



Preliminary Ecological Appraisal Report

Willow Street, Bury

Reference: 80-819-R1-1

Date: September 2022



PRELIMINARY ECOLOGICAL APPRAISAL REPORT

Willow Street
Bury

Prepared for:
Irwell Valley Homes

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EXECUTIVE SUMMARY

Site Address	Former CPU Kitchens, Willow Street, Bury, BL9 7QZ
Coordinates	E 381801, N 411038
Site Area	Approximately 0.4 ha
Current Site Use and Adjacent Site Use	The site comprised three buildings, one active building used as housing for young adults and two disused buildings previously used as commercial units. Hardstanding car parks and access roads were present along the eastern and western aspects of the site. Amenity grassland surrounded the residential building on the northern aspect. Scattered trees, hedgerows and introduced shrub were present on site along the southern, western, and eastern boundaries. Maxwell Street was located adjacent to the northern boundary and Willow Street to the east. Residential housing surrounded the site with East. Ward Community Primary School was present to the south-east of the site.
Designated Sites	The site is located within the Impact Risk Zone of the Rochdale Canal Site of Special Scientific Interest (SSSI) Special Area of Conservation (SAC). No impacts on the designated site are anticipated as a result of the development, based on the distance from the site and the small scale of the development. Chesham Woods Site of Biological Importance (SBI) and Local Nature Reserve (LNR) is located within 1 km of the site. No impacts on Chesham Wood SBI and LNR are anticipated as a result of the proposed development as it is a small-scale residential scheme.
Survey Results	The site was found to comprise three buildings, one structure, hardstanding, introduced shrub, amenity grassland, bare ground, poor semi-improved grassland, scattered trees, and two hedgerows. The site was found to have the following potential ecological constraints: ✿ B1, B2 and B3 had Low bat roosting potential. ✿ Potential foraging and commuting opportunities for bats within the scattered trees and hedgerows. ✿ Opportunities for nesting birds within the scattered trees introduced shrub, and hedgerows. ✿ Hedgehogs are anticipated to be present on-site within the introduced shrub, grassland, and hedgerows and present within the surrounding area. ✿ Invasive plant species, field horsetail, is present on-site.



Conclusions

The following further surveys are recommended:

- ✿ At least one Nocturnal Bat Survey is required on B1, B2 and B3.

The following mitigation is recommended:

- ✿ If any vegetation requires removal, it should be removed outside of the breeding bird season (March to September inclusive). If this is not possible, a nesting bird check should be undertaken by a suitably qualified ecologist up to 24 hours 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.
- ✿ Precautionary Working Methods for hedgehogs.
- ✿ Lighting recommendations for bats in association with the scattered trees and on-site hedgerows.
- ✿ Eradication of field horsetail prior to works commencing on-site.

A gain in biodiversity will likely be required on-site. If this cannot be achieved on-site, a conservation offset payment or off-site compensation may be required.



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1. INTRODUCTION

1.1. BACKGROUND

E3P were commissioned by Irwell Valley Homes to undertake a Preliminary Ecological Appraisal at Willow Street, Bury, hereafter referred to as “the site”.

This report has been prepared by Carlin Jones BSc (Hons), QCIEEM, Graduate Consultant Ecologist at E3P. Carlin has experience conducting a range of European Protected Species Surveys and ecological mitigation across the UK.

1.2. PROPOSED DEVELOPMENT

Detailed development proposals include the demolition of the on-site buildings and the construction of an apartment scheme and associated landscaping.

1.3. SITE LOCATION

The site is located in the residential area north-east of the centre of Bury. Maxwell Street defines the northern site boundary, with Willow Street defining the eastern boundary. East Ward Community Primary School and Hazel Wood High School are located south-east of the site. Beyond Hazel Wood High School extends an area of woodland and scrub that provides connectivity to Openshaw Park, and the River Roch located south of the site. The M66 is located approximately 330 m east of the site. 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 September 2022.
- ✚ Aerial mapping and ordnance survey maps.
- ✚ Local data records, including The Greater Manchester Ecology Unit (GMEU) – the biodiversity information system for Greater Manchester, were received on 31st August 2022.

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 surrounding habitat.

