FUTURESECOLOGY

Precious Holdings

Land at Providence Street, Earlsheaton

ECOLOGICAL IMPACT ASSESSMENT

Report Reference Number: FE385/EcIA01

August 2024

Please note that the report is likely to be valid for a period of 12 months[1]. Where specific protected species surveys are undertaken the validation period of these surveys differs and must be considered carefully when utilising the data present within this report. For example, bat nocturnal emergency surveys are likely to be valid for a period of two seasons (a season being May – September) to support a planning application though to apply for a European Protected Species Licence surveys must be up to date and should be conducted in the current or most recent optimal survey season.

Futures Ecology Ltd
Carrwood Park, Swillington Common Farm, Selby Rd, Leeds LS15 4LG

Company Number: 12125083

REV	Issue Status	Author or Reviewer	Name & Qualifications	Position	Date
-	Draft 1	Author	K. Haymes BSc (Hons) MCIEEM	Senior Ecologist	19.08.2024
		Reviewer	J. Eales BSc	Managing Director	20.08.2024

[1] https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf

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APPENDICES

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1.0 EXECUTIVE SUMMARY

1.1 An Ecological Impact Assessment (EcIA) was undertaken following published guidelines on the likely effects upon biodiversity as a result of development proposals. The assessment draws from a desk study and field surveys of the Site and surrounding area.

1.2 A residential development is proposed to include 30 dwellings with associated infrastructure and greenspace. The remaining woodland within the Site will be retained and managed to maximise its biodiversity value in the long-term. The Site is allocated for residential development within the Kirklees Local Plan as housing site HS50[2].

1.3 The assessment identified the following ecological features which could be affected by proposals or warrant consideration due to the legal protection afforded them:

- Denby Grange Colliery Ponds SAC;
- Habitats of Principal Importance (HPI);
- Kirklees Wildlife Habitat Network (KWHN);
- Semi-natural broadleaved plantation woodland;
- Badger *Meles meles*;
- Generalist bat species;
- Nesting Birds;
- Hedgehog *Erinaceus europaeus*; &
- Fox *Vulpes vulpes.*

1.4 No impacts are expected to Denby Grange Colliery Ponds SAC or offsite HPIs within 1km.

1.5 Part of the Site is mapped as Deciduous Woodland HPI, however following the habitat assessment the woodland was not considered to meet the definition of Lowland Mixed Deciduous Woodland HPI. Some woodland has previously been felled; all the remaining woodland is to be retained in accordance with the Illustrative Masterplan. To offset the losses which have already taken place, the remaining woodland will be managed & enhanced to maximise its biodiversity value. This will be outlined in a **Biodiversity Management Plan (BMP)**, to be conditioned with any planning consent.

1.6 Impacts during construction to retained habitats and sensitive offsite habitats (Kirklees Wildlife Habitat Network (KWHN)) will be minimised through the careful control of construction activities through industry best practice and outlined within a **Construction Environmental Management Plan (CEMP)** to be conditioned with any planning consent.

1.7 Roosting bats were found to be likely absent from onsite buildings B1 (a & b) and B2 following nocturnal surveys, however given inherent roost potential, **precautionary working methods** will be adopted during the renovation works to ensure continued compliance with the legislation. This will be outlined in the CEMP.

[2] Kirklees Local Plan Allocation and Designations, Adopted 27 February 2019 https://www.kirklees.gov.uk/beta/planning-policy/pdf/local-plan-allocations-and-designations.pdf

1.8 To comply with relevant legislation, any removal of vegetation should be timed to avoid the bird nesting season where possible (March to September inclusive, although dates do vary depending on the species and weather conditions).

1.9 An **updated badger survey** will be carried out prior to works commencing on-site. In order to minimise risk to species such as badger, fox and hedgehog, precautionary working methods are provided in this document.

1.10 Mitigation is required to avoid impacts from lighting the woodland parcels during the construction and operational phases of the development. A **sensitive lighting strategy** will be required to be conditioned with any planning consent.

1.11 The inclusion of compensation and biodiversity enhancements is provided within Section 6 and 10 of this report to maximise the biodiversity value of the Site.

2.0 INTRODUCTION

2.1 The following report has been prepared by Futures Ecology Ltd. on behalf of Precious Holdings. It provides the results of a suite of ecological surveys undertaken at land at Providence Street, Earlsheaton, Kirklees, West Yorkshire (central grid reference: SE 25924 21175) during April – August 2024.

2.2 This document has been prepared with reference to the Chartered Institute of Ecology and Environmental Management's (CIEEM) Ecological Impact Assessment (EcIA) Guidelines[3]. The key objectives of the Ecological Impact Assessment Report are to:

- Gain an understanding of the baseline ecology of the Site and immediate surrounding area;
- Determine whether the Site supports or has the potential to support protected species;
- Identify any likely ecological constraints and use to inform future layouts (if necessary);
- Assess the likely significant impacts of the proposed Masterplan on the Important Ecological Features;
- Identify mitigation measures likely to be required;
- Identify the opportunities offered by the potential project to deliver ecological enhancement; and
- Assess the Sites ability to deliver net gain.

2.3 At the time of writing, bat activity surveys are ongoing at the Site, therefore an addendum Bat Survey Report and Bat Updated Impact Assessment will be provided following the completion of these surveys in October 2024, as necessary.

[3] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.

SITE LOCATION AND CONTEXT

2.4 The Site comprises ~2 ha of land within the residential area of Earlsheaton. Habitats onsite comprise broadleaved woodland, some of which has been recently removed, tall ruderal vegetation, poor semi-improved grassland and bramble scrub. Homestead Mill with buildings, (B1a, B1b, B2) shipping containers and associated hardstanding is present in the north. The Site is bound on all aspects by housing.

DEVELOPMENT PROPOSALS

2.5 A residential development is proposed to include 30 dwellings with associated infrastructure and greenspace. The remaining woodland within the Site will be retained and managed to maximise its biodiversity value in the long-term.

BACKGROUND

2.6 The Site is allocated for residential development within the Kirklees Local Plan as housing site HS50[4].

3.0 LEGISLATION, PLANNING POLICY AND GUIDANCE

3.1 The policy and guidance framework for nature conservation is provided by various national, regional, and local planning policies as outlined below, with further details, as necessary, within relevant subsequent sections.

Legislative Framework

3.2 The following legislation and European Directives afford protection to wildlife and have been used to inform this assessment.

- The Environment Act 2021[5];
- The Conservation of Habitats & Species Regulations 2017 (as amended)[6];
- The EC Habitats Directive (Directive 92/43/EEC)[7] as translated into UK law by The Conservation of Habitat and Species Regulations 2017 (as amended);
- The EC Birds Directive (Directive 79/409/EEC)[8]; as translated into UK law by The Conservation of Habitat and Species Regulations 2017 (as amended);
- Wildlife and Countryside Act 1981 (as amended) (WCA)[9];
- Natural Environment and Rural Communities Act 2006 (NERC)[10].

[4] Kirklees Local Plan Allocation and Designations, Adopted 27 February 2019 https://www.kirklees.gov.uk/beta/planning-policy/pdf/local-plan-allocations-and-designations.pdf
[5] https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted
[6] HMSO. The Conservation of Habitats and Species Regulations 2017 (as amended) - No.1012
[7] EC (1992) Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (The EC Habitats Directive).
[8] EC (1979), Council Directive 79/409/EEC on the Conservation of wild birds (EC Birds Directive).
[9] HMSO. The Wildlife and Countryside Act 1981 (as amended).
[10] HMSO. (2006), Natural Environment and Rural Communities Act.

- The Protection of Badgers Act 1992[11].
- The Hedgerow Regulations Act 1997[12].

