



Preliminary Ecological Appraisal Report

Greenbrow Social Club, Wythenshawe

Reference:80-980-R2-1

Date: August 2023



PRELIMINARY ECOLOGICAL APPRAISAL REPORT

Greenbrow Social Club
Wythenshawe

Prepared for:
Wythenshawe Community Housing Group

Report Ref: 80-980-R2-1
Date Issued: 04/08/2023

E3P

Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

+ 44 (0) 161 707 9612
<https://e3p.co.uk/>

Registered in England
CRN: 08725262

QUALITY ASSURANCE

PROJECT NUMBER	80-980		
VERSION	Version 1		
REMARKS	Final		
DATE	August 2023		
PREPARED BY	C. Bass		
QUALIFICATIONS	BSc (Hons), QCIEEM, Consultant Ecologist		
CHECKED BY	L. Thomas		
QUALIFICATIONS	BSc (Hons), QCIEEM, Project Manager - Ecology		
AUTHORISED BY	C. Barlow		
QUALIFICATIONS	BSc (Hons), MSc, MEnvSc, CEnv, MCIEEM, Principal Ecologist		



EXECUTIVE SUMMARY

Site Address	Greenbrow Social Club, Greenbrow Road, Wythenshawe, M23 2TB
Coordinates	E 380839, N 387182
Site Area	Approximately 0.3 ha
Current Site Use and Adjacent Site Use	The site comprised the former Greenbrow Social Club, with associated hardstanding and amenity grassland. Residential housing surrounds the site on all aspects. The M56 motorway is located approximately 530 m south of the site at its closest point, beyond which lies Manchester Airport.
Designated Sites	The site is located within the impact risk zone of the following Sites of Special Scientific Interest (SSSIs): ✿ Cotteril Clough SSSI, located approximately 2.7 km south of the site boundary. ✿ Rostherne Mere SSSI, Ramsar and National Nature Reserve (NNR), located approximately 6.3 km south-west of the site. Due to the small scale and nature of the works and the distance between the site and the SSSIs, no impacts on any designated site are anticipated as a result of the proposed development. Furthermore, consultation with MAGIC (accessed August 2023) identified that the proposed development does not meet the criteria that would require further consultation with Natural England to proceed. Additionally, due to the nature of the works and the distance between the proposed site and the Ramsar site, a Habitat Regulations Assessment (HRA) screening assessment will not be required to assess whether the proposed development will have any 'likely significant effects' on the designated site. The site is also located within 1 km of Ponds at Davenport Green Site of Biological Importance (SBI), which is located approximately 460 m west of the site. Due to the SBI's lack of connectivity to the site as well as the small scale of the proposed works, no detrimental impacts upon the SBI are anticipated as a result of the development. Furthermore, due to the small scale of the development, a significant increase in visitors to the SBI is not anticipated.
Survey Results	The site was found to comprise a building, hardstanding, ephemeral/short perennial, dense scrub, poor semi-improved grassland, scattered trees, and hedgerow. The site was found to have the following potential ecological constraints: ✿ Potential presence of common amphibians within the dense scrub, poor semi-improved grassland, hedgerow and brash piles. ✿ Foraging potential for bats along the hedgerow, dense scrub, and scattered trees. ✿ Building 1 (B1) was assessed as having High bat roosting potential.



	✿ Potential presence of badger within the local area and on site. ✿ Potential presence of hedgehog within the dense scrub, poor semi-improved grassland, hedgerow, base of scattered trees and brash piles. ✿ Suitable nesting bird habitat within the dense scrub, scattered trees, hedgerow and building.
Conclusions	Three nocturnal bat surveys will be required on B1 between May and September (inclusive), with at least two between May and August (inclusive). The following mitigation is recommended: ✿ Common amphibians are to be removed by hand from the working area during the clearance phase. ✿ Lighting strategy for bats. ✿ Precautionary Working Methods for badger. ✿ Updated site walkover for badger prior to works. ✿ Vegetation should be retained where possible. If any vegetation requires removal, it should be trimmed to 50 cm and checked for hedgehog prior to clearance to ground level. The brash piles should be demolished by hand to ensure no sheltering hedgehogs are impacted by the works. If trees are removed, their bases should be checked, prior to removal, for sheltering hedgehogs. It is recommended that vegetation clearance takes place outside of December-March to avoid impacting hibernating hedgehogs. ✿ Vegetation should be retained where possible. If any vegetation requires removal, it should be removed outside of the breeding bird season (March to September inclusive). Additionally, demolition of the building should be undertaken outside of nesting bird season. If this is not possible, a nesting bird check should be undertaken by a suitably qualified ecologist up to 24 hrs before works commence. If a nest, or nest in construction, is located, then a stand-off distance should be maintained until the young have fledged. A gain in biodiversity will be required on-site. If this cannot be achieved on-site, a conservation offset payment, or off-site compensation may be required.