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 Carlin Jones on 18th August 2022. The weather was 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 Carlin Jones on 18th August 2022. 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 August, 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. Due to the habitats present on-site, this is not considered to be a major constraint.

A survey within 30 m of the site for evidence of badger was unable to be carried out as residential housing was located north, east and west and East Ward Community Primary School south-east of the site and access to these areas was not possible. However, due to the developed nature of the surrounding habitat, this is not thought to pose a major constraint.

Internal access to B1 and B2 was not possible at the time of the survey. B1 was a residential unit used to house young people as such a detailed external inspection was deemed sufficient. Access to B2 was not possible due to damage to the roller door on the eastern aspect. This has been taken into consideration during the assessment.

A loft void was present in B3, access was not possible via one of the loft hatches due to health and safety reasons. A detailed inspection of the southern aspect of the loft void was possible from the additional loft hatch. This has been taken into consideration during the assessment.



3. SURVEY RESULTS

3.1. SITE CONTEXT

The site comprised three buildings, one active building used as residential units for young adults and two disused buildings previously used as storage and as commercial units. Hardstanding car parks and access roads were present along the eastern and western aspects. Amenity grassland surrounded the residential building on the northern aspect. Scattered trees, hedgerows and introduced shrub were present on site along the southern, western, and eastern boundaries. The site is expected to provide limited value to local wildlife, which is restricted to the hedgerows, scattered trees, and introduced shrub, that may offer nesting or roosting opportunities for common bird species and bats. Residential housing extends on all aspects which are anticipated to be of limited value for local wildlife.

Adjacent to the south-east is East Ward Community Primary School and Hazel Wood High School, providing limited ecological value. Beyond is an area of woodland and scrub, connected to an area of broadleaved woodland approximately 500 m south-east of the site, surrounding the River Roch. This habitat is expected to act as a resource for a range of local fauna and has the potential to provide roosting and nesting opportunities for bats and birds. This woodland could provide sett building opportunities for badger and be a commuting feature for other terrestrial mammals. Residential housing is situated between this habitat and the site which is not considered functionally linked land.

No waterbodies were identified on-site or within 250 m of the site boundary.

3.2. DESIGNATED SITES

The site is located within the Impact Risk Zone of Rochdale Canal Site of Special Scientific Interest (SSSI) Special Area of Conservation (SAC) located approximately 6.5 km east of the site. The SSSI 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 canal attracts a range of fauna species including the notable kingfisher (*Alcedo atthis*) that uses the canal for foraging. The canal also supports populations of two species of nationally scarce water beetle (*Agabus uliginosus*) and the pea mussel (*Pisidium pulchellum*).

Chesham Woods Site of Biological Importance (SBI) and Local Nature Reserve (LNR) is located approximately 670 m north of the site. The site contains six woodlands including broadleaved semi-natural woodland and broadleaved semi-natural plantation.



3.3. HABITATS

The main habitats encountered during the survey are described in the following subsections. Please refer to Appendix I Drawing 80-819-001 for the Phase 1 Habitat Plan.

3.3.1. BUILDINGS, WALLS, AND HARDSTANDING

Three buildings, Building 1 – Building 3 (B1 – B3) were located on-site. B1 comprised residential units. B2 and B3 were on a disused section of the site and comprised a garage previously used for storage and a commercial unit. A description of the buildings can be found in Appendix II.

PLATE 1 SHOWING B1



PLATE 2 SHOWING B2



PLATE 3 SHOWING B3



Concrete hardstanding car parks were associated with the on-site buildings. The hardstanding had been colonised at its edges by butterfly-bush (*Buddleja davidii*), herb-Robert (*Geranium robertianum*), dandelion (*Taraxacum officinale* agg.), bramble (*Rubus fruticosus*), ivy (*Hedera helix*) and rosebay willowherb (*Chamaenerion angustifolium*). Field horsetail (*Equisetum arvense*) was present within the hardstanding in the centre of the site adjacent to B3.

PLATE 4 SHOWING HARDSTANDING CARPARK



3.3.2. AMENITY GRASSLAND

Amenity grassland verges surrounded the hardstanding car park to the west and adjacent to B1. The grass had been well maintained and cut to a short sward. As such, grass species were difficult to identify. Species present included ribwort plantain (*Plantago lanceolata*), clover species (*Trifolium spp.*), perennial rye-grass (*Lolium perenne*), daisy (*Bellis perennis*) and dandelion.