National Planning Policy Framework (NPPF)

3.3 The latest NPPF 2023[13] sets out the Government's planning policies for England and how these are expected to be applied within the planning system. It provides a framework for local councils to produce local plans and determine planning applications in order to achieve more sustainable developments.

3.4 The former UK Biodiversity Action Plan (BAP) has been used to compile the statutory lists of priority species and habitats as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (also referred to as Habitats and Species of Principal Importance). These lists continue to be regarded as conservation priorities under the NPPF, although the UK Biodiversity Action Plan (BAP) has now been superseded by the UK Post-2010 Biodiversity Framework[14] and Biodiversity 2020[15].

Local Biodiversity Action Plan

3.5 Local BAPs are a key element for securing the requirements of the NPPF at a local level, consequently this assessment has taken due consideration of the priority habitats and species within the Kirklees Biodiversity Action Plan[16].

Local Planning Policy

3.6 Within Kirklees all planning decisions are based on the Kirklees Local Plan, which was adopted in February 2019[17]. The key local policy concerned with ecology is Policy LP30 which states;

Development proposals will be required to:-

- *result in no significant loss or harm to biodiversity in Kirklees through avoidance, adequate mitigation or, as a last resort, compensatory measures secured through the establishment of a legally binding agreement;*
- *minimise impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist;*
- *safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network at a local and wider landscape-scale unless the loss of the site and its functional role within the network can be fully maintained or compensated for in the long term;*

[11] HMSO. The Protection of Badgers Act 1992 (as amended).
[12] HMSO. The Hedgerow Regulations Act 1997
[13] Department for Levelling Up, Housing & Communities (December 2023). National Planning Policy Framework. London
[14] JNCC and Defra (on behalf of the Four Countries' Biodiversity Group) (2012) UK Post-2010 Biodiversity Framework. July 2012.
[15] DEFRA (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services.
[16] https://www.naturalkirklees.org/resources/kirklees-biodiversity-action-plan/
[17] https://www.kirklees.gov.uk/beta/planning-policy/pdf/local-plan-strategy-and-policies.pdf

- *establish additional ecological links to the Kirklees Wildlife Habitat Network where opportunities exist; and*
- *incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone.*

Other guidance

Birds of Conservation Concern

3.7 Leading governmental and non-governmental conservation organisations in the UK have reviewed the population status of 245 bird species regularly found in Britain and, using standardised criteria, have assessed and assigned all bird species onto lists of conservation concern[18].

3.8 Birds are placed into one of three lists - Red, Amber or Green and although these listings offer no further legal protection, they are meant to guide conservation action for the individual species. The listings reflect an individual species' global and European conservation status as well as that within the UK and additionally measure the importance of the UK population in international terms.

4.0 METHODOLOGY

PERSONNEL

4.1 The Habitat Survey and protected species survey assessment was conducted by M. Baker BSc (Hons), MSc, ACIEEM. M. Baker has over 5 years' experience in ecological consultancy, including habitat surveys and site assessments for protected species. M. Baker is appropriately qualified for the surveys based on the CIEEM competencies for species surveys and is registered to use a great crested newt (GCN) *Triturus cristatus* (2020-49701-CLS-CLS).

4.2 The Ground Level Tree Assessment (GLTA) and internal / external building assessment was undertaken by K. Haymes BSc (Hons) MCIEEM. K. Haymes has over 8 years' experience in ecological consultancy, including external and internal assessments for roosting bats and holds a Level 2 bat licence (2020-46132-CLS-CLS). K. Haymes is also registered to use a GCN licence (2018-35049-CLS-CLS) and a barn owl *Tyto alba* licence (2023-11761-CL29-OWL).

4.3 The bat activity surveys were led by T. Stratton MSc, BSc (Hons) and E. Padmore, BSc (Hons) who are both appropriately qualified for the surveys based on the CIEEM competencies and have experience of conducting and leading field surveys for protected species across a wide range of sites across Yorkshire.

4.4 The bat nocturnal surveys were led by J. Eales BSc., or a suitably accredited agent,. J. Eales has 20 years' consultancy experience including field surveys, project management,

[18] Stanbury *et al* (2021), The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114, 723-747. https://britishbirds.co.uk/sites/default/files/BB_Dec21-BoCC5-IUCN2.pdf

planning support and business management. J. Eales holds several protected species licences for bats (Level 2 CL18 2015-16150-CLS-CLS), GCN (Level 1 Survey Licence CL08 2015-17861-CLS-CLS), barn owl (CL29 / 00113), and white clawed crayfish *Austropotamobius pallipes* (2016-22651-CLS-CLS).

DESK STUDY

4.5 Prior to the field survey, aerial photographs and mapping tools were reviewed using online mapping resources at a minimum scale of 1:25,000; Google Maps[19]; and the Multi Agency Geographic Information for the Countryside (MAGIC)[20] to assess the landscape context of the survey area and surrounding areas.

4.6 The MAGIC website was used to obtain information about:

- Statutory designated sites of international, national and local importance;
- Impact Risk Zones (IRZs) for Sites of Special Scientific Interest (SSSIs), Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites;
- Approved European Protected Species Mitigation (EPSM) licences, and
- Natural England Environmental DNA surveys and Habitat Suitability Assessments of Ponds for great crested newt in support of District Level mitigation Licensing.

4.7 To support the field survey and compile baseline information of relevance to the site, ecological information was sought from third party organisations:

- West Yorkshire Ecological Service (WYES);
- West Yorkshire Bat Group (WYBG); and
- Natural England's Open Dataset[21].

4.8 Relevant data requested included records of protected or notable species and sites designated for nature conservation interest.

4.9 The search area for designated sites and protected species is determined by the likely Zone of Influence[22] and the likely significant affect. The search areas for the various levels of site designation and for protected / notable species is detailed below:

- Sites of international statutory designation such as Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar Sites are searched for within a 10km radius around the application site.
- Sites of national or regional importance with a statutory designation of Site of Special Scientific Importance (SSSI) or National Nature Reserve (NNR) within 2km.

[19] www.google.com/maps
[20] www.magic.defra.gov.uk
[21] https://data.gov.uk/dataset/8643f1b9-b419-4ee8-8e9c-18200e0edc31/great-crested-newt-edna-habitat-suitability-index-pond-surveys-for-district-level-licensing-2017-2018-2019
[22] The Zone of Influence (ZOI) is defined by CIEEM as being the "area over which ecological features may be affected by biophysical changes as a result of a proposed project and associated activities" CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater and Marine.

- Sites of local importance with statutory designation of Local Nature Reserve (LNR), or non-statutory designation of Site of Importance for Nature Conservation (SINC) or the equivalent Local Wildlife Site (LWS) within 1km; and
- Records of notable / protected species (i.e., including Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 and local Biodiversity Action Plan (LBAP) species within 1km and bats within 2km.
- EPSM licences relating to bats within 2km and GCN within 1km.

FIELD SURVEY – HABITATS

Habitat Survey

4.10 The survey was undertaken on 11th April 2024, during weather conditions that were dry and clear. Survey methodology followed guidance from Joint Nature Conservation Committee (JNCC) 2016[23] comprising a walkover of the survey area mapping (using JNCC standard habitat codes) and broadly describing and classifying the principal habitat types and other features of interest. The frequencies at which plant species occurred were noted using the DAFOR24 method. Whilst the plant species lists obtained should not be regarded as exhaustive, sufficient information was obtained to determine broad habitat types. Habitat types were also described and evaluated in accordance with the UK Habitat Classification System (UKHab, 2023)[25].

4.11 Habitats were also assessed for their potential to support protected or notable species including any incidental sightings of birds recorded during the walkover. Where potentially suitable habitats were observed during the scope of this assessment, detailed protected species surveys were undertaken using methodology detailed below.

