the building, these were covered creating only small holes to provide air into the cattery. There were no roosting features or access points throughout the building. Externally the cattery was made up of PVC walls with glass windows, these were found to be in similar condition as the internal inspection. There were no gaps or crevices identified throughout that could create a PRF. The cattery was found to have ‘None’ bat roosting potential.	
Dog Kennel and Grooming Room (B5)	Externally, the kennel and grooming room consisted of red brick walls which were in good condition with no gaps or crevices identified. All windows and doors were in good condition and well-sealed. The roof was a flat with limited view, plastic soffit board were located along the top of the building connecting the brick walls to the roof. These were all in good condition and there were no roosting features identified. There were no access points to the building that could be used by roosting bats. Internally the dog kennel and grooming room consisted of PVC walls with a tile ceiling. All walls were well sealed internally with no PRF's identified, there were no access points that could be used by bats. The Dog Kennel and Grooming Room were found to provide ‘None’ bat roosting potential.	

Office Building (B6)	The office building consisted of red brick walls on all aspects that were in good condition. Two service vents were located on the southwestern aspect of the dwelling approximately 2 – 3 m high. Two of the vents were found to be well sealed and did not lead into a cavity. An air brick was also on this aspect was not sealed behind and allowed access into a space within the wall, it is anticipated that this could lead to a cavity. A further five air bricks were located on the northeastern aspect, these were located along the top of the building, and it remains unknown whether they lead into a cavity. However, it is anticipated that these bricks could also lead to a cavity wall. These vents along the building were identified as PRF's/potential access point to a cavity wall. A wooden extension was located on the northeastern aspect this consisted of glass windows and doors with supporting wooden frames. This was found to be in good condition with no gaps identified that could support roosting bats. No loft space was present. The roof was constructed of concrete, with dropped ceilings for services. No PRFs were identified internally. The Office Building was found to provide 'Moderate' bat roosting potential.	  
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Wooden Toilet Block (B7)	A wooden toilet block was located adjacent to the office buildings. Externally these consisted of wooden slats which were in very good condition with no gaps identified throughout the walls of the toilet block. The toilet block has a flat plastic roof with limited view. However, the internal inspection showed that this connects directly to the internal sealed roof and there was no loft space. Internally, the toilets consisted of breezeblock walls which were all sealed. There were no gaps or crevices identified within either toilet block which could provide roosting features. There were no access points identified, it is anticipated that bats are not able to access the internal aspect of the toilets. The toilets were found to provide 'None' bat roosting potential.	 
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Snowy Owls (B8)	The snowy owl enclosure was made up of wooden and mesh walls, which were all well sealed to ensure the owls could not escape to exhibit. There were no gaps identified and no access points that could allow for roosting bats. The roof of the enclosure was almost covered entirely in moss with only one small area in the corner free of moss. It is anticipated that this has been a recent repair to the roof to prevent the owls escaping. Overall, the building was in good condition and there were no PRFs identified that could support local bats. The snowy owl enclosure was found to have 'None' bat roosting potential.	
Animal Shelters (unnumbered)	Small animal shelters were located throughout the farm area to provide cover for rabbits, guinea pigs and chickens. These were all made of wood with a plastic covered roof. These were all low to the ground to allow for the small animals to utilize these areas. They were not inspected internally to minimize stress to the animals. The wooden shelters did not provide suitable features that could support roosting bats and all woodwork was found to be well sealed. It is anticipated that the presence of domesticated species will deter roosting bats. It was also noted that the shelters were only 1-2m tall and therefore not attractive for local bats. The animal shelters were found to provide 'None' bat roosting potential.	