PLATE 5 SHOWING AMENITY GRASSLAND



3.3.3. INTRODUCED SHRUB

Stands of introduced shrub were present within the western boundary, south-west corner and centre of the site. Species present included Wilson's honeysuckle (*Lonicera nitida*), white dogwood (*Cornus alba*), orange day-lily (*Hemerocallis fulva*), ninebark (*Physocarpus opulifolius*), shrubby cinquefoil (*Dasiphora fruticosa*), Chinese silver grass (*Miscanthus sinensis*), red escallonia (*Escallonia rubra*), bamboo species (*Phyllostachys* spp.), New Zealand flax (*Phormium tenax*), Japanese pieris (*Pieris japonica*), and Lavender species (*Lavandula* spp.).

PLATE 6 INTRODUCED SHRUB



3.3.4. HEDGEROWS

Two hedgerows, Hedgerow 1, and Hedgerow 2 (H1 and H2) were located within the site boundary. A description and images of hedgerows can be seen within Table 3.1.

TABLE 3.1 HEDGEROW DESCRIPTIONS

REF.	DESCRIPTION	PHOTOGRAPH
H1	H1 was present adjacent to the hardstanding car park adjacent to the eastern boundary. H1 was approximately 10 m long, 5 m tall and 1 m wide and comprised Lawson's cypress (<i>Cupressus lawsoniana</i>).	
H2	H2 was present adjacent to the southern site boundary. H2 was approximately 5 m long, 2 m tall and 0.5 m wide. H1 comprised Wilson's honeysuckle.	



3.3.5. SCATTERED TREES

Scattered trees were present adjacent to the western, eastern, and southern site boundaries and within the centre of the site. Species included sycamore (*Acer pseudoplatanus*), cherry species (*Prunus sp.*), ash and goat willow (*Salix caprea*).

PLATE 7 SHOWING SCATTERED TREES



3.3.6. BARE GROUND

Bare ground was present within the centre of the site. Colonising species present included butterfly bush, field horsetail, sycamore saplings, common nettle, bramble, rosebay willowherb and false oat grass.

PLATE 8 BARE GROUND



3.3.7. POOR SEMI-IMPROVED GRASSLAND

Poor semi-improved grassland was present within the centre of the site. Species present included dandelion, false oat-grass (*Arrhenatherum elatius*), rosebay willowherb, ash saplings (*Fraxinus excelsior*), field horsetail, common nettle, and sycamore saplings (*Acer pseudoplatanus*).

PLATE 9 POOR SEMI-IMPROVED GRASSLAND



3.4. PROTECTED AND NOTABLE SPECIES

3.4.1. SPECIES DISCOUNTED FROM ASSESSMENT

White-clawed crayfish (*Austropotamobius pallipes*) has been discounted from assessment as no suitable aquatic habitats were located on-site or within proximity to the site.

Hazel dormouse (*Muscardinus avellanarius*) mainly occurs 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). The species are not generally known to be present within the Bury area and as such, the species are reasonably discounted from assessment.

3.4.2. AMPHIBIANS

Consultation with GMEU identified one record of great crested newt (*Triturus cristatus*) within the 1 km search area. This was located approximately 780 m north-east of the site with eggs being observed within a waterbody associated with a field used for livestock.

Consultation with MAGIC identified one great crested newt European Protected Species Licences within the 1 km search area. The licence was located approximately 760 m north-east of the site, effective between 2011 and 2014 for the destruction of a resting place.



Great crested newts' upper dispersal limit is generally considered to be up to 250 m from a waterbody (though the occurrence of greater distances does exist where habitat connectivity is of high quality) (English Nature, 2001). As such, the presence of great crested newts on-site is reasonably discounted as no waterbodies were located on-site or within 250 m of the site. Furthermore, as the site is mainly comprised of buildings, hardstanding, and amenity grassland the site does not provide any suitable terrestrial habitat for great crested newts.

Consultation with GMEU did not identify any records of common amphibians within the 1 km search area.