4.12 The distribution and extent of any invasive species listed on Schedule 9, Section 14 of the Wildlife and Countryside Act 1981 (*as amended)* were also noted during the survey.

BIODIVERSITY IMPACT ASSESSMENT (BIA)

4.13 In anticipation of the requirement for a BIA, to quantity deliverable net gain for a future application the baseline value of the habitats within the site have been calculated utilising the Statutory Biodiversity Metric.

FIELD SURVEY – FAUNA

Badger *Meles meles*

4.14 A badger survey was undertaken on 11th April 2024, within the application site and 30m beyond the boundary where possible. The survey followed standard methodology as

[23] JNCC (2016) Handbook for Phase1 Habitat Survey – a technique for environmental audit. ISBN 0 86139 636 7

[24] https://bsbi.org/wp-content/uploads/dlm_uploads/Sampling_Guidance_-_Annex_1_v4_April_2011.pdf

[25] UKHab (2023) The UK Habitat Classifications – Habitat Definitions Version 2.0

outlined by Natural England (2015)[26] and Harris *et al* (1989)[27], Creswell *et al.* (1990)[28]. Field signs searched for include: setts, earth mounds, bedding material, mammal paths, latrines, snuffle holes, prints, hairs, scratching posts etc.. The identification of some signs on their own does not necessarily provide conclusive evidence of the presence of badgers.

4.15 The status and level of activity associated with a sett are categorised using the following information;

- Main sett: usually continuously used with significant signs of activity, including a large number of holes and spoil mounds;
- Annexe sett: usually found close to a main sett and connected to it by well used paths. These setts are not continuously occupied;
- Subsidiary: lesser-used setts usually comprising a few holes and without associated well-used paths.
- Outlier: one or two holes without well-worn paths, with very sporadic use.

4.16 The level of activity is determined by the following parameters;

- Active: clear of debris, trampled spoil mounds and obviously active e.g., presence of prints, hair and bedding;
- Disused: partially or completely blocked or collapsed.

Bats

Daytime Bat Walkover (DBW)

4.17 The DBW was undertaken on 11th April 2024.

Roost Habitat – Buildings

Internal & External Building Visual Inspection

4.18 All buildings within the Site boundary were assessed for their potential to support roosting bats using statutory guidance (Natural England[29]) and best practice survey methodology[30]. The survey was undertaken by an ecologist with a Natural England level 2 class licence to survey for bats (reference number: 2020-46132-CLS-CLS) on 3rd May 2024.

4.19 The buildings were inspected externally using close focussing binoculars, a high-powered torch and endoscope where appropriate. Features such as small gaps around or under barge/soffit/fascia boards, windows, lintels, flashing, external pipework and or raised or

[26]Natural England (2015) Badger Surveys and Mitigation accessed May 2021 https://www.gov.uk/guidance/badgers-surveys-and-mitigation-for-development-projects#survey-methods (accessed December 2019)
[27] Harris, S., Creswell, P., & Jefferies, D. (1989). *Surveying Badgers.* The Mammal Society.
[28] Cresswell, P., Harris, S., & Jeffries, D.J. (1990) The history, distribution, status, and habitat requirements of the badger in Britain. Nature Conservancy Council.
[29] https://www.gov.uk/guidance/bats-surveys-and-mitigation-for-development-projects (accessed March 2020)
[30] Collis, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).* The Bat Conservation Trust, London.

missing roof/ridge tiles or gaps at gable ends, which have the potential for use as access points, were noted. Evidence that bats actively used such features included: staining within and around the gaps or bat droppings / urine staining under gaps. The presence of cobwebs and or general detritus within and around potential access points was used as an indicator that bats had not recently used the area to access the building.

4.20 Where accessible and safe to do so, the interiors of the building including roof voids and cellars were assessed for evidence of bat activity and for the potential to be used by roosting bats. Evidence of a roost would be determined by the presence of live or dead bat(s), concentrated piles or scattered bat droppings, feeding remains such as insect wing fragments as well as scratch marks and or staining from mammalian fur oil/ urine.

4.21 An assessment was made on the level of bat roosting potential offered by the structures, based on the presence of the features detailed above. Table 1 below broadly classifies the potential categories and discusses the relevance of such features, where present.

Table 1 - Bat Roost Potential Classification Buildings - Based on Table 4.1 and Table 7.2 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2023).

Classification / Suitability	Description of Roosting Habitat within buildings	Likely Further Survey Work
None	No habitat features onsite to be used by any roosting bats at any time of the year.	None.
Negligible	No obvious habitat features onsite likely to be used by roosting bats; however a small element of uncertainty remains.	None.
Low	A structure with one or more potential roost sites or features (PRF) that could be used by individual bats opportunistically at any time of the year. These features do not provide enough space, shelter, suitable conditions and or surrounding suitable habitat to be used on a more regular basis or by larger numbers of bats. The feature is unlikely to be suitable for hibernation or maternity roosts. Examples include (but are not limited to); loose/lifted tiles, small gaps beneath a soffit board.	Nocturnal presence / absence surveys are likely to be required to give confidence in a negative result. At least one dusk emergence survey during the appropriate survey period. Further roost characterisation surveys would be required should a roost be confirmed that will be affected by development proposals.
Moderate	A structure with one or more potential roost sites or features that could be used by bats due their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (in respect to roost type only and not species conservation status).	At least two nocturnal presence / likely absence required to give confidence in a negative result. Two dusk emergence surveys during the appropriate period. Surveys should be evenly spread throughout the season with a minimum of at least 3 weeks apart. Should a roost be confirmed further roost characterisation surveys be required.

Classification / Suitability	Description of Roosting Habitat within buildings	Likely Further Survey Work
High	A structure with one or more potential roost sites that are obviously suitable for use by large numbers or bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	At least three nocturnal presence / likely absence surveys during the appropriate period required to give confidence in a negative result. Surveys should be evenly spread throughout the season with a minimum of at least 3 weeks apart.
Confirmed Roost	Evidence of roosting bats in the form of live or dead bats, droppings, urine staining, mammalian fur oil staining etc.	At least three nocturnal surveys to ascertain the status of the roost during appropriate survey period. Surveys should be evenly spread throughout the season with a minimum of at least 3 weeks apart.

Ground Level Tree Assessment (GLTA)

4.22 All trees to be affected by the proposals within the survey area were assessed for their potential to support roosting bats using statutory guidance (Natural England, 2019)[31] and best practice survey methodology (Collins, 2013[32] and Mitchell-Jones, A.J. and McLeish, A.P. (eds), 2004)[33]. The survey was undertaken on 3rd May 2024 by an ecologist with a Natural England level 2 class licence to survey for bats (reference number: 2020-46132-CLS-CLS).

4.23 The trees were inspected from the ground using close focussing binoculars, a high-powered torch, and an endoscope where appropriate. Potential Roosting Features (PRF) for bats such, holes / cavities, loose bark, cracks / splits, occluded bark, and gaps behind ivy stems (please note that this list is not exhaustive) were sought (Based on P16, *British Standard 8596:2015*[34]). Other factors such as orientation of the feature, its height from the ground, the direct surroundings and its location in respect to other features may enhance or reduce the potential value of the PRF. Signs indicating possible use by bats were also recorded such as bat droppings, odour, scratches, staining and audible sounds.

4.24 An assessment was made on the level of bat roosting potential offered by the trees, based on the presence of the features detailed above. Table 2 below outlines the suitability categories as per the Bat Survey Guidelines[35] which now supersedes The British Standard Document[14] which groups trees with moderate and high potential.