Quarantine Area (9)	The large quarantine building was made up of wooden slat walls with a corrugated metal roof. A large metal shutter door was located on the southern aspect of the dwelling, with one gap located within the doorframe that may provide a potential access point. A wooden porch was located adjacent to the shutter door to provide internal access. This was also well sealed, not providing any access into the building for local bats. The top of the wooden slats was covered by metal flashing which connected to corrugated metal roof. The design of these areas meant that small gaps were located underneath the metal flashing that may provide a PRF. These features were identified as sub optimal PRFs due to being constructed of metal which will fluctuate in temperature and the pockets not leading to any further cavities. Internally the building consisted of a large barn with an exposed corrugated metal roof with supporting wooden beams. The roof was well sealed with no gaps or crevices identified. Four small breeze block rooms were located within the building which are anticipated to be used for species isolation. All breeze block walls were well sealed throughout the building and there were no features that could support roosting bats. Rat droppings were identified within the building during the inspection however no bat droppings or feeding remains were identified. The building was found to provide ‘Low’ bat roosting potential.	
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Locker Room and disused enclosure (B10)	B10 consisted of a large building which was covered in wooden slats with a corrugated metal roof. The wooden slat walls included wooden soffit boards around the top of the building. The designs of these features created slight gaps throughout the walls of the building, these were identified as a PRF. These consisted throughout the length of all walls of the building. Internally the building consisted of two separate rooms which were made up of the same materials. The walls and ceilings all consisted of plastic and were all well sealed throughout. There were no gaps in either of the two rooms which would allow bats to enter the building. There were no PRF's identified internally as well as no bat droppings or feeding remains throughout. The locker room and disused enclosure building was found to provide 'Low' bat roosting potential.	 
Polytunnel (B11)	B11 was open on all aspects and is primarily used to shelter storage items underneath. It consisted of a plastic roof with a metal support frame. The whole tunnel was open to all external weather conditions and there were no gaps or crevice's that could create PRFs. The tunnel was found to provide 'None' bat roosting potential.	

PRA Summary of Buildings

- 3.1.47. The office building (B6) was found to consist of numerous roosting features in relation to the air bricks throughout the building. As roosting bats are known to be present within the surrounding area, it increases the probability of bats utilising these features. B6 was found to provide **'Moderate Bat Roosting Potential'**.
- 3.1.48. The quarantine building (B9) was found to consist of small gaps along the top of the building located underneath the metal flashing. This created small pockets within the wood and metal which could be used by local bats. This feature was deemed suboptimal as the metal is anticipated to fluctuate in

temperature and they did not lead to any further cavities. As roosting bats are known to be present within the surrounding area, it increases probability of bats utilising these features, B10 was found to provide **“Low Bat Roosting Potential”**.

- 3.1.49. The locker room and disused enclosure (B11) consisted of small gaps along the top of the external wooden walls which could be used by local bat populations. This feature was deemed sub-optimal as it did not lead to any further cavities. However, roosting bats are known to be present within the wider area, B10 was found to provide **“Low Bat Roosting Potential”**.
- 3.1.50. All remaining buildings on campus were found to provide **“None Bat Roosting Potential”**, they did not provide features that could support roosting bats.

PRA of Trees

- 3.1.51. The majority of trees were subject to PRA, however not all trees associated with the broadleaved woodland were inspected. Please refer to Table 4 for the summary of trees identified as having bat roosting potential. Additional trees may be located within the woodland.

Tree Ref	Description	Photograph
Tree A	SD 87473 08362, located within G4 as referenced within the Tree Constraints Plan. A mature sycamore with a large split within the main stem from ground level to approximately 7m in height, situated on the northern aspect (goat enclosure). Tree A provided ‘Moderate’ bat roosting potential.	
Tree B	SD 87492 08333, T2 as referenced within the Tree Constraints Plan. A mature common beech with large pruning would approximately 10-15m from ground level on southern aspect. Additional pruning wounds identified, all of which may lead to a cavity within the main stems. Tree B provided ‘Moderate’ bat roosting potential.	

Tree C	SD 87503 08358, located within G1 as referenced within the Tree Constraints Plan. Multiple pruning wounds and splits in stem and branches. Tree C provided 'Moderate' bat roosting potential.	
Tree D	SD 87503 08358, located within G1 as referenced within the Tree Constraints Plan. Large cavity within the main stem, with large wound approximately 2m from ground level on the northern aspect. Historic bird nest at base but appeared to lead upwards to a cavity. Tree D provided 'Moderate' bat roosting potential.	

Habitat Value

- 3.1.52. The majority of the site is considered to be of limited value due to comprising intensively managed or grazed habitats. However, the parcels are located adjacent or in proximity to extensive woodland habitat, in association with designated sites. Whilst the broadleaved woodland and individual trees are connected to extensive woodland in the wider area. Overall, the site is anticipated to provide suitable foraging and commuting value, with the highest valued habitat relating to the mature trees.
- 3.1.53. Overall, the site and surrounding habitats have the potential to support roosting, foraging and commuting bats.