The site does provide suitable habitats within their terrestrial phase for common amphibians such as within the grassland and introduced shrub. However, no waterbodies are located on-site or within 250 m of the site as such, therefore the presence of the species on-site is reasonably discounted.

3.4.3. BATS

Numerous records of bats were located within 1 km of the site boundary during the data search. Records included confirmed roost records for common pipistrelle (*Pipistrellus pipistrellus*), and pipistrelle species (*Pipistrellus sp.*). The closest record for a confirmed roost was a non-breeding common pipistrelle roost. The roost supported one individual bat in 2015 and was located approximately 65 m north-west and was associated with industrial units.

Records of bat observations included records of common pipistrelle, pipistrelle species and soprano pipistrelle (*Pipistrellus pygmaeus*). The closest record was for an adult male common pipistrelle in 2018 associated with a residential property approximately 10 m north of the site.

Consultation with MAGIC did not identify the presence of a Natural England Bat Mitigation Licence within the 1 km search area. The closest licence was located approximately 1.6 km north-west of the site boundary, active in 2012 for the destruction of a common pipistrelle non-breeding roost.

During the site survey, an inspection of trees and buildings was undertaken as per guidance set out in Collins (2016), to assess the features for suitability for roosting bats. All on-site trees were found to have Negligible bat roosting potential, as no Potential Roosting Features were identified.

B1, B2 and B3 were assessed as having **Low** roosting potential for a small number of crevice-dwelling bats on an occasional basis within a small gap within the soffit, crevices present between the wooden cladding and brickwork and gaps at the end of the dry end verges. As such, B1 was assessed as having **Low** bat roosting potential. A detailed description of the three on-site buildings and associated Preliminary Roost Assessment can be found in Appendix II.

Structure 1 and Wall 1 were found to have **Negligible** roosting potential as they contained no potential bat roosting features.

The amenity grassland and hardstanding present on-site have negligible value for bats, whereas the scattered trees, introduced shrub, and hedgerows may act as a foraging resource, due to the attraction of invertebrate prey. However, it is anticipated that bats within the local area will utilise the habitat of greater value in proximity to the site rather than that present on-site, i.e., broadleaved woodland to the south-east of the site. In addition, H1 and H2 were only approximately 10 m and 5 m respectively and did not continue into the wider landscape. Therefore, they are not anticipated to act as an important commuting feature for bats within the local area.



It is anticipated that there will be some light disturbance from the neighbouring residential properties which may have an effect on the local bat population (Downs et al, 2003) as foraging and commuting behaviour may be affected (BCT, 2018). Specifically, on slow-flying species (i.e., brown long-eared bats and myotis species) which are less tolerant to light. It should be acknowledged however that artificial lighting has benefits for more light tolerant species (i.e., pipistrelles) as many species of night flying insects are attracted to light, which bats will predate on.

3.4.4. BADGERS

No records of badger were located within the site boundary or the 1 km search area. No signs of badger were present within the site or within 30 m of the site where access was possible. A search for signs of badger could not be completed within the 30 m buffer from the site due to access constraints from the surrounding residential properties and a primary school located south-east.

The wider landscape to the south-west of the site was assessed as having suitability for the species, due to the presence of broadleaved woodland and scrub. As such, badger may be present in the surrounding area. However, the site mainly comprises buildings and hardstanding as such does not offer sett building opportunities or foraging opportunities. The site does not have the potential to support badgers and no on-site setts or further field signs of badgers were identified during the survey.

3.4.5. 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. From OS mapping, the closest aquatic habitat was located approximately 410 m south-east of the site comprising the River Roch.

No aquatic habitats such as suitable rivers and streams were identified on-site or adjacent to the site boundary. As such, the presence of otters and water voles on-site can reasonably be discounted.

3.4.6. OTHER TERRESTRIAL MAMMALS

Three records of European hedgehog (*Erinaceus europaeus*) were located within 1 km of the site boundary. The closest of these was located in a residential area approximately 150 m south of the site.

The species is anticipated to be present on-site within the introduced shrub, and hedgerows. The species could use the grassland present on site for foraging. It is also anticipated that the species will be present within the wider area including the woodland and scrub present to the south-east of the site.