[31] Bats: surveys and mitigation for development projects: https://www.gov.uk/guidance/bats-surveys-and-mitigation-for-development-projects (accessed 12/11/2019)
[32] Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologist: Good practice Guidelines (4th edition), The Bat Conservation Trust, London.
[33] Mitchell-Jones, A.J. and McLeish, A.P. (eds) (2004) *Bat Workers' Manual (3rd edn*). JNCC, Peterborough.
[34] British Standard (2015) BS 8596:2015 *Surveying for bats in trees and woodland – Guide*, October 2015.
[35] Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologist: Good practice Guidelines (4th edition), The Bat Conservation Trust, London.

Table 2: Suitability of Trees for Bat Roosts – Based on Table 4.2 of Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologist: Good practice Guidelines (4th edition), The Bat Conservation Trust, London.

Classification / Suitability	Description	Likely Further Survey Work
NONE	Either no PRFs in the tree of highly unlikely to be any	None
FAR	Further assessment required to establish if PRFs are present in the tree.	Aerial Assessment or further GLTA required by a licensed or accredited bat licensed worker.
PRF	A tree with at least one PRF present.	PRF Inspection Survey (Aerial Assessment). If this is not possible alternative access methods such as a MEWP and / or nocturnal survey work must be considered.

4.25 Upon completion of the above assessment the PRF's are assigned the following:

- PRF-I – PRF is only suitable for individual bats or very small numbers of bats due to size of lack of suitable surrounding habitats. No further survey work may be required but a precautionary working method statement may be appropriate.
- PRF-M – PRF is suitable for multiple bats and may therefore be used by a maternity colony. These will require further aerial (close) inspection and / or nocturnal surveys which comprise 3 visits between May – September, with at least two in the period May – August. Each visit should be at least 3 weeks apart.

Nocturnal Emergence Surveys

4.26 Nocturnal surveys were undertaken of buildings B1 and B2 in July and August 2024. Building B1 (a & b) were identified as providing moderate bat roosting potential and B2 was identified with low bat roosting potential. The proposals include the renovation of these buildings.

4.27 This methodology takes into account the statutory guidance from Natural England and Bat Conservation Trust Guidelines[36].

4.28 Surveyors were positioned on either side of the buildings to ensure all aspects of the buildings could be observed. Wildlife Acoustics Inc. Echo Meter Touch Pro2® bat detectors in conjunction with the Echo Meter Touch® app for the Apple Inc iPad® and Android were used during the surveys. Infra-red cameras (Canon XA60) and 850nm infra-red lights (IRL) (Night Fox XB5/XC5 or 20-850nm LED Irl Emitter) were also utilised during the surveys to assist with visibility.

4.29 The dusk emergence surveys were undertaken from approximately 15 minutes prior to sunset and for a duration of between 90-120 minutes. Data collected, namely recorded bat calls, were analysed, where necessary, using Kaleidoscope© version 12 (Wildlife Acoustics Inc) software package, by taking measurements of the peak frequency, inter-pulse interval, call duration and end frequency. This method was used to confirm the species of bat recorded during the surveys.

[36] Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologist: Good practice Guidelines (4th edition), The Bat Conservation Trust, London.

4.30 The surveys were undertaken during suitable weather conditions, when the ambient air temperature exceeded 10°C and there was little to no rain or wind (Beaufort 3 or 5m/s). Table 3 below provides a summary of the survey dates and weather conditions.

Table 3: Nocturnal Survey Dates and Weather Conditions

Date	Building	Sunset	Temperature (℃) Start / End	Rain (0-5) Start / End	Wind (0-5) Start / End	Cloud (%) Start / End
25.06.2024	B1a, B1b, B2	21:39	13 / 13	0 / 0	1 / 0	15 / 100
16.08.2024	B1a, B1b	20:32	16 / 15	0 / 0	2 / 1	5 / 15

Foraging / Commuting Habitat

4.31 The potential for the site and immediate surrounds to support foraging and commuting bats was also assessed, with particular regard being given to the presence of continuous treelines providing good connectivity in the landscape, and the presence of varied habitat such as scrub, woodland, grassland and open water in the vicinity.

Nighttime Bat Walkover (NBW)

4.32 This methodology takes into account the statutory guidance from Natural England and Bat Conservation Trust (BCT) Guidelines, with one survey visit per season (spring – April/May, summer – June/July/August, autumn – September/October)[37]. The primary objective of transects completed was to further confirm foraging areas, commuting routes and species utilisation of the development area.

4.33 At the start of the NBW surveys, ecologists were stationed on potential flight lines close to potential roost sources (such as groups of buildings or woodland onsite) before sunset until 30-60 minutes after sunset. The length of time spent stationed on potential flight lines was determined by live observations in the field.

4.34 Ecologists then walked the pre-determined walkover route in order to comprehensively cover all areas of the Site. The route included point count stops to identify activity levels around the features of potential value to bats that are to be most affected by proposals (i.e. hedgerows, scrub etc). Each point count was between 5 minutes long, during which time all bat activity was recorded. Where appropriate, surveyors stopped or made detours to observe bat behaviour.

4.35 NBWs commenced at sunset and continued for approximately 2-3 hours. Each NBW was walked at a steady pace and when a bat passed by, the species, time and behaviour was recorded on a Site plan. This information would help to form a general view of the bat activity present onsite and highlight what habitat types were associated with the activity. Echo meter touch 2 Pro for Android or IOS were utilised with Android / iOS tablets.

4.36 Post-survey, bat calls were analysed using Kaleidoscope where necessary. From this, the level of bat activity across the Site in relation to the abundance of individual species foraging and commuting along habitats was assessed.

[37] Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn). The Bat Conservation Trust, London

4.37 All NBWs were undertaken when conditions were suitable (i.e. when the ambient air temperature exceeded 10°C and there was little wind and no rain) see Table 4.

Table 4: NBW Dates and Weather Conditions

Date	Sunset	Temperature °C Start / End	Rain (0-5) Start / End	Wind (0-5) Start / End	Cloud % Start / End
20.05.2024	18:42	14 / 11	0 / 0	1 / 3	0 / 90
07.08.2024	20:51	17 / 16	0 / 0	1 / 1	90 / 50

4.38 Bat activity surveys are ongoing at Site. At the time of reporting, two NBWs have been completed, in spring and summer 2024. The autumn survey occasion will be undertaken in September / October 2024.

Automated Static Detector Surveys

4.39 Static passive recording broadband detectors were deployed onsite on a monthly basis to supplement the NWB surveys as stipulated in the guidance document Bat Conservation Trust (BCT) Guidelines for sites with Moderate or High suitability for bats[38].

4.40 Passive monitoring was undertaken using an automated logging system (Song Meter Mini Bat Acoustic Recorder) with its output saved to an internal storage device. The static detectors were placed along linear features considered to be of value to bats, such as hedgerows and tree lines.

4.41 Sample locations are determined based on expert opinion (after the DBW but may be adapted based on the NBW) or historical information. Sample sites were paired; perceived good habitat/poor habitat to allow for comparisons to be made.

4.42 Detectors were placed in the same locations each month for a period of 5 consecutive nights during weather conditions representative of the month. Detectors were programmed to activate 30 minutes before dusk and recorded continuously until 30 minutes following sunrise. Where detectors are onsite for a period over 5 days, only the first five night's of data are utilised to establish suitable comparisons between surveys.

4.43 The recorded data was analysed using Kaleidoscope analysis software to assess the amount of bat activity onsite by recording the number of bat passes.