Table of Contents

EXECUTIVE SUMMARY	2
1. INTRODUCTION	6
1.1. Background	6
1.2. Proposed Development	6
1.3. Site Location	6
1.4. Objectives	7
2. METHODOLOGY	8
2.1. Desktop Study	8
2.2. Vegetation and Habitats	8
2.3. Fauna	9
2.4. Preliminary Roost Assessment	9
2.5. Survey Limitations	10
3. SURVEY RESULTS	11
3.1. Site Context	11
3.2. Designated Sites	11
3.3. Habitats	12
3.3.1. Building	12
3.3.2. Hardstanding	13
3.3.3. Neutral Semi-Improved Grassland	14
3.3.4. Ephemeral/Short Perennial	14
3.3.5. Dense Scrub	15
3.3.6. Scattered Trees	16
3.3.7. Hedgerow	16
3.4. Protected and Notable Species	17
3.4.1. Amphibians	17
3.4.2. Bats	18
3.4.3. Badgers	21
3.4.4. Otter and Water Vole	21
3.4.5. Other Terrestrial Mammals	21
3.4.6. Nesting Birds	21
3.4.7. Reptiles	21
3.4.8. Invertebrates	22
3.5. Invasive Plant Species	22
4. ECOLOGICAL CONSTRAINTS AND MITIGATION	23
4.1. Development Proposals	23
4.2. Habitats	23
4.2.1. Hedgerow and Scattered Trees	23
4.3. Protected and Notable Species	24
4.3.1. Amphibians	24
4.3.2. Breeding Birds	24
4.3.3. Bats	24
4.3.4. Badgers	25
4.3.5. Hedgehogs	25
5. FURTHER SURVEYS	27
5.1. Bats	27
5.2. Table of Further Surveys	27



6. BIODIVERSITY NET GAIN	28
7. REFERENCES	29
APPENDIX I PHASE 1 HABITAT PLAN.....	30
APPENDIX II WATERBODY PLAN.....	31



1. INTRODUCTION

1.1. BACKGROUND

E3P were commissioned by Wythenshawe Community Housing Group to undertake a Preliminary Ecological Appraisal at Greenbrow Social Club, Wythenshawe, hereafter referred to as “the site”.

This report has been prepared by Ciara Bass BSc (Hons), Consultant Ecologist at E3P. Ciara holds a qualifying CIEEM membership and has experience undertaking Preliminary Ecological Appraisals, protected species surveys and ecological mitigation for a wide variety of projects across the UK.

1.2. PROPOSED DEVELOPMENT

Development proposals comprise the demolition of the existing structures on-site to facilitate the development of a number of residential units with associated gardens, landscaping and hardstanding.

1.3. SITE LOCATION

The site is located in the predominantly residential area of Wythenshawe, Greater Manchester. The site is accessed via Greenbrow Road, which defined the eastern boundary of the site. Wythenshawe Hospital is located approximately 320 m north of the site. The M56 motorway is located approximately 530 m south of the site at its closest point, beyond which lies Manchester Airport. Please refer to Figure 1.1 for the approximate site location.

FIGURE 1.1 APPROXIMATE SITE LOCATION



1.4. OBJECTIVES

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 species and habitats.
-  Recommend any further surveys or mitigation that may be required.

The Preliminary Ecological Appraisal comprises a desk study and site walkover. This survey has been completed as a baseline assessment of the site, and as such please see the end of the report for further surveys and mitigation proposed.



2. METHODOLOGY

2.1. DESKTOP STUDY

The following sources of information and ecological records were consulted:

- ✚ MAGIC – A web-based interactive mapping system, on which geographic information regarding key environmental schemes and designations are collated, including details of statutory conservation sites, consulted in August 2023.
- ✚ Aerial mapping and ordinance survey maps.
- ✚ Local data records, including provided by the Greater Manchester Ecology Unit (GMEU) on 5th July 2023.

A 1 km search area was utilised for the data search, with this being deemed an appropriate distance for the zone of influence of the site, due to the size of the site and the built-up urban nature of the surrounding habitat, which comprises residential housing.

The data search included a request for details of protected and notable species of flora and fauna within 1 km of the central grid reference of the site. In addition, a request was made for any non-statutory designated sites within 1 km of the site boundary.

Please note that a lack of up-to-date records does not confirm absence of a species from the area. Lack of records may simply be a result of a lack of protected species surveys being undertaken within the local area.

2.2. VEGETATION AND HABITATS

A Preliminary Ecological Appraisal of the proposed development site was undertaken by Ciara Bass on 04th July 2023. The weather was mild, dry and sunny.

The walkover survey was undertaken to the standard methodology as detailed by the JNCC Handbook for Phase 1 Habitat Survey, 2010. The assessment follows the methodology as per "Guidelines for Preliminary Ecological Appraisal" (CIEEM, 2017).

A vegetation and habitat plan has been produced for the proposed development site and the immediate surrounding area (please refer to Appendix I). The mapping is based on the Joint Nature Conservation Committee Phase I Habitat Survey Methodology (JNCC, 2010).

Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the Wildlife and Countryside Act 1981 (as amended) and species which are indicators of important and uncommon plant communities. All plant nomenclature follows Stace (2019).

Searches were carried out for the presence of invasive species, including those listed on the revised (April 2010) Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) including but not limited to, Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*).



2.3. FAUNA

A thorough search of the site for signs of protected species of fauna was undertaken during the site walkover. These searches considered the following:

- ✿ Suitability of any ponds to support notable amphibians, and the suitability of the site's terrestrial habitats to support amphibians.
- ✿ Suitability of the site to support reptiles by way of habitat structure and refuge piles, as well as links to the wider landscape.
- ✿ Signs of badgers (*Meles meles*), by way of setts, mammal paths, foraging signs or latrines to indicate usage of the site by the species.
- ✿ Search of any watercourses for signs or suitability for water vole (*Arvicola amphibius*) and otter (*Lutra lutra*) by way of burrows, resting places, holts and foraging signs.
- ✿ Suitability of the site to support roosting, foraging and commuting bats.
- ✿ Suitability of the site to support notable bird species.
- ✿ Suitability of the site to support notable invertebrates.
- ✿ Search of the site for any invasive species.

2.4. PRELIMINARY ROOST ASSESSMENT

The Preliminary Roost Assessment (PRA) was undertaken by Ciara Bass on 04th July 2023.