One record of the brown hare (*Lepus europaeus*) was located approximately 790 m north-east of the site. Brown hare is commonly found in grassland and woodland edges and favours a mosaic of habitats including arable fields, grassland, and hedgerows. The species is therefore reasonably discounted as being present on-site due to the site not comprising the suitable mosaic of habitats needed to support the species.

3.4.7. NESTING BIRDS

Consultation with GMEU identified numerous records of notable birds within the search area, including house sparrow (*Passer domesticus*), song thrush (*Turdus philomelos*), starling (*Sturnus vulgaris*), dunnoek (*Prunella modularis*), bullfinch (*Pyrrhula pyrrhula*) and kingfisher (*Alcedo atthis*).



The habitats within the site are common within the local area and are anticipated to support common bird species within introduced shrub, scattered trees, and hedgerows. The site lacked the suitability to support kingfisher which is known to be present in the nearby area.

The site is assessed as having negligible value for ground-nesting birds due to the lack of suitable habitat provided by the hardstanding, buildings, and amenity grassland.

3.4.8. REPTILES

No records of reptiles were identified within the 1 km search area. The site was found to provide limited value for reptiles, given the site comprised mainly hardstanding, amenity grassland and buildings, which lack the structure and habitat quality to support the species group. As such, the presence of reptiles within the site is reasonably discounted.

3.4.9. INVERTEBRATES

The data search identified shaded broad-bar moth (*Scotopteryx chenopodiata*) and white-letter hairstreak butterfly (*Satyrrium w-album*) within the 1 km search area. The site is comprised mainly of hardstanding, buildings and areas of amenity grassland. Due to the lack of floristic diversity, notable invertebrates are not anticipated to be present on-site. Common invertebrates may be present within the introduced shrub, scattered trees, and hedgerows.

3.5. INVASIVE PLANT SPECIES

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

During the survey, field horsetail was identified within the site, with several stands located within the north-west corner of the site adjacent to the northern aspect of B3 and the introduced shrub along the northern boundary.



4. ECOLOGICAL CONSTRAINTS AND MITIGATION

4.1. DEVELOPMENT PROPOSALS

Detailed development proposals include the demolition of the on-site buildings and the construction of an apartment scheme and associated landscaping.

4.2. DESIGNATED SITES

The site is located within the Impact Risk Zone of the Rochdale Canal Site of Special Scientific Interest (SSSI) Special Area of Conservation (SAC), located approximately 6.5 km east of the site. The SSSI SAC contains important habitats for submerged aquatic plants and emergent vegetation, which attracts a range of fauna species including notable birds and invertebrates.

Taking into account the reasons for the SSSI and SAC designations, it is deemed highly unlikely that the development will have an impact on the aquatic plant, bird, and invertebrate communities. Additionally, due to the distance present between the site and the SSSI and SAC and the anthropogenic barriers, such as the M66 and the residential and commercial areas of Bury that lay between them no negative impacts on the designated site are anticipated as a result of the development. Furthermore, consultation with MAGIC Mapping identified that the proposed development does not meet the requirements that would justify further consultation with Natural England for the development to proceed (accessed September 2022).

Chesham Woods Site of Biological Importance (SBI) and Local Nature Reserve (LNR) is located approximately 670 m north of the site. The site contains six woodlands including broadleaved semi-natural woodland and broadleaved semi-natural plantation.

Taking into consideration the reason for the SBI and LNR designation, it is deemed unlikely that the development will have an impact on the woodlands present. Additionally, due to the distance present between the site and the SBI and LNR and the anthropogenic barriers, such as B6222 and residential and commercial areas of Bury that lay between them no negative impacts on the designated site are anticipated as a result of the development.

No increase in visitor numbers is anticipated on the Rochdale Canal SSSI SAC and Chesham Woods SBI LNR as a result of the development due to a low number of residential units being constructed.

4.3. 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, birds, hedgehogs, and common amphibians. Badger is also anticipated to be present within the local area. The hardstanding and amenity grassland is of the lowest value for wildlife, with the scattered trees, hedgerows, and introduced shrub comprising the areas of the highest value.