Badger

- 3.1.54. The data search returned records of badger and an active badger sett within 1km of the site boundary, their location is to remain confidential.
- 3.1.55. There were no signs of badger presence recorded within the site during the survey. The connecting woodland habitat provides suitable conditions for sett building for local badger populations. It is anticipated that due to the setts within the local area, badgers will use the site for commuting and foraging purposes.

Other Terrestrial Mammals

- 3.1.56. The data search returned records of ten European hedgehog (*Erinaceus europaeus*) within the 1km of the site boundary. Given the habitats present within the site including grassland and woodland, it is anticipated that hedgehog could be present within the site.

Non-Native Invasive Species

- 3.1.57. The data search returned no records of non-native invasive species within 1km of the site boundary.
- 3.1.58. Rhododendron were identified within the broadleaved woodland habitat.

Species Discounted from Assessment

- 3.1.59. Water vole, otter and white-clawed crayfish have been discounted from assessment. Trub Brook runs within the woodland habitats, situated approximately 40m east of the site and may support these species. The aquatic habitat is deemed a sufficient distance away from the development and nearby aquatic habitats.
- 3.1.60. Hazel Dormouse (*Muscardinus avellanarius*) mainly occur in southern counties, especially in Devon, Somerset, Sussex and Kent. There are few recorded localities north of the Midlands, though they are present in parts of the Lake District and in scattered Welsh localities (Matthews et al, 2018). There are no records of the species within the local area, the surrounding woodland could provide suitable habitat however the college campus does not provide habitat to support this species.
- 3.1.61. Red squirrel has been discounted from the assessment. Red squirrel populations are limited to small areas of northern England and no previous records returned in the data search. It is anticipated that high abundances of grey squirrel are present within this region (Shuttleworth/RSST n.d.). This species will displace red squirrel through competition as well as cause increased red squirrel mortality through the spread of squirrel pox (The Mammal Society, 2020).

4. Mitigation Recommendations

Designated Sites

- 4.1.1. The site is located within the impact risk zone for the Rochdale Canal SSSI and SAC which is located 1km east from the site (at nearest point). The Rochdale Canal contains important habitats for submerged aquatic plants and emergent vegetation. The proposed works are not anticipated to directly impact the designated site due to the works relating to the footprint of existing buildings or well managed habitats. Whilst the works relate to commercial use and will not cause an increase of visitors to the site. As such, no further assessments are deemed necessary in relation to this designated site.
- 4.1.2. There are numerous LNRs and SBIs within the surrounding area of the site based on consultation with magic.gov.uk and the local data search. The closest of which related to Hopwood Woodlands LNR site located adjacent to the site. The proposed works mainly relate to the footprint of existing buildings or well managed habitats.
- 4.1.3. It is recommended that a minimum 5-10m buffer is to be maintained between the LNR site and the proposed development throughout the construction and operational phase in order to reduce impacts during this phase. The buffer should be appropriately signed and fenced, and all contractors inducted as to their working limits. If any works are required within the buffer, they should be undertaken under the supervision of a suitably experienced ecologist (and dependent of further species surveys).

- 4.1.4. It is recommended that a detailed Construction and Environment Management Plan (CEMP) specific to the proposed development is created (and adhered to throughout the course of construction works) to avoid, minimise and mitigate for negative impacts resulting from construction practices on all habitats surrounding the site.
- 4.1.5. This plan will detail measures to avoid, minimise or mitigate any potential negative effects caused by construction practices on the environment on and surrounding the site including:
- The control of run-off from areas of arisings to prevent any pollutants/contaminants entering nearby waterbodies.
 - Appropriate measures to suppress dust during hot, dry and/or windy conditions.
 - Excavations should be sealed overnight or should have at least one shallow-sloping side to allow any animals that may fall in to escape.
 - An ecologist should be contacted for advice should any protected species be discovered during construction.

Priority Habitats

Deciduous Woodland

- 4.1.6. The extent of proposed works mainly relates to existing building footprints and well managed habitats; however, the extent of habitat loss is unknown and whether the Priority habitats will be impacted. It is recommended that the development aims to retain this habitat and maintain its quality. The protection measures are to be detailed within the Arboricultural Impact Assessment (AIA) to be produced by Seed Arboricultural Ltd.
- 4.1.7. Generally, the protection measures of retained trees will be through used of temporary protective demarcation fencing to protect the trees and shrubs. The fencing must extend outside the canopy of the retained trees and must remain in position until all plots have been developed to ensure protection is provided throughout the construction phase. Please refer to the AIA report for the tree protective fencing specification.