The survey involved undertaking a systematic search of the trees and structures, searching for signs of bats, or spaces where bats would be able to access. The methodology followed that described in Bat Surveys for Professional Ecologists, 3rd Edition (Collins, 2016).

The trees and structures were categorised for their bat roosting potential as described in Table 2.1 in accordance with Collins (2016).

TABLE 2.1 BAT ROOSTING POTENTIAL CLASSIFICATION OF TREES AND STRUCTURES

CATEGORY	DESCRIPTION
NEGLIGIBLE	A tree or structure with no roosting features present or of an age/species that would not support roosting bats.
LOW	A tree or structure with one or more potential roost site. However, the potential roost sites do not provide suitability for large numbers of bats (i.e. for maternity or hibernation) and would only be used on an occasional basis.
MODERATE	A tree or structure with one or more potential roosting feature which could support bats but is of a suitability meaning that it would be unlikely to support a roost of high conservation status.
HIGH	A tree or structure with several potential roosting features which could support large number of bats on a regular basis and for longer periods of time. The tree or structure would have suitability to support maternity or hibernation roosts.



The survey was undertaken utilising suitable binoculars and ladders to access all areas where safe to do so.

2.5. SURVEY LIMITATIONS

A Preliminary Ecological Appraisal does not constitute a full botanical survey. Instead, key species are identified to give a representative description of each habitat type.

This survey was undertaken in July, which is an appropriate time of year to undertake ecological surveys. However, due to differing flowering times, it is possible that some species of flora may have been missed or misidentified. It is possible that some invasive/non-native species could have been missed during the survey.

A survey of the areas within 30 m of the site boundary to search for field signs of badger was not possible, due to the presence of private residential properties on all aspects. However, due to the developed nature of these habitats, this is not thought to pose a major constraint.

Internal access to the building on site could not be gained during the survey and as such only an external inspection was undertaken.

These constraints have been taken into consideration during the assessment.



3. SURVEY RESULTS

3.1. SITE CONTEXT

The site comprises the former Greenbrow Social Club; a derelict building, with an associated hardstanding car park and grassland area. The site itself is not anticipated to provide significant ecological value due to the urban nature of its habitats, as well as the urban nature of the adjacent land which comprises residential housing.

However, approximately 110 m west of the site lies a mosaic of grassland, woodland, and scrub habitats, which are anticipated to provide valuable foraging, commuting and refuge habitat for a range of local fauna including bats, birds, and terrestrial mammals. Additionally, Fairywell Brook runs through this area, approximately 180 m west of the site at its closest point. This is likely to form an important linear feature, offering foraging and commuting opportunities for fauna, including species which specialise feeding along aquatic habitats such as otter and Daubenton's bat (*Myotis daubentonii*). The brook also provides links to valuable habitat further afield, including Deciduous Woodland Biodiversity Action Plan (BAP) Priority Habitat located approximately 560 m south of the site. The proximity of the Brook and associated habitats to the site will likely facilitate the dispersal of bat and bird species between the two. However, the presence of residential developments adjacent to the site on all aspects limits connectivity for other species such as terrestrial mammals, amphibians, and invertebrates.

Two areas of Open Mosaic Habitat are located within 1 km of the site, approximately 520 m and 630 m north. Such habitat comprises brownfield land that has previously experienced disturbance and modification, which has since regenerated to support notable habitats. As such, these areas are anticipated to provide valuable habitats for a wide range of fauna, including rich assemblages of invertebrates. However, these habitats lack connectivity to the site due to the presence of extensive urban developments between them.

No waterbodies were identified within the site itself. One waterbody (WB1) was located within 250 m of the site boundary, located approximately 230 m south.

3.2. DESIGNATED SITES

No statutory designated sites were located within the 1 km search area.

The site is located within the impact risk zone of the following Sites of Special Scientific Interest (SSSI):

-  Cotteril Clough SSSI, located approximately 2.7 km south of the site boundary. This comprises part of a ravine, cut into the Keuper Marl by the erosion of the Cotteril Brook. The majority of the site is woodland with associated stream habitat and is the most diverse clough woodland on base rich soils in Greater Manchester. It is known to support a range of breeding birds as well as a diverse range of invertebrates, including 79 species of spider and the rare beetle *Dropephylla gradiloqua*.



- ✳ Rostherne Mere SSSI, located approximately 6.3 km south-west of the site. Rostherne Mere is one of the deepest and largest meres forming part of a nationally important series of open water and peatland sites. The Mere is nationally important for its birds. It acts as a winter roost for large numbers of ducks and holds nationally significant numbers of pochard (*Aythya farina*) and pintail (*Anas acuta*). Over 10,000 gulls regularly roost on the water and up to 90 cormorants (*Phalacrocorax carbo*) roost in the trees along the edge. Because of its size and depth it is the last freshwater body in the area to freeze in winter and is consequently an important refuge in severe weather. The SSSI also encompasses Rostherne Mere Ramsar, which is designated for comprising open water transition fen habitat, and Rostherne Mere National Nature Reserve (NNR), which is primarily of importance for its wintering wildfowl populations, particularly pochard, as well as its contributions to freshwater research.

Due to the small scale of the works and the distance between the site and the SSSIs, no impacts on any designated site are anticipated as a result of the proposed development. Furthermore, consultation with MAGIC (accessed August 2023) identified that the proposed development does not meet the criteria that would require further consultation with Natural England to proceed. Additionally, due to the nature of the works and the distance between the proposed site and the Ramsar site, a Habitat Regulations Assessment (HRA) screening assessment will not be required to assess whether the proposed development will have any 'likely significant effects' on the designated site.