4.3.1. HEDGEROWS AND SCATTERED TREES

It is recommended that, where possible, trees and hedgerows are retained and protected through development. It is anticipated that some trees, and hedgerows may require removal to facilitate development, and where this is needed, new landscape planting will be introduced to mitigate the loss. Where hedgerows require removal, replacement hedgerow planting is to be undertaken as soon as practicable to mitigate the loss and to maintain the commuting feature through the site. A mix of native woody species is to be utilised to create a species-rich hedgerow, increasing the value of the hedgerows currently on-site.

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 aucuparia*).
-  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 hedgerows 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. The fencing must extend outside the canopy of the retained trees and must remain in position until the end of development 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*.

4.4. PROTECTED AND NOTABLE SPECIES

4.4.1. BREEDING BIRDS

The site was assessed as having value for common bird species within the scattered trees, introduced shrub, and hedgerows.

If any vegetation requires removal, it should be removed outside of the breeding bird season (March to September inclusive). If this is not possible, a suitably qualified ecologist will undertake a nesting bird check up to 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, landscape planting, as detailed in Section 4.3.1, should be introduced to mitigate the loss of any trees removed to facilitate the development. Bird boxes could also be installed throughout the development to enhance the site's value for the species group.

4.4.2. BATS

The site was found to have value for foraging bats within H1, H2, scattered trees and the introduced shrub and was also found to have roosting potential within B1, B2, and B3.

It is recommended that the proposed Lighting Plan considers the habitats of the highest importance. It is recommended that any security lighting during construction is appropriately placed to avoid being directed at any retained habitats such as H1 and H2, scattered trees and the introduced shrub.

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

- ✿ Lighting should be pre-fixed on any proposed buildings, to ensure impacts on sensitive areas such as H1, H2, scattered trees and the introduced shrub 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. A series of bat boxes could be installed throughout the development to enhance the site's value for the species group.

4.4.3. BADGERS

No badger setts were identified on-site and the site was not assessed as providing sett building and foraging resources for the species. However, the species is anticipated to be present within the wider area.

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

4.4.4. HEDGEHOGS

During site clearance, the vegetation should also be strimmed to 30 cm and then checked for hedgehogs prior to clearance to ensure no sheltering hedgehogs are impacted by the works. If hedgehogs are located, they should be carefully moved by hand to an area outside of the working area. It is recommended that if any of the vegetation requires removal, it should be removed outside of the hedgehog hibernation period (November-March).



4.5. INVASIVE PLANT SPECIES

Field horsetail was identified within the site. It is recommended these species are eradicated from the site due to the damage the species causes to hardstanding.



5. FURTHER SURVEYS

5.1. BATS

B1, B2, and B3 were assessed as having **Low** roosting potential therefore it is recommended that one Nocturnal Bat Survey is required between May and August (inclusive) on B1, B2 and B3.

The survey is 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. Nocturnal surveys are generally seasonally constrained to May to September (inclusive). However, the low bat potential survey will be required between May-August (inclusive).

Should a bat roost be identified within B1, B2 or B3 during the survey, a further two Nocturnal Bat Surveys will be required on the individual building identified as having a bat roost. Further surveys will be used to inform a European Protected Species Licence (EPSL), which will be required to destroy any identified bat roosts with B2 and B3. Mitigation should be put in place to prevent any disturbance to bats roosting within B1. An EPSL can only be granted once full planning permission has been obtained and all wildlife conditions have been discharged.

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
ONE NOCTURNAL BAT SURVEY ON B1, B2 AND B3	May-August (inclusive)



6. BIODIVERSITY NET GAIN

The scheme should strive to achieve biodiversity net gain, as per “Biodiversity Net Gain; Good Practice Principles for Development” CIEEM, CIRIA, IEMA (2016). Full details of this and a calculation of net gain could be completed after detailed landscape plans have been prepared. An ecologist should be consulted initially to inform proposals. The following habitat measures will increase the on-site biodiversity:

-  Retaining the Hedgerows and scattered trees.
-  Native Hedgerow Planting.
-  Native Scrub Planting.
-  Wildlife Ponds.
-  Broadleaved Trees.