Species

Amphibians

- 4.1.8. Great crested newts were deemed unlikely to be present on site and no further consideration for the species is required. However, there is a possibility that common amphibians such as common toad may be present on site.
- 4.1.9. It is recommended that consideration of amphibian presence during habitat removal and throughout the construction phase is completed. Any debris is to be cleared by hand, and any common amphibians located moved carefully, by hand, to outside of the impacted area.

Reptiles

- 4.1.10. The proposed development is to be mainly relates to existing building footprints and well managed habitats. Due to the potential presence of reptiles, it is recommended that Reasonable Avoidance Measures (RAMs) are es to minimise the likelihood of killing, injuring or disturbing any reptiles present on site during the construction phase.

- 4.1.11. The precautionary destructive search work will be undertaken during the summer at a time of year when reptiles are active. The ecologist will be present during the strimming works. Any reptiles found during the destructive search will be relocated to the nearby woodland habitats.
- 4.1.12. The RAMs can be adopted through the recommended CEMP, and should follow the following measures:
- An experienced Ecological Clerk of Works (ECoW) shall be appointed to ensure RAM's are enforced.
 - A walkover of the area should be undertaken by the ECoW to determine any change in status of the habitats/structures on site prior to the initiation of any works.
 - A toolbox talk by the appointed ECoW will be given to the site manager and all contractors working on site with respect to the surrounding habitats and potential for protected/notable species. A copy of species factsheets relating to reptiles will be provided for display within the site office.
 - Suitable vegetation is to be strimmed under ECoW to approximately 15cm in height in a northern to southern direction. It is to be checked by the ECoW following strimming to identify individuals. If discovered, they will be removed from the working area and covered. Once the areas are deemed reptile free, they are to be strimmed to ground level and maintained at this length for the remaining works.
 - Any excavations will be backfilled on the same day as excavation or checked by the ECoW immediately prior to backfilling. If not possible, a ramp, will be provided in all excavations that cannot be backfilled on the same day or alternatively, all excavations should be well-covered with plywood.
 - No piles of loose construction materials are to be created during works – all material will be kept on hardstanding, stored on pallets, removed immediately from the site, or checked by an ECoW prior to being removed.
 - In the event reptiles are discovered, works will halt immediately and the ECoW will be contacted for advice. Contractors are not to handle reptiles unless informed to do so by the ECoW.
- 4.1.13. The precautionary destructive search work will be undertaken during the summer, a time of year when reptiles are active. The ecologist will be present during the strimming works. Any reptiles found during the destructive search will be relocated to the adjacent fields which are not to be impacted during the proposed works.

Breeding Birds

- 4.1.14. Nesting birds are anticipated to be present within the site. As such, any vegetation removal should be undertaken with consideration for nesting birds.
- 4.1.15. Any vegetation removal should be undertaken outside of the breeding bird season (March to September, inclusive). If this is not possible, a suitably qualified ecologist should undertake a nesting bird check no more than 48 hours prior to removal. If nesting activity is observed, the nest(s) should be left in situ until the young have fledged. A suitable buffer will be maintained and determined by the ecologist.
- 4.1.16. It is also recommended that a nesting bird check, as detailed under paragraph 4.1.12 to be carried out should vegetation removal be completed during the nesting bird season (March to August, inclusive).
- 4.1.17. It is recommended that the habitats are to be retained where feasibly possible to maintain suitable breeding bird habitats onsite.

Bats

- 4.1.18. B6 was assessed as providing Moderate Bat Roosting Potential. This is defined as:

'A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but likely to support a roost of high conservation status. (Collins, 2023).'