The site is also located within 1 km of Ponds at Davenport Green Site of Biological Importance (SBI), which is located approximately 460 m west of the site. This is designated for its old grassland and pond and small lodges habitats, which are known to support significant populations of amphibians and aquatic invertebrates. The SBIs hedgerows and intrinsic appeal provided by accessibility and usage are also cited as supplementary features contributing to the designation. Due to the SBI's lack of connectivity to the site as well as the small scale of the proposed works, no detrimental impacts upon the SBI are anticipated as a result of the development. Furthermore, due to the small scale of the development, a significant increase in visitors to the SBI is not anticipated.

3.3. HABITATS

The main habitats encountered during the survey are described in the following subsections. Please refer to Appendix I the Phase 1 Habitat Plan.

3.3.1. BUILDING

One building, Building 1 (B1) was located on-site, which comprised the former Greenbrow Social Club. A full description and further photos of the building can be found in Section 3.4.2.



PLATE 1 SHOWING B1



3.3.2. **HARDSTANDING**

A hardstanding car park was present in the west of the site whilst a hardstanding access road defined the northern boundary. This comprised tarmac, which was generally well sealed, although colonised around the edges by species including common evening-primrose (*Oenothera biennis*), ribwort plantain (*Plantago lanceolata*), selfheal (*Prunella vulgaris*), Yorkshire fog (*Holcus lanatus*) and willowherb species (*Epilobium* sp.).

PLATE 2 SHOWING HARDSTANDING



3.3.3. NEUTRAL SEMI-IMPROVED GRASSLAND

An area of neutral semi-improved grassland was present in the south and east of the site. This comprised barren brome (*Anisantha sterilis*), perennial rye-grass (*Lolium perenne*), ribwort plantain, dandelion (*Taraxacum officinale* agg.), herb Robert (*Geranium robertianum*), hedge mustard (*Sisymbrium officinale*), ivy (*Hedera helix*), broadleaved dock (*Rumex obtusifolius*), nettle (*Urtica dioica*), nipplewort (*Lapsana communis*), false oat grass (*Arrhenatherum elatius*), common chickweed (*Stellaria media*), creeping buttercup (*Ranunculus repens*), white clover (*Trifolium repens*), common bent (*Agrostis capillaris*), Yorkshire fog, oak saplings (*Quercus robur*), cock's foot (*Dactylis glomerata*), ragwort (*Jacobaea vulgaris*), meadow buttercup (*Ranunculus acris*), silver birch saplings (*Betula pendula*), willow saplings (*Salix* sp.), creeping thistle (*Cirsium arvense*), cranes bill species (*Geranium* sp.), cleavers (*Galium aparine*), meadow foxtail (*Alopecurus pratensis*), bramble (*Rubus fruticosus* agg.), sycamore saplings (*Acer pseudoplatanus*), purple toadflax (*Linaria purpurea*), wood avens (*Geum urbanum*), and yellow loosestrife (*Lysimachia vulgaris*).

PLATE 3 SHOWING POOR SEMI-IMPROVED GRASSLAND



3.3.4. EPHEMERAL/SHORT PERENNIAL

The south-west of the site predominantly comprised ephemeral/short perennial. Species present in these areas included selfheal, ragwort, yellow loosestrife, silver birch saplings, false oat grass, evening primrose, herb Robert, spear thistle (*Cirsium vulgare*), nettle, broadleaved dock, sycamore, nipplewort, perennial rye grass, and creeping thistle.



PLATE 4 SHOWING EPHEMERAL/SHORT PERENNIAL



3.3.5. DENSE SCRUB

Dense scrub defines the site's western boundary, which was dominated by bramble, with raspberry (*Rubus idaeus*), birch saplings, ragwort, nipplewort, sycamore saplings, ox-eye daisy (*Leucanthemum vulgare*), lady's mantle (*Alchemilla vulgaris*), and large bindweed (*Calystegia octulera*) also present.

PLATE 5 SHOWING DENSE SCRUB



3.3.6. SCATTERED TREES

A number of scattered trees were present on site, comprising pedunculate oak and sycamore.

PLATE 6 SHOWING SCATTERED TREE



3.3.7. HEDGEROW

One hedgerow (H1) was present on site, which defined the site's northern boundary. This comprised garden privet (*Ligustrum ovalifolium*), sycamore, ash (*Fraxinus excelsior*), and hornbeam (*Carpinus betulus*), with occasional herb Robert and nettle within the understory. The hedgerow was approximately 2 m tall and 0.5 m wide.



PLATE 7 SHOWING H1



3.4. PROTECTED AND NOTABLE SPECIES

3.4.1. AMPHIBIANS

Consultation with GMEU identified one record of great crested newt within the 1 km search area. This was located approximately 800 m south-west of the site associated with a flowerbed within a private residence.

Consultation with MAGIC did not identify any great crested newt European Protected Species Licences within the 1 km search area. The closest licence was located approximately 1.9 km south of the site, effective in 2009 the destruction of a great crested newt resting and breeding place.

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 where habitat connectivity is of high quality) (English Nature, 2001). One waterbody was located within 250 m of the site: Waterbody 1 (WB1) was located approximately 230 m south of the site. This comprised a large pond, with multiple platforms around the edge which indicate the presence of fish. Fish are known to predate on great crested newts, and it is therefore unlikely that great crested newts are present within the waterbody. Furthermore, the residential developments and roads which lie adjacent to the site on all aspects would act as significant barriers to the dispersal of any great crested newts from the waterbody to the site. As such, great crested newts are unlikely to be present in WB1 and, if present, they are not anticipated to commute to the site due to the dispersal barriers situated between them. As such, WB1 is discounted from further assessment.