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

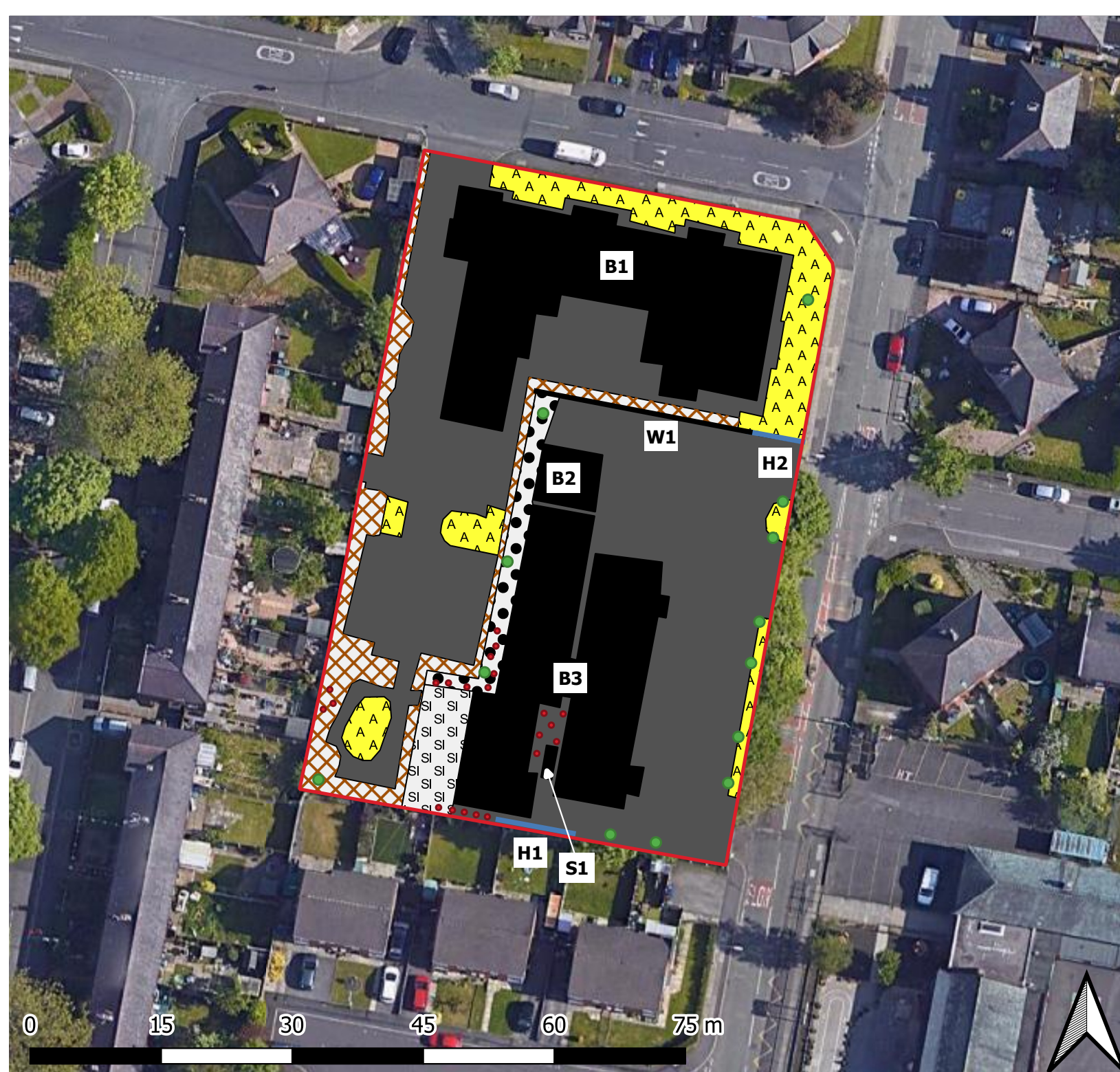
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END OF REPORT



APPENDIX I

PHASE 1 HABITAT PLAN



Key:

- Site boundary
- Hedgerows
- Walls
- Field Horsetail
- Scattered trees
- Amenity grassland
- Bare ground
- Buildings and structures
- Hardstanding
- Introduced shrub
- Poor semi-improved grassland

Notes

Issue: 1	Revision: 1	Date: 12/09/2022	Drawn: CJ	Authorised: HM
Client: Irwell Valley Homes			Job No. 80-819	Date: 12/09/2022
			Drawing No. 001	Scale: 1:1000 @ A4
Job title: Willow Street, Bury			Drawing title: Phase 1 Habitat Plan	