- 4.1.19. Further surveys were to be recommended however, upon review of the proposals at the site the works consist of the infill of three windows on the ground floor of the southern aspect of the building. One door on the southwestern corner is to be removed and replaced with a window.
- 4.1.20. A single-story metal extension is then to be added onto the southern aspect of the site, attached to B6. It is noted from the proposals that all works are to be completed a sufficient distance from the potential roosting features such as the vents are located on the eastern and western aspect of the building. Therefore, Precautionary Working Methods (PWM's) have been recommended throughout the course of the proposed works. The PWM's listed in point 4.1.25 – 4.1.26 are to be followed during the works at B6.
- 4.1.21. Any tools that are to be used on site during course of the works on B6 and the associated extension should be consulted with a Licenced Bat Ecologist. This will be completed to confirm that the impact of the machinery will not cause a risk of disturbing potential roosting bats.
- 4.1.22. If any further works are to be completed on B6 which have not been stated above, consultation with a Licenced Bat Ecologist will be completed to confirm whether further nocturnal bat surveys are required following Best Practise Guidelines (Collins 2023).
- 4.1.23. Once the selected features have been removed under supervision, works can proceed in the absence of the licenced ecologist, at their discretion. If a bat is discovered at any unsupervised time, work must cease immediately, and a licenced bat handler must be called for advice. Builders and contractors are explicitly forbidden from handling bats except in the case of finding a trapped or injured bat. In which case the bat may be moved into a safe and secure place (e.g. a box) and the licenced ecologist must be contacted immediately.
- 4.1.24. B10 and B11 was assessed as providing Low Bat Roosting Potential. This is defined as:
- 'A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough shelter, protection, appropriate conditions and /or suitable habitat to be used on a regular basis or by larger numbers of bats.' (Collins, 2023).'*
- 4.1.25. As **B9 and B10** consisted of suboptimal features to support local bats it isn't possible to confirm the absence of roosting bats with full confidence and the causation of an offence to be committed by the way of disturbance or damage to bats or their roosts under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (As amended).
- 4.1.26. The Bat Mitigation Guidelines (Reason and Wray, 2023) details that a non-licensable approach to works can be adopted in cases of buildings assessed as maximum 'low potential' with no evidence of use, but where the presence of a bat (or very low numbers of bats) cannot be ruled out. As such, it is considered that these measures can be adopted for this development on B11.
- 4.1.27. A non-licensable approach includes the implementation of Precautionary Working Methods (PWMs) on B10 and B11 as detailed:

- All contractors working on the site will be briefed with a Toolbox Talk by the licenced ecologist, on the legal protection afforded to bats and their roosts, and on how to proceed if a bat is discovered during the course of the works as well as background on why bats are legally protected.
 - The licenced ecologist will attend site on the day of the scheduled works to undertake a search for bats in relation to the PRFs identified during the PRA (2023) prior to the works commencing.
 - If any bats and/or field signs of roosting bats are located under the external features such as the ridge tiles, the stated features will be carefully put back in place, all works will cease.
 - If there are signs of a bat roost present onsite or a bat is identified onsite, then a Bat European Protected Species Licence (EPSL) will be required from Natural England before any works can continue to the buildings. This licence can only be applied for once planning consent has been given and a required bat emergence survey has been undertaken.
 - Soft stripping of external features should not be undertaken in cold or rainy conditions or in high winds, this includes autumn and winter months as bats will be hibernating at this time.
 - Although deemed highly unlikely, if a bat was found and needed to be rescued then this will be done by the licenced bat ecologist only always following best practise guidelines by Natural England. The ecologist will have equipment on them so a bat can be rescued and retained temporarily in a draw bag before releasing or if it needs to be assessed by a registered bat carer.
- 4.1.28. Once the selected features have been removed under supervision, works can proceed in the absence of the licenced ecologist, at their discretion. If a bat is discovered at any unsupervised time, work must cease immediately, and a licenced bat handler must be called for advice. Builders and contractors are explicitly forbidden from handling bats except in the case of finding a trapped or injured bat. In which case the bat may be moved into a safe and secure place (e.g. a box) and the licenced ecologist must be contacted immediately.
- 4.1.29. Tree A to D were identified as having **Moderate** bat roosting potential, whilst additional trees within the broadleaved woodland may also have bat roosting potential. The extent of tree loss is unknown until the AIA has been produced. It is recommended that the AIA is reviewed once produced to identify what trees require removal. And to assess whether further surveys are required in relation to the trees with bat roosting potential and/or updated PRA of any trees to be lost in association with the broadleaved woodland.
- 4.1.30. The site provides value for local bat populations with known roosts present within the wider Hopwood Hall Campus and the site provides suitable foraging and commuting habitats. As stated, the development should seek to retain the habitats surrounding the building as feasibly possible to maintain the sites value for bat activity. If habitat loss is required, proposed landscaping should include locally native and species rich habitats to compensate for the loss.
- 4.1.31. Slow-flying species such as brown long-eared, which are known to be in the local area, are sensitive to lighting and may be impacted by the proposed development, should no mitigation for lighting be considered.
- 4.1.32. The following measures should be implemented in the final produced lighting strategy, following guidance outlined in the Institute for Lighting Engineers document “Guidance for the Reduction of Obstructive Lighting” (2005) and BCT’s “Bats and Artificial Lighting at Night” (2023):
- Keep site lighting to minimum levels.
 - LED lighting with a warm white light to be used over cool white light (>2700Kelvin).