No records of other common amphibians were located within the search area. However, the dense scrub, hedgerow and poor semi-improved grassland on-site offer suitable refuge for common amphibians within their terrestrial phase. Additionally, two brash piles were located on-site which provide suitable shelter for the species group. As such, common amphibians may be present on site.



PLATE 8 SHOWING BRASH PILE



3.4.2. BATS

Numerous records of bats were located within 1 km of the site boundary during the data search. Records included common pipistrelle (*Pipistrellus pipistrellus*), bat species (*Chiroptera sp.*), noctule (*Nyctalus noctula*), soprano pipistrelle (*Pipistrellus pygmaeus*), and pipistrelle species (*Pipistrellus sp.*). The closest record, a common pipistrelle and pipistrelle species, was recorded approximately 90 m north of the site, associated with Newall Green Farm.

Consultation with MAGIC Mapping did not identify the presence of a Natural England Bat Mitigation Licence within the 1 km search area. The closest licence was located approximately 1.8 km west of the site active between 2012 and 2013 for the destruction of a common pipistrelle and soprano pipistrelle non-breeding roost.

During the survey, an inspection of the building and trees on-site was undertaken as per guidance set out in Collins (2016), to assess their suitability for roosting bats. All on-site trees were found to have Negligible bat roosting potential, due to a lack of any potential roosting features. Building 1 (B1) was found to have High bat roosting potential. Please see Table 3.1. for the full description and Preliminary Roost Assessment of this building.



TABLE 3.1 BUILDING DESCRIPTION AND PRELIMINARY ROOST ASSESSMENT

BUILDING REFERENCE	DESCRIPTION	PHOTOGRAPHS
B1	Building 1 (B1), the former Greenbrow Social Club; comprised a two-storey brick and stone building with a hipped clay-tiled roof, and a single-story extension to the west. Some of this extension comprised a similarly hipped clay-tiled roof, whilst the remaining area comprised a flat roof garage covered with roofing felt. Soffit boxes extended around the building which were in poor condition. Multiple cracks and gaps were located within the soffit around the building, giving access to cavities in which a larger number of bats may be able to roost on a regular basis. Lifted paint was also located around the soffit, creating smaller crevices in which smaller numbers of opportunistic bats may be able to roost on an occasional basis. Cracks within the brickwork, specifically around the entrance to the main building on its eastern aspect, as well as a number of lifted tiles on all aspects offer similar opportunities.	



The lifted tiles may also provide entry into the inside of the building, particularly the loft void, which could offer suitable habitat for large numbers of bats such as maternity roosts. Access to the building could not be gained during the survey and as such the presence or absence of bats within the loft could not be ascertained.

The land immediately surrounding the building comprises residential developments not anticipated to provide significant value for local bat species. However, 110 m west of the site lies a mosaic of grassland, woodland, and scrub habitats, through which Fairywell Brook runs. These areas are anticipated to provide high-quality foraging and commuting habitat for local bat species.

Due to the number of potential roost features, some of which may support significant numbers of bats, and the presence of high-quality habitat nearby, B1 was assessed as having **High** bat roosting potential.



The site is anticipated to have limited value for foraging and commuting bats, due to the expanse of hardstanding, grassland and ephemeral/short perennial habitats. However, the dense scrub, scattered trees and hedgerow may attract some invertebrate prey for the species group and in turn provide some foraging opportunities. Features such as hedgerow can form important linear features for commuting bats, offering habitat corridors throughout the wider landscape. However, the urban nature of the site and adjacent area limits the commuting value of the hedgerow on site. Local bat species are anticipated to use higher quality foraging and commuting habitat within the wider area, most notably Fairywell Brook and associated woodland habitats located approximately 180 m west of the site at their closest point.



3.4.3. BADGERS

No records of badger were located within the site boundary or the 1 km search area. A search for signs of badger could not be completed within the 30 m buffer from site due to access constraints from the surrounding residential developments.

The majority of the site comprises poor-quality habitat for badgers, due to the expanse of hardstanding and ephemeral/short perennial. However, the poor semi-improved grassland, dense scrub, and hedgerow provide suitable foraging and sett-building opportunities for the species. As such, badgers may use the site.

3.4.4. OTTER AND WATER VOLE

No records of otter or water vole were identified within the 1 km search area.

No aquatic habitats were identified on-site or within close proximity to the site. The closest watercourse comprised Fairywell Brook located approximately 180 m west of the site at its closest point. Due to a lack of suitable aquatic habitat for otter and water vole within and adjacent to the site, both species have been ruled out of further assessment.

3.4.5. OTHER TERRESTRIAL MAMMALS

One record of European hedgehog (*Erinaceus europaeus*) was located within 1 km of the site boundary, located approximately 490 m north-east of the site within a residential area.

The site was assessed as providing suitable refuge and foraging habitat for hedgehogs within the poor semi-improved grassland, dense scrub, hedgerow and brash piles, as well as the base of scattered trees. The dense scrub, hedgerow and brash piles may also offer suitable hibernation opportunities for the species.

3.4.6. NESTING BIRDS

Consultation with GMEU identified records of house sparrow (*Passer domesticus*), dunnock (*Prunella modularis*), song thrush (*Turdus philomelos*), spotted flycatcher (*Muscicapa striata*) and starling (*Sturnus vulgaris*) within the search area.

During the site walkover, a number of pigeons (*Columba livia*) were observed resting on Building 1 (B1).