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APPENDIX II

BUILDING DESCRIPTION

REF.	DESCRIPTION	PHOTOGRAPH
B1	Building 1 comprised a residential unit containing self-contained apartments. The building comprised red brick walls. The wooden cladding was present under several windows on all aspects of the building. The roof comprised tiles with lead flashing and end dry verges. The building was in fairly good condition on all aspects, one gap was present within two pieces of the soffit on the eastern aspect. This gap could provide roosting opportunities for a small number of crevice-dwelling bats on an occasional basis. The wooden cladding on the northern, eastern, and western aspects had lifted sections along the bottom of the feature. This created a crevice between the brickwork and wooden cladding. The crevice could support a small number of bats on an occasional basis. The dry-end verges on the roof on the eastern and western aspects contained gaps where the verges end. These small gaps could support a small number of crevice-dwelling bats on an occasional basis. B1 was assessed as having roosting potential for a small number of crevice-dwelling bats on an occasional basis within a small gap within the soffit, crevices present between the wooden cladding and brickwork and gaps at the end of the dry end verges. As such, B1 was assessed as having Low bat roosting potential.	
B2	Building 2 comprised a double roller door garage previously used for storage. The walls comprised red brick walls with quions present adjacent to the doorways. The roof comprised corrugated metal with metal bargeboards. The majority of the brickwork was well sealed however, one brickwork crevice was present along the northern aspect. The brickwork crevice could provide a small number of crevice-dwelling bat species roosting opportunities on an occasional basis. Crevices were present around the quions on the eastern aspect of the building, these	



REF.	DESCRIPTION	PHOTOGRAPH
	crevices could support a roost containing a small number of crevice-dwelling bats on an occasional basis. B2 was assessed as having roosting potential for a small number of crevice-dwelling bats on an occasional basis within an area of damaged brickwork and services present around the quions. As such, B2 was assessed as having Low bat roosting potential.	
B3	Building 3 comprised red brickwork walls with a corrugated metal roof on the eastern aspect. The western aspect of the building comprised metal sheeting walls, barge board and a corrugated metal roof. Externally, B3 featured a lifted section of bargeboard along the southern aspect of the building. This could provide internal access to the loft void within the building. The area of lifting could provide a crevice that could support a small number of crevice-dwelling bats on an occasional basis. The main entrance to B3 featured plywood bargeboards that were damaged and contained lifted sections. The damage and lifted sections of boarding could provide roosting opportunities for a small number of crevice-dwelling bats on an occasional basis. Internally, the building comprised several refrigerated rooms with food preparation and office space. Internal access for bats to B3 was possible via the lifted metal bargeboard along the southern aspect. The access point provided access to the building's loft void.	



REF.	DESCRIPTION	PHOTOGRAPH
	The loft void comprised a corrugated metal roof with open beams and insulation. Also present were thin metal supporting beams. The brickwork was present at each gable end and featured sections of peeling paintwork. The paintwork was thin and as such did not provide any potential roosting features. The internal brickwork was well sealed and did not contain any crevices that could provide a roosting feature. As the internal loft void did not contain any potential roosting features, the building could not support a larger number of bats on a more regular basis. B3 was assessed as having roosting potential for a small number of crevice-dwelling bats on an occasional basis within a crevice behind a section of lifted metal bargeboard and damaged and lifted sections of plywood bargeboard. As such, B3 was assessed as having Low bat roosting potential.	
S1	Structure 1 comprised a small substation located between the two sections of B3. The gaps created by the vents could provide internal access to S1. However, no potential bat roosting features were present within the structure. S1 was assessed as having no potential roosting features and as such, assessed as having Negligible bat roosting potential.	



REF.	DESCRIPTION	PHOTOGRAPH
W1	Wall 1 comprised a red brick wall approximately 1.5 m in height. The brickwork of the wall was well sealed with no brickwork crevices present. Some small holes were present along the bottom of the wall. However, these were discounted as having bat roosting potential due to the distance from the ground. W1 was assessed as having no potential roosting features and as such, assessed as having Negligible bat roosting potential.	