Table 5: Automated Static Detector Dates and Weather Conditions[39]

Date	Sunset	Sunrise	Temperature °C Min- Max	Rain (mm)	Wind Average mph
24/04/24 – 29/04/24	20:25 - 20:34	05:45 - 05:34	0-10	0.00	7.67
15/05/20 – 20/05/24	21:02 - 21:10	05:04 - 04:56	16-22	0.00	7.5
26/06/24 - 01/07/24	21:40 - 21:39	04:37 - 04:41	15-25	0.00	9.12
11/07/24 – 16/07/24	21:32 – 21:27	04:51 – 04:57	13-19	0.00	7.7

4.44 Bat activity surveys are ongoing at Site. At the time of reporting, four months of data collection have been completed, from April – July 2024. The surveys will continue until September / October 2024.

[38] Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn). The Bat Conservation Trust, London
[39] https://www.wunderground.com/history/daily/gb/dewsbury/EGNMy

Great Crested Newt (GCN) *Triturus cristatus*

4.45 OS mapping and online aerial imagery were analysed for the presence of on and off-site water bodies within 500m of the application site in accordance with Natural England guidance[40].

GCN Terrestrial Habitats

4.46 An assessment of the suitability of the terrestrial habitats within the site to support GCN was completed within the subject site. Suitable terrestrial habitat includes shelter habitat such as scrub and rank vegetation and habitat that could provide suitable hibernation sites such as rubble piles, tussock grassland and compost heaps.

Reptiles

4.47 An assessment of the suitability of the habitats present to support common reptile species was completed at the time of the habitat survey. This involved a review of habitats and habitat structure suitable for the shelter of reptiles such as areas of scrub and woodpiles, grassland with well developed, varied structure; and also, the appropriate juxtaposition of areas suitable for basking shelter and forage/hunting. This assessment was based on the methodology detailed in the Herpetofauna Workers Manual (Gent and Gibson, 1998)[41], and Froglife Advice Sheet 10 – Reptile Survey (Froglife 1999)[42].

Other

4.48 Any sightings, evidence of or suitable habitats for other protected fauna, local Biodiversity Action Plan (BAP) species or otherwise notable species was recorded during the survey.

Survey Limitations

4.49 The habitat survey was undertaken in the optimal survey season, especially for woodland ground flora (spring), therefore no limitations in terms of habitat classification are expected.

4.50 It was not possible to survey the 30m around the Site fully for signs of badger due to the dense nature of the vegetation / no access to neighbouring private gardens.

4.51 The summer NBW transect route / point counts were amended during the survey due to the overgrown nature of the woodland and fallen trees blocking previous paths through. All habitats were still adequately sampled, therefore no constraints to the data are anticipated.

4.52 Access was not possible to the private garden to the west of buildings B1a, B1b and B2, therefore it was not possible to fully view this aspect during the nocturnal surveys of the buildings. Given the very low bat activity encountered during these surveys, from bats flying from the south (i.e. not from the vicinity of the buildings) this is not anticipated to

[40] Natural England: *Standing Advice Sheet: Great Crested Newts* Paragraph 4: 4.1
[41] Gent, A.H., & Gibson, S.D., *eds* 1998. *Herpetofauna Workers' Manual*. Peterborough, joint Nature Conservation Committee.
[42] Froglife 1999. Froglife Advice Sheet 10: Reptile Survey. Froglife, London

impact the conclusions of the bat nocturnal surveys, which found roosting bats to be likely absent. To negate this limitation, precautionary measures will be undertaken prior to / during any works to the buildings as detailed in the Impact Assessment below.

ASSESSMENT

Importance

4.25 Ecological features are those that are considered to be important and potentially affected by the project. Importance may relate, for example, to the quality or extent of designated sites or habitats, to habitat/species rarity, to the extent to which they are threatened throughout their range, or to their rate of decline (CIEEM 2018).

Geographical Context

4.26 The importance of an ecological feature is considered within a defined geographical context. For the purposes of the assessment this is:

- International (European)
- National (United Kingdom)
- Regional (North England)
- County (West Yorkshire)
- District (Kirklees)
- Local (Earlsheaton)

4.27 The assessment of the importance of the ecological features and the potential likelihood of an effect of the development will identify which ecological features could be significantly affected by the proposal. Only these features will be taken forward for further assessment.

4.28 Where further surveys are required to determine whether an effect would be significant, the precautionary principle would be applied, and a significant effect assumed.

Further Assessment

Significance

4.29 In order to assess the significance of effects, Important Ecological Features that could potentially be affected by the development have been identified and described and the potential effects quantified using a range of characteristics:

- Positive / negative
- Extent
- Magnitude
- Duration
- Frequency / timing

- Reversibility

4.30 For the purposes of this assessment, a 'significant effect' is an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. Conservation objectives may be specific (e.g., for a designated site) or broad (e.g., national / local nature conservation policy) or more wide-ranging (enhancement of biodiversity)[43].

Mitigation, Compensation and Enhancement

4.31 Where significant effects have been identified, the mitigation hierarchy has been considered: avoiding significant effects where possible, applying mitigation measures to minimise unavoidable significant effects and compensating for any remaining significant effects.

4.32 The assessment will include mitigation, compensation and enhancements which are proposed.

Residual Effects

4.33 Upon completion of the above, residual significant effects will then be identified. It is then only necessary to assess and report significant residual effects (those that remain after mitigation measures have been considered).

Cumulative Effects

4.34 Consideration is given to the effects that may arise cumulatively from the development proposed in combination with other plans and projects proposed/consented but not yet built and operational.

5.0 RESULTS (BASELINE)

DESK STUDY

5.1 A summary of relevant information provided by third party consultees is provided below. The original data has not been included in this report and a summary of the relevant findings is provided upon Figure 1.

Statutory Designated Sites

5.2 No statutory designated sites occur within the Site boundary.

5.3 One internationally and nationally designated site occurs within 10km of the Site: Denby Grange Colliery Ponds SAC / SSSI located 5.4km south of the Site boundary. This waterbody, created by coal-mining activity, has consistently yielded high counts of great

[43] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

crested newt *Triturus cristatus* in recent years. The pond is surrounded by wooded slopes, with adjacent anthropogenic habitat associated with the previous mining activities.

5.4 As such, Denby Grange Colliery Ponds SAC would be considered important at an **International** level.

5.5 Consultation with MAGIC site check confirms that the application site lies within the 5-10km Impact Risk Zone (IRZ) for Denby Grange Colliery Ponds SAC / SSSI. However, the development proposals do not fall within the categories that would otherwise require consultation with Natural England due to their potential impact, those being:

- *Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 4000m².*
- *General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.*

5.6 No sites of local importance with a statutory designation were located within site or within 1km of the site boundary.

Non-Statutory Designated Sites

5.7 No sites of local importance with a non-statutory designation occur within the Site or within 1km of the Site boundary.

Habitats of Principal Importance (HPI)

5.8 One parcel of Deciduous Woodland HPI is mapped within the Site. A further 43 parcels of Deciduous Woodland HPI occur within 1km of the Site boundary. Two parcels of 'No main habitat but additional habitat present' HPI occur within 1km, the closest being 312m southwest of Site. These HPIs would be considered of importance at a **Local** level.

Kirklees Wildlife Habitat Network (KWHN)

5.9 The KWHN forms part of the West Yorkshire Habitat Network (WYHN) which has been produced by combining District Wildlife Habitat Networks drawn up between 2011 and 2016 by Wakefield District Council and West Yorkshire Ecology Service (acting on behalf of Bradford, Leeds, Kirklees, and Calderdale District Councils). At the nearest point KWNH occurs 55m south of the Site boundary (Figure 1). KWHN would be considered to be important at a **Local** level.

Protected / Notable Species Records

5.10 Records of protected and notable species provided by desk study consultees are provided in Table 6 below. The species records have been filtered to comprise relevant protected and / or notable species within 1km (and bats within 2km) of the survey area from the last 20 years. The locations are shown on Figure 1.