Common bird species are anticipated to be present on site within the dense scrub, scattered trees, hedgerow and building. The site is assessed as having negligible value for ground-nesting birds due to the exposed nature of the site and as the site largely comprises hardstanding and a building. Furthermore, the building, defining hedgerow and scattered trees could support perching predators.

3.4.7. REPTILES

No records of reptiles were identified within the 1 km search area.

The site was found to provide limited value for reptiles as it lacks the structure and habitat quality to support the species group. Additionally, it is isolated from high-quality habitat further afield. As such, the presence of reptiles within the site is reasonably discounted.



3.4.8. INVERTEBRATES

One record of cinnabar moth (*Tyria jacobaeae*) was located within 1 km of the site boundary. This was located approximately 180 m north of the site within a residential area.

Common invertebrates are anticipated to present on site within the dense scrub, hedgerow, poor semi-improved grassland and scattered trees. The presence of notable invertebrates on site is reasonably discounted due to the lack of floristic diversity and high-quality habitat.

3.5. INVASIVE PLANT SPECIES

No records of invasive species were recorded within the 1 km search area.

During the survey no invasive species were identified within the site.



4. ECOLOGICAL CONSTRAINTS AND MITIGATION

4.1. DEVELOPMENT PROPOSALS

Development proposals comprise the demolition of the existing structure on-site to facilitate the development of a number of residential units with associated gardens, landscaping and hardstanding.

4.2. HABITATS

The site comprised habitats that were found to be widespread within the local area; however, they did contain value for wildlife such as bats and birds. Badger and hedgehog are also anticipated to be present within the local area. The hardstanding and ephemeral/short perennial are of lowest value for wildlife, with the dense scrub, hedgerow, poor semi-improved grassland and scattered trees comprising the areas of highest value.

4.2.1. HEDGEROW AND SCATTERED TREES

It is recommended that, where possible, the scattered trees and hedgerow are retained and protected through development. It is anticipated that some areas may require removal, and where this is needed, the trees should be replaced as soon as practicable. Any replacement planting should endeavour to be on the same aspect as that to be lost.

If areas of hedgerow are to be removed, they should be replaced as soon as practicable using lengths of more valuable hedgerow. Any compensation planting should equate to a minimum of 1.5 times the length to be lost. Any replacement planting should endeavour to be on the same aspect as that to be lost.

It is recommended that the landscape planting comprises native species and species known to be of value for the attraction of wildlife. This will include fruiting and flowering species. Species deemed suitable for this development could include berry-bearing native species such as:

-  Hawthorn (*Crataegus monogyna*)
-  Rowan (*Sorbus acuparia*)
-  Holly (*Ilex aquifolium*)
-  Whitebeam (*Sorbus aria*)
-  Spindle (*Euonymus europaea*)
-  Dog rose (*Rosa canina*)
-  Guelder rose (*Viburnum opulus*)
-  Elder (*Sambucus nigra*)

All planting should be from a trusted pest-free source and, where possible, be of local provenance.



Any trees or shrubs within the site or boundary, to be retained, are to be appropriately protected during the construction phase. Temporary protective demarcation fencing will be used 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.

The fencing will be in accordance with BS 5837:2012 *Trees in Relation to Design, Demolition and Construction: Recommendations*.

4.3. PROTECTED AND NOTABLE SPECIES

4.3.1. AMPHIBIANS

The site may support small numbers of common amphibians within the dense scrub, hedgerow, poor semi-improved grassland and brash piles on-site. It is recommended that during the clearance phase of works, any common amphibians encountered be moved by hand, away from construction activities.

4.3.2. BREEDING BIRDS

The site was assessed as having value for birds within the dense scrub, scattered trees, and hedgerow on-site. It is recommended that these areas are retained and enhanced where possible. Birds may also be nesting within the building on site.

Should any vegetation require removal, it should be removed outside of the breeding bird season (March to September inclusive). Additionally, demolition of the building should be undertaken outside of nesting bird season. If this is not possible, a nesting bird check will be undertaken by a suitably qualified ecologist no more than 24 hours before works commence. If a nest, or nest in construction, is located then a stand-off distance will be maintained until the young have fledged. The ecologist will advise on suitable stand-off and provide a toolbox talk to all site contractors regarding their working limits and legal implications.

Post-development, bird boxes could be installed throughout the development to enhance the site's value for the species group.

4.3.3. BATS

Building 1 (B1) was assessed as having High bat roosting potential. As such, further surveys will be required, which are outlined in Section 5. The site was also found to have some, although limited, foraging value for bats amongst the dense scrub, scattered trees and hedgerow, as well as a treeline adjacent to the south of the site. It is recommended that the proposed lighting plan considers the habitats of the highest importance and maintains these habitats as dark areas, should they be retained. It is recommended that any security lighting during construction is appropriately placed to avoid being Directed at retained habitats.

To reduce the potential lighting impacts on bats, the following recommendations are advised for the lighting strategy:

- ✳ Lighting should be pre-fixed on any structures, to ensure impacts on sensitive areas such as broadleaved woodland, dense scrub, scattered trees and treelines are diminished.
- ✳ Warm white tones are preferable to blue-toned lights (3000k).
- ✳ LED lights are preferable as they produce minimal UV.



- ✿ To avoid light spill skyward, ensure lights face downward.
- ✿ Make use of vegetation to block light spill into dark areas.

Lighting should follow the protocols outlined in the Institute for Lighting Engineers document “Guidance for the Reduction of Obtrusive Lighting” (2005) and BCT’s “Bats and Artificial Lighting in the UK” (2018) to minimise disturbance and sky-glow off-site.

It is recommended that any planting within the site be of native fruiting/flowering species in order to enhance the site for foraging bats post-completion. Bat boxes could be installed throughout the site post-construction to enhance the site for the species group.