- Lighting should feature peak wavelengths greater than 550nm.
- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- Avoid illuminating habitats of value (i.e. surrounding woodland and bat boxes).
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use.

Badgers

- 4.1.33. There were no badger setts identified during the surrounding areas of the site. It is anticipated that they will be present within the connecting woodland and may use the site for commuting and foraging purposes. The following PWMs will be adhered to during the construction phase to ensure no badgers are impacted by the proposed development (Badger Trust, 2023):
- A pre-commencement of work badger survey should be conducted by a suitably qualified ecologist to ensure the current badger situation is known and that the recommendations are correct.
 - All site personnel should be fully briefed concerning the method statement, the presence of badgers, the mitigation measures to be followed, the relevant legislation, the penalties imposed and who to contact should they need to.
 - Ensure excavations or trenches left overnight are covered or have an escape route such as a shallow gradient at one or both ends.
 - Ensure excavations or trenches are inspected each morning and evening to ensure no badgers have become trapped.
 - Open pipework with a diameter of more than 120mm should be properly covered or capped at the end of the working day to prevent badgers from entering and becoming trapped.
 - During the work, the storage of any chemicals should be contained in such a way that they cannot be accessed or knocked over by any roaming badgers.
 - The storage of topsoil or other “soft” building materials within the site should be given careful consideration. Badgers will readily adopt such mounds and dig setts which would then be afforded the same protection as established setts. To avoid the adoption of such mounds, they should be subject to daily inspections before work commences or alternative measures put in place, such as being fenced off for higher-risk areas.
 - Litter tools and potentially dangerous materials on site should be cleared at the end of the working day. Care should be taken that there are no sharp metal objects or pointed protrusions on the ground which could seriously injure a badger due to their poor eyesight.
 - Ensure no dogs are brought to the work site.
 - Fires should be lit only in secure compounds away from areas of badger activity and should be fully extinguished at the end of the working day.
- 4.1.34. Adherence to these measures should be confirmed to planners at regular intervals by the project ecologist.

Terrestrial Mammals

- 4.1.35. European Hedgehog are anticipated to be present within the site and are a Species of Principal Importance. During habitat removal, any areas of dense vegetation should first be carefully hand searched to check for the species. If identified during management, should be relocated carefully by hand to a location away from the working area. If any injured either species are located, they should be taken to a local vet.

Non-Native Invasive Species

- 4.1.36. Rhododendron was identified within the site. As the survey was completed in January, it is possible specimens may have been missed. It is recommended that an updated walkover is completed by a competent non-native invasive species contractor and the production of a Method Statement to include measures for the eradication of non-native invasive species is completed.

5. Conclusion

Conclusion

- 5.1.1. The site consisted of mainly of well managed and heavily grazed habitats with limited ecological value, with the woodland and individual trees anticipated to be of greatest value. Building 6 was found to have potential to support roosting bats, whilst an updated inspection of the AIA should be carried out to assess the extent of habitat loss.
- 5.1.2. Specific enhancement recommendations for the site include the following:
- Bat and bird boxes could be placed on the retained trees. A plan to show the locations of these boxes and the specifications should be produced by a suitably qualified ecologist once the layout is finalised.

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Appendix 1 – Site Photographs