Table 6: Summary of Relevant Protected Species Records

Species	Latin	Conservation Status	Total No. of Records	Location / Minimum distance of records from Site boundary (m)	Grid ref. accuracy of nearest record
Bat species					
Common pipistrelle	*Pipistrellus pipistrellus*	Regs (Sch2), WCA (Sch5), NERC (SPI), LBAP	Roost: 10 Field Record: 21 Total: 31	Roost: 569m S Field record: 526m West (W)	Roost: 100m Field record: 10m
Soprano pipistrelle	*Pipistrellus pygmaeus*	Regs (Sch2), NERC (SPI), WCA (Sch5), LBAP	Roost: 3 Field Record: 1 Total: 4	Roost: 1576m South-West (SW) Field record: 1576m SW	Roost: 1m Field record: 1m
Pipistrelle bat species	*Pipistrellus* spp.	Regs (Sch2), WCA (Sch5), WYBAP, LBAP	Roost: 2 Field Record: 7 Total: 9	Roost: 569m S Field record: 766 North (N)	Roost: 100m Field record: 1m
Noctule bat	*Nyctalus noctula*	Regs (Sch2), NERC (SPI), WCA (Sch5), LBAP	Roost: 0 Field Record: 2 Total: 2	Roost: N/A Field record: 639m North-West (NW)	Roost: N/A Field record: 1m
Leisler's bat	*Nyctalus leisleri*	Regs (Sch2), WCA (Sch5), NERC (SPI), LBAP	Roost: 0 Field Record: 1 Total: 1	Roost: N/A Field record: 1391m East (E)	Roost: N/A Field record: 10m
Daubenton's bat	*Myotis daubentonii*	Regs (Sch2), WCA (Sch5), NERC (SPI). LBAP	Roost: 0 Field Record: 1 Total: 1	Roost: N/A Field record: 1631m SW	Roost: N/A Field record: 1m
Brown long-eared bat	*Plecotus auritus*	Regs (Sch2), NERC (SPI), WCA (Sch5), LBAP	Roost: 2 Field Record: 4 Total: 6	Roost: 521m W Field record: 1520m SW	Roost: 1m Field record: 100m
Unidentified bat species	-	Regs (Sch2), WCA (Sch5), NERC (SPI), LBAP	Roost: 4 Field Record: 4 Total: 8	Roost: 607m S Field record: 1253m South-East (SE)	Roost: 1m Field record: 10m
Other mammal species					
European otter	*Lutra lutra*	Regs (Sch2), NERC (SPI), WCA (Sch5), LBAP	1	976m SW	1m
Bird species					
Cuckoo	*Cuculus canorus*	BoCC (Red), NERC (SPI)	1	764m S	10m

Species	Latin	Conservation Status	Total No. of Records	Location / Minimum distance of records from Site boundary (m)	Grid ref. accuracy of nearest record
Other species					
Himalayan balsam	*Impatiens glandulifera*	WCA (Sch9)	8	327m SE	10m
Giant hogweed	*Heracleum mantegazzianum*	WCA (Sch9)	3	830m SW	1m
Japanese knotweed	*Fallopia japonica*	WCA (Sch9)	3	830m SW	1m

Status Key: Regs - The Conservation of Habitats and Species Regulations 2017 (*as amended*). WCA - The Wildlife and Countryside Act 1981 (*as amended*). Sch 1 - Schedule 1. Sch 2 – Schedule 2. Sch5 - Schedule 5. Sch8 - Schedule 8. Sch9 - Schedule 9. NERC - England Natural Environment and Rural Communities Act (2006) Section 41. SPI - Species of Principal Importance. BoCC - Birds of Conservation Concern. LBAP –Kirklees BAP.

5.11 There are no records of badger *Meles meles* within 200m of the Site, and the nearest known sett is located over 1km from the Site boundary. The Site does fall within an area of increased probability of badger activity according to WYES.

5.12 A search of the MAGIC online resource revealed there were no European Protected Species Licences (EPSL) relating to bats within 2km of the Site boundary.

5.13 There are no EPSL's relating to GCN or records of GCN surveys from Natural England's Open Dataset[44] within 1km of the Site boundary. The Site does not fall within an area of District Level Licensing (DLL[45]).

HABITATS

5.14 The habitats recorded within the application Site during the habitat survey comprised:

- Buildings and hardstanding;
- Poor semi-improved grassland;
- Tall ruderal vegetation;
- Bramble scrub;
- Semi-natural broadleaved plantation woodland and felled woodland;
- Scattered scrub and broadleaved trees.

5.15 The location of the habitats recorded, and associated target notes are presented on Figure 2 and described below. The botanical species recorded in association with each habitat are listed in Appendix A.

[44] https://data.gov.uk/dataset/8643f1b9-b419-4ee8-8e9c-18200e0edc31/great-crested-newt-edna-habitat-suitability-index-pond-surveys-for-district-level-licensing-2017-2018-2019

[45] https://www.gov.uk/government/publications/great-crested-newts-district-level-licensing-schemes-for-developers

Buildings (u1b5) and hardstanding (u1b6)

5.16 Three buildings (B1a, B1b and B2) were present in the north-west of the Site. Further details can be found in the Bat section below (Photograph 1 and 2).

5.17 A hardstanding track and road were present in association with these buildings (Photograph 3).

5.18 Given their man-made nature and lack of ecological value they are not considered to be an IEF and will not be subject to further assessment in this report.

Photograph 1: Buildings B1a and B1b.

Photograph 2: Building B2.

Photograph 3: Hardstanding track adjacent to B1 and B2.

Poor semi-improved grassland (g4)

5.19 An area of poor semi-improved grassland was present in the south of the Site (Photograph 4). Species present included abundant bent grass *Agrostis* sp. alongside frequent cock's foot *Dactylis glomerata*, perennnal ryre-grass and Yorkshire-fog *Holcus lanatus*. Common ragwort *Jacobaea vulgaris*, creeping thistle *Cirsium arvense*, broadleaved dock *Rumex obtusifolius*, dandelion and cleavers *Galium aparine* were occasional. Common nettle *Urtica dioica* and bramble *Rubus fruticosus* agg. were locally abundant.

5.20 Given the limited size and low species diversity of this habitat it is not considered to be an IEF and will not be subject to further assessment in this report.

Photograph 4: An area of poor semi-improved grassland in the south of the Site.

Tall ruderal vegetation (16)

5.21 Limited areas of tall ruderal vegetation were present at the edges of other habitats on-site (Photograph 5). A range of species were present including frequent common hogweed *Heracleum sphondylium*, common nettle, cleavers, wood avens *Geum urbanum* bramble and Yorkshire fog. Common ivy *Hedera helix* alongside hawthorn *Crataegus monogyna* and sycamore *Acer pseudoplatanus* saplings were occasional. Lesser celandine *Ficaria verna* was abundant and non-native barberry *Berberis vulgaris* and Spanish bluebell *Hyacinthoides hispanica* were rare.

5.22 Given the limited size and low species diversity of this habitat it would only be considered important at a **Site** level, and therefore it would not be an IEF in the context of this assessment.

Bramble scrub (h3d)

5.23 Areas dominated by bramble scrub were present in the north-west of woodland W2 (Photograph 6). Raspberry *Rubus idaeus* was also locally frequent.

5.24 Given the limited size and low species diversity of this habitat it would only be considered important at a **Site** level, and therefore it would not be an IEF in the context of this assessment.

Photograph 5: Tall ruderal vegetation present on-site.

Photograph 6: Bramble scrub adjacent to the woodland.

Semi-natural broadleaved plantation woodland and felled woodland (w1g)

5.25 Two areas of semi-natural broadleaved woodland (W1 and W2) were present onsite.

5.26 Woodland W1 was a small parcel containing abundant sycamore alongside occasional elder *Sambucus nigra*, hawthorn, holly *Ilex aquifolium*, cherry *Prunus avium* and cherry laurel *Prunus laurocerasus*. Ground flora was limited to locally abundant common ivy and common hogweed as well as frequent bramble and cow parsley *Anthriscus sylvestris* (Photograph 7).