4.3.4. BADGERS

No badger setts were located during the survey, though the habitats were identified as being suitable for the species. Badgers are highly mobile and can create new setts in a short period of time. It is recommended that an updated site walkover prior to the development is carried out to identify any new badger setts.

If a badger sett is located, a stand-off distance may be required as well as precautionary working methods. If the sett requires closure, a Natural England Badger Licence would be required. Please note that badger licences can only be obtained between July and November each year to avoid potential impact on pregnant females. The following precautionary working methods will be adhered to during the construction phase to ensure that no badgers within the local area are impacted by the proposed development:

- ✿ All site operatives will be inducted to the presence of the species and their working limits and legal responsibilities.
- ✿ All site operatives will be inducted as to identifying potential badger setts, and should be vigilant if they suspect they locate a new sett during works and inform the project ecologist immediately.
- ✿ All excavations will be battened at a 45 degree angle to allow escape should animals become trapped.
- ✿ All site machinery and materials will be appropriately stored to avoid harm to the species, notably between July and November each year when extra care is needed to avoid potential impacts on pregnant females.

It is not anticipated that the development will have a significant negative impact on badgers within the local area.

4.3.5. HEDGEHOGS

The site was assessed as providing suitable refuge and foraging opportunities for hedgehogs within the poor semi-improved grassland, dense scrub, hedgerow and brash piles, as well as the base of scattered trees. The dense scrub, hedgerow and brash piles may also offer suitable hibernation opportunities for the species. These habitats should be retained where possible. If any vegetation requires clearance, it should be trimmed to 50 cm and checked for hedgehog prior to clearance to ground level. The brash piles should be demolished by hand to ensure no sheltering hedgehogs are impacted by the works. If trees are removed, their bases should be checked, prior to removal, for sheltering hedgehogs. It is



recommended that any clearance takes place outside of December-March to avoid impacting hibernating hedgehogs.



5. FURTHER SURVEYS

5.1. BATS

B1 was found to have High bat roosting potential. Development proposals include the removal of B1 and as such, three Nocturnal Bat Surveys will be required between May and September (inclusive), with at least two between May and August (inclusive). The surveys are to follow the guidance set out in Collins (2016), surveyors are to be positioned at areas of greatest roosting potential and should be completed by suitably qualified ecologists.

The surveys would be valid for two years to inform a planning application. If bats are identified roosting within the building, a European Protected Species Licence will be required and would require up-to-date surveys from the survey season prior to the application submission.

5.2. TABLE OF FURTHER SURVEYS

Please refer to Table 5.1 for a summary of further surveys required to inform a planning application.

TABLE 5.1 FURTHER SURVEYS RECOMMENDED

SURVEY TYPE	TIMESCALES
NOCTURNAL BAT SURVEY ON B1	Three surveys between May and September (inclusive), with at least two between May and August (inclusive).



6. BIODIVERSITY NET GAIN

The scheme should strive to achieve a 10% in biodiversity net gain. In line with The Environment Act 2021, this will be a mandatory requirement from November 2023. Full details of this and a calculation of net gain could be finalised after detailed landscape plans have been prepared. It is recommended that an ecologist is consulted during the design stage to ensure, where possible, biodiversity net gain can be achieved. The following habitat measures will increase the on-site biodiversity:

-  Retaining the scattered trees, scrub, and hedgerow
-  Native hedgerow planting.
-  Native shrub planting.
-  Native tree planting.

Habitat measures should be provided within areas of open space or designated wildlife zones. A 30-year management plan should be produced to ensure biodiversity is secured on-site.