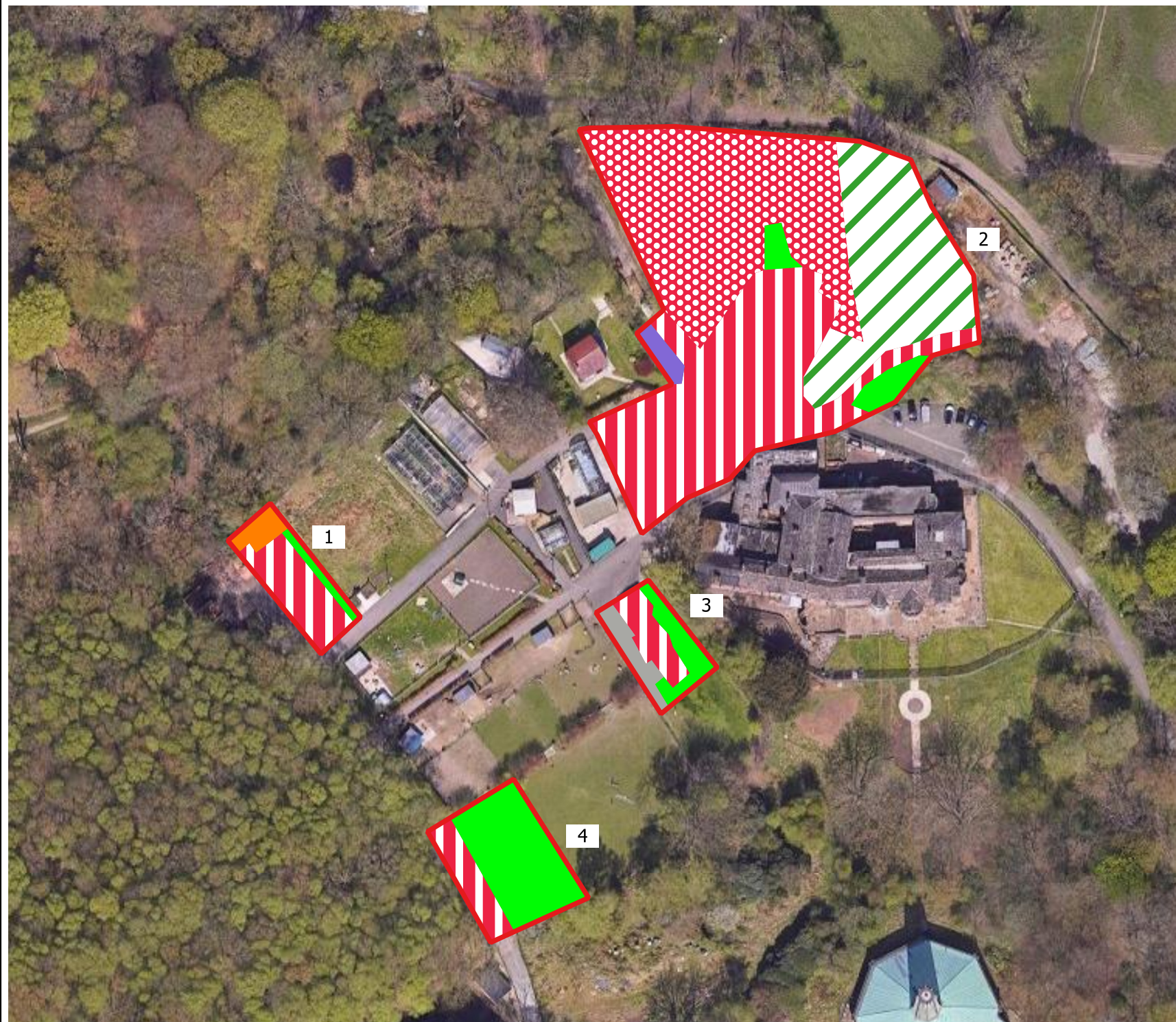
Feature	Photograph	
Parcel 1 – modified grassland		
Parcel 1 – tall forbs		
Parcel 1 – developed land; sealed surface		
Parcel 2 – artificial unvegetated; unsealed surface and individual trees		
Parcel 2 – Modified grassland		

Parcel 2 – broadleaved woodland		
Parcel 2 – introduced shrub		
Parcel 2 – developed land; sealed surface		
Parcel 3 – developed land; sealed surface		
Parcel 3 – bare ground		
Parcel 3 – modified grassland		

Parcel 4 – modified grassland			
Parcel 4 – native hedgerow			
P1			

Appendix 2 – Habitat Map





Hopwood Hall College - Animal
Management
Date: 17.01.24

-  Artificial Unvegetated,
Unsealed Surface
-  Tall forbs
-  Introduced shrub
-  Broadleaved Woodland
-  Modified grassland
-  Bareground
-  Developed Land,
Sealed Surface
-  Red line

Scale: 1:2000

Drawn By: CW

Checked By: KB

Approved By: KB



Client: Seven Architecture

Site: Hopwood Hall College, Rochdale Road,
Middleton, Manchester, M24 6XH

Project Number: 1697A | Rev: 1.0

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