5.27 Woodland W2 was slightly more diverse, with abundant sycamore alongside occasional cherry, elder, holly, ash *Fraxinus excelsior*, English oak *Quercus robur*, silver birch *Betula pendula* and willow *Salix* sp. Ground flora was again fairly limited with locally frequent cleavers, creeping buttercup *Ranunculus repens*, hedge bindweed *Calystegia sepium* as well as occasional common hogweed, dandelion and wood avens. Cow parsley and common nettle were both occasional to locally frequent. Ivy was locally dominant in addition to bramble was frequent to locally dominant (Photograph 8).

5.28 Considering the definitions of Lowland Mixed Deciduous Woodland HPI[46,47,48] both areas of woodland are not considered to meet this definition due to their species composition, with both parcels recorded as containing abundant sycamore, which is a non-native broadleaved tree. Instead, these areas of onsite woodland would best meet the definition of Other Broadleaf Woodland w1g[49], which is not a Habitat of Principle Importance.

5.29 The woodland areas would be considered to be of value at a **Local** scale for their inherent value for wildlife.

5.30 An area in the centre of the Site had been subject to clearance prior to the Site visit, this has been marked as felled woodland, from the tree stumps / wood chip evident in this area and also from reviewing aerial imagery (Photograph 9).

[46] Lowland Mixed Deciduous Woodland, UK Biodiversity Action Plan; Priority Habitat Descriptions. BRIG (ed. Ant Maddock) 2008
[47] Lowland Mixed Deciduous Woodland, Natural England document: https://publications.naturalengland.org.uk/file/4687590768771072, accessed 05.08.2024
[48] UKHab (2023) The UK Habitat Classifications – Habitat Definitions Version 2.0
[49] UKHab (2023) The UK Habitat Classifications – Habitat Definitions Version 2.0

Photograph 7: Woodland W1 in the north-west of the Site.

Photograph 8: Woodland W2 in the south-east of the Site.

Photograph 9: Evidence of recently felled woodland was present in the centre of the Site.

Photograph 10: A smaller area of cleared trees in the south of the Site.

Scattered scrub (10) and broadleaved trees (32)

5.31 A limited number of scattered trees and shrub species were present within tall ruderal vegetation in the northern section of the Site (Photograph 11). Species present included sycamore, ash and elder.

5.32 The scattered scrub and trees would only be considered important at a **Site** level, and therefore it would not be an IEF in the context of this assessment.

Photograph 11: Scattered trees were present on-site.

Target notes

5.33 Features recorded as target notes on Figure 2 include:

- TN1 – Spanish bluebell and garden waste was present on the edge of the woodland (Photograph 12).

Photograph 12: Spanish bluebell and garden waste, present on the edge of the woodland.

BIA BASELINE

5.34 The summary of the habitats present on-site is provided in Table 7 below including the UK Hab equivalent habitats for the purpose of the BIA baseline.

Table 7: Summary of Habitats

Phase 1 Habitat Type	UK Habitat Classification for BNG	Condition Assessment Notes
Buildings	Developed land; sealed surface	N/A - Other
Hardstanding	Developed land; sealed surface	N/A - Other
Garden	Vegetated garden	Condition Assessment N/A
Amenity grassland	Modified grassland	Passes: C, D, E, F, G. Fails: A, B. Condition: **Poor**
Poor semi-improved grassland	Modified grassland	Passes: B, C, D, E, F, G. Fails: A Condition: **Poor**
Tall ruderal vegetation	Tall forbs	Passes: C. Fails: A, B. Condition: **Poor**
Native scrub	Bramble scrub	Condition Assessment N/A
Semi-natural broadleaved woodland (W1)	Other woodland; broadleaved	A=1, B-3, C=2, D=3, E=2, F=3, G=2, H=3, I=1, J=2, K=1, L=2, M=2. Score: 27 Condition: **Moderate**

Phase 1 Habitat Type	UK Habitat Classification for BNG	Condition Assessment Notes
Semi-natural broadleaved woodland (W2)	Other woodland; broadleaved	A=2, B-3, C=3, D=3, E=2, F=1, G=2, H=3, I=1, J=2, K=1, L=2, M=2. Score: 27 Score: **Moderate**
Semi-natural broadleaved woodland (Felled)	Other woodland; broadleaved	Condition (assumption): **Moderate**
Broadleaved trees	T1 – Medium Urban Tree	Passes: B, C, D, E. Fails: A. Condition: **Good**
	T2 – Medium Urban Tree	Passes: B, C, D, E. Fails: A. Condition: **Good**
	T3 - Small Urban Tree	Passes: A, B, C, D, E. Condition: **Good**
	T4 – Small Urban Tree	Passes: B, C, D, E. Fails: A. Condition: **Good**

5.35 From the **Statutory Metric**, the value of the existing Site habitats is **14.86 Biodiversity Habitat Units** (BHU). For more details refer to Appendix B.

FAUNA

Badger

5.36 From the desk study no records of badger were returned within 1km of the Site boundary, however the Site does fall within an area of increased probability of badger activity according to WYES.

5.37 No evidence of badger was noted during the survey, however the woodland within the Site does represent suitable foraging and sett creation habitat for this species.

5.38 Badgers are relatively common and widespread in England and whilst legally protected, the emphasis of The Protection of Badgers Act 1992 is focused on protection from persecution, rather than on conservation. As such, badgers would be considered an important ecological feature, but as they are not of conservation concern, no scale of geographical significance would be applied.

Bats

5.39 From the desk study up to eight bat species were recorded within 2km of the Site boundary (common pipistrelle, soprano pipistrelle, a pipistrelle bat species, noctule bat, Leisler's bat, Daubenton's bat, brown long-eared (BLE) bat and an unidentified bat species). No EPSLs relating to bats were identified within 2km of the Site boundary.

Roosts – Trees & Buildings

Ground Level Tree Assessments (GLTA)

5.40 All individual trees within the Site (T1-T4) and those on the woodland edges were found to provide no potential roosting features (PRFs) for bats as they were in good condition. No bat roosts were confirmed during the GLTA.

Internal / External Building Assessment

5.41 Three buildings, associated with Homestead Mill were present within the north of the Site. Full details of the internal and external building assessments, including building descriptions and photographs, can be found in Appendix C.

5.42 Buildings B1a and B1b provided moderate bat roosting potential and building B2 provided low bat roosting potential. No evidence of roosting bats was found during the internal or external assessment of these buildings.

Nocturnal Surveys - Buildings

5.43 A summary of each survey is provided below with surveyor and infra-red camera positions illustrated on Figures 4 and 5.

Dusk Emergence Survey – 1st July 2024 (Figure 4)

5.44 All buildings within the Site were surveyed on this occasion. The survey started at 21:24 and continued until 23:09, with sunset at 21:39. The overall level of bat activity was low, with low numbers of common pipistrelle detected throughout the survey. The first common pipistrelle detected was at 22:06 and observed commuting from the south of the buildings. This was then observed foraging in the private garden to the west of the Site. Single contacts of noctule and Nathusius' pipistrelle were also detected during the survey, however these were non-visual and not in the vicinity of the buildings. No bats were observed emerging from any of the onsite buildings.

Dusk Emergence Survey – 16th August 2024 (Figure 5)

5.45 The onsite buildings with moderate bat roosting potential (B1a and b) were surveyed on this occasion. The survey started at 20:17 and ended at 22:02, with sunset at 20:32. Bat activity was again low, with common pipistrelle recorded intermittently during the survey. The first common pipistrelle was observed commuting from the south, towards the buildings. The vast majority of other contacts were non-visual as bats passed / foraging in neighbouring offsite gardens. A single pass of a noctule, flying south from offsite at 21:11 was also recorded. No bats were observed emerging from any of the onsite buildings.