7. REFERENCES

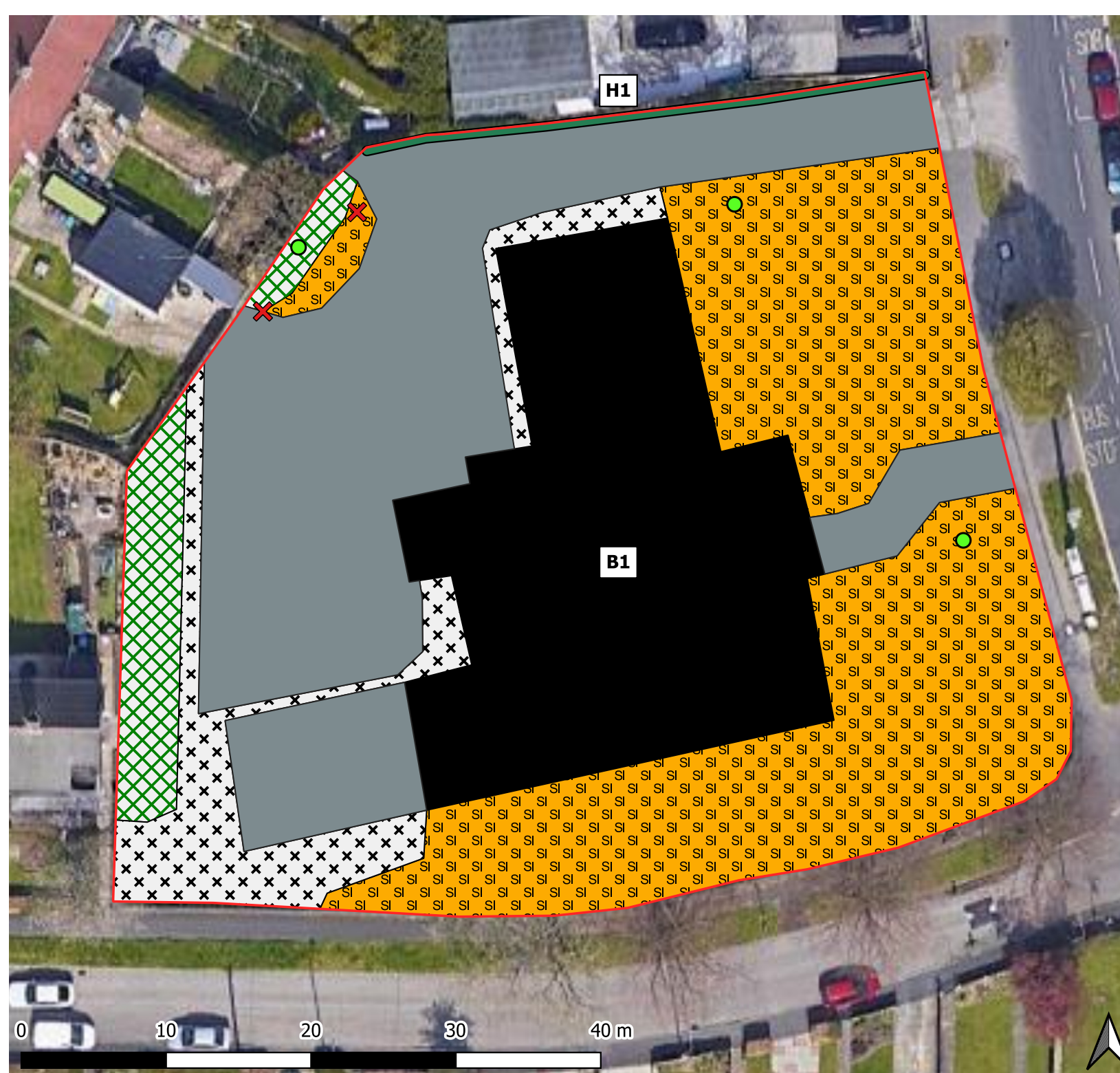
- ✿ Bat Conservation Trust (2018). Bats and Artificial Lighting in the UK: Bats and the Built Environment Series.
- ✿ Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal.
- ✿ CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine.
- ✿ Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edition. The Bat Conservation Trust, London.
- ✿ Crawford (2010) Environment Agency's Fifth Otter Survey of England 2009–2010 .
- ✿ Dean, M., Strachan, R., Gow, D., Andrews, R., Mathews, F., & Chanin, P. (2016). The Water Vole Mitigation Handbook.
- ✿ Downs et al (2003) The Effects of Illuminating the Roost Entrance on the Emergence Behaviour of *Pipistrellus pygmaeus*. Biological Conservation 111, 247-252.
- ✿ English Nature (2001). Great Crested Newt Mitigation Guidelines.
- ✿ Froglife (2001). Great Crested Newt Conservation Handbook.
- ✿ Institute of Lighting Engineers (2005). Guidance Notes for the Reduction of Obtrusive Light.
- ✿ JNCC (2010). Handbook for Phase 1 habitat survey: A technique for environmental audit. English Field Unit, Nature Conservancy Council.
- ✿ 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.
- ✿ Mathews et al. (2018) A Review of the Population and Conservation Status of British Mammals: Technical Summary. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough.
- ✿ Stace, C. A. (2019). New Flora of the British Isles. Fourth Edition. Cambridge University Press.
- ✿ Wildlife and Countryside Act (2010) Schedule 9 of the Wildlife and Countryside Act 1981.

END OF REPORT



APPENDIX I

PHASE 1 HABITAT PLAN



Key:

— Site boundary

— Hedgerow

■ Building

▤ Dense scrub

⊗ Ephemeral/short perennial

■ Hardstanding

■ Neutral semi-improved grassland

● Scattered trees

✕ Brash pile

Notes

Issue: 1	Revision: 1	Date: 28/07/2023	Drawn: CB2	Authorised: CB
Client: Wythenshawe Community Housing Group			Job No. 80-980	Date: 28/07/2023
			Drawing No. 80-980-002	Scale: 1:600 @A4
Job title: Greenbrow Social Club			Drawing title: Phase 1 Habitat Plan	



e3p

Environmental Engineering Partnership Ltd
Manchester Office
Taylor Road, Urmston M41 7JQ
Tel: 0161 707 9612
Email: info@e3p.co.uk
Website: www.e3p.co.uk

The client must not permit any drawing, design or other intellectual property produced by E3P Ltd without permission in writing from E3P Ltd in advance of any amendments being made. In the event that such written permission is not obtained in advance of the amendments being made, E3P Ltd shall not be liable for any damage and/or losses occurring as a result of the amended drawing, design or intellectual property.

APPENDIX II

WATERBODY PLAN

Key:
— Site boundary
Waterbody

Notes

Issue: 1	Revision: 1	Date: 28/07/2023	Drawn: CB2	Authorised: CB
Client: Wythenshawe Community Housing Group			Job No. 80-980	Date: 28/07/2023
			Drawing No. 80-980-003	Scale: 1:5500 @A4
Job title: Greenbrow Social Club			Drawing title: Waterbody Plan	



Environmental Engineering Partnership Ltd
Manchester Office
Taylors Road, Urmston M41 7JQ
Tel: 0161 707 9612
Email: info@e3p.co.uk
Website: www.e3p.co.uk

The client must not permit any drawing, design or other intellectual property produced by E3P Ltd without permission in writing from E3P Ltd in advance of any amendments being made. In the event that such written permission is not obtained in advance of the amendments being made, E3P Ltd shall not be liable for any damage and/or losses occurring as a result of the amended drawing, design or intellectual property.