Foraging / Commuting Habitat

5.46 The results of the 2024 surveys undertaken by Futures Ecology Ltd are shown in Figures 6 - 8, with detailed results tables included within the figures.

Nighttime Bat Walkover Spring 2024 (Figure 6)

5.47 The spring survey occasion was undertaken on 20th May 2024. A total of 21 common pipistrelle contacts were recorded during the survey, mainly individual bats but occasionally 2-3 bats were observed foraging. The first common pipistrelle was observed flying back and forth along the woodland edge of W2 at 21:34. Much of the bat activity recorded during the survey was concentrated on the northwestern edge of woodland W2, with relatively low activity recorded within the woodland itself or within the open habitats in the north of Site.

Nighttime Bat Walkover Summer 2024 (Figure 7)

5.48 The summer survey occasion was undertaken on 7th August 2024. A total of 14 bat contacts were recorded during the survey, mainly individual common pipistrelle bats, with one noctule observed at the start of the survey, at 20:49 located at the edge of woodland W2. As with the spring survey occasion, much of the activity was concentrated along the northwestern woodland edge of W2. Common pipistrelles were also noted foraging in association with the southern edge of woodland W1. Again, relatively low levels of activity were recorded within the dense woodland (W2) or within the open habitats in the north of Site.

Bat Automated Static Detector Survey April 2024 (Figure 8)

5.49 The automated static detector for April 2024 (FESTATIC 11) was positioned on the northern boundary, attached to T4. This recorded very low levels of bat activity with only 36 bat registrations over the five nights. All of the bat contacts were common pipistrelle (100%). The highest levels of activity of common pipistrelle were between 21:00 and 22:00. This is likely to be bats foraging, as it would be expected to peak again later in the survey if commuting back to a roost if present nearby.

5.50 The automated static detector or April 2024 (FESTATIC 14) was positioned within woodland W2. This recorded 545 bat registrations in total over the five nights. Again, all of the contacts were common pipistrelle (100%). There was a high level of activity of common pipistrelle between 20:00 and 21:00 which was not replicated later during the survey. As outlined above this is likely to be bats foraging.

Bat Automated Static Detector Survey May 2024 (Figure 8)

5.51 An automated static detector (FESTATIC 13) was positioned on the northern boundary, attached to T4. This recorded 1013 bat registrations. Nearly all of the recordings were that of common pipistrelle (98%), with small numbers of noctule (<1%) *Nyctalus* species (<1%) and *Myotis* species (<0.5%). The common pipistrelle bat activity occurred throughout the night at a relatively consistent rate, indicating continual foraging activity of a small number of individuals.

5.52 A second automated static detector (FESTATIC 12) was positioned within woodland W2. This recorded 853 bat registrations. The vast majority of the recordings were common pipistrelle (97%) with small numbers of *Myotis* species (2%), noctule (<0.5%) and *Nyctalus* species (<0.5%). The vast majority of the common pipistrelle activity occurred during 21:00-22:00, indicating foraging activity..

Bat Automated Static Detector Survey June 2024 (Figure 8)

5.53 An automated static detector (FESTATIC 04) was positioned on the northern boundary, attached to T3. This recorded very low numbers, with a total of 48 bat registrations over the five nights. Of these, the most common were common pipistrelle (67%), with lower numbers of *Myotis* species (17%), noctule (14%) and a single registration of a *Nyctalus* species (2%). Common pipistrelle activity peaked between 22:00 - 23:00, which indicated foraging activity. The activity of *Myotis* species and noctule also peaked at this time.

5.54 A second automated static detector (FESTATIC 09) was positioned within woodland W2. This recorded a total of 427 bat registrations. Common pipistrelle accounted for most of the recordings (93%) with noctule (3%), pipistrelle species (2%), and a *Nyctalus* species (>1%) occurring in much lower numbers. For common pipistrelle activity was recorded through the night, with a clear peak in activity between 22:00 - 23:00, which is attributed to foraging bats.

Bat Automated Static Detector Survey July 2024 (Figure 8)

5.55 An automated static detector for July 2024 (FESTATIC 05) was positioned within woodland W2. This recorded very low numbers, with a total of 23 registrations over the five nights. Results were dominated by common pipistrelle (83%) with small numbers of noctule (17%). Activity levels for common pipistrelle peaked between 21:00-22:00 with very little activity recorded through the rest of the night.

5.56 A second automated static detector for July 2024 (FESTATIC 13) was positioned on the northern boundary, attached to T3. This recorded a total of 968 bat registrations over the five nights. The majority of these were common pipistrelle (98%) with a small number of noctule (<1%), *Nyctalus* species (<1%), brown long-eared (<1%) and pipistrelle species (<1%) also recorded. Activity levels for common pipistrelle peaked between 22:00 -23:00, with lower levels of activity recorded through the rest of the night.

Bat Summary

5.57 From the completed surveys, roosting bats were found to be likely absent from the onsite buildings. Access was not possible to the private garden to the west of buildings B1a, B1b and B2, therefore it was not possible to fully view this aspect during the nocturnal surveys of the buildings. Given the very low bat activity encountered during these surveys, from bats flying from the south (i.e. not from the vicinity of the buildings) this is not anticipated to impact the conclusions of the bat nocturnal surveys. However, to negate this limitation and ensure continued compliance with The Conservation of Habitats and Species Regulations 2017 (as amended) and The Wildlife and Countryside Act 1981 (as amended), roosting bats will be brought through into the Impact Assessment, however no geographical importance will be applied.

5.58 During the NBWs common pipistrelle and a single noctule were recorded. Much of the bat activity was concentrated on the northwestern edge of woodland W2, and southern edge of woodland W1, with relatively low activity recorded within the dense woodland (W2) or within the open habitats in the north of Site.

5.59 The static bat detector data showed higher levels of activity within woodland W2 (positioned 10m-20m from the northwestern edge) than in the open habitats to the north of Site in April, May and June. The July survey occasion had lower levels within the woodland compared to the northern habitats, but overall activity was considered to be low in both areas. A summary of the overall species composition from all the static surveys is provided within Table 8 below.

Table 8: Summary of Species Composition from Completed Static Surveys To Date

Species	Percentage %
Common pipistrelle	97.214%
Noctule	1.099%
***Myotis* species**	0.767%
***Nyctalus* species**	0.588%
Pipistrelle species	0.256%
Brown Long-eared	0.077%

5.60 Given the species recorded within the Site during the surveys and their relative abundance, the Site is considered to support generalist bat species, which are of importance at a **Local** level.

Great Crested Newts (GCN)

5.61 From the desk study no records of GCN were returned from within 1km of the Site boundary. There were also no EPSL's relating to GCN or records of GCN surveys from Natural England's Open Dataset within 1km of the Site boundary.

5.62 The Site provided some suitable foraging, commuting and shelter habitat for GCN within the onsite woodland parcels, however these are isolated within the landscape as the Site is surrounded by residential development on all sides.

5.63 In terms of aquatic habitat, no waterbodies were identified within the Site boundary. One watercourse, Chickenley Beck, and one ditch were identified within 500m of the Site boundary. Details of these are provided in Table 9 below.

Table 9: Waterbodies identified within 500m of the application site (refer to Figure 3)

Pond Ref.	Locality	Straight Line Distance / Direction. Distance via Optimal Connective Habitat in (m)	OS Grid Reference	Connectivity to Application Site
WC1	Chickenley Beck flows through Earlsheaton urban area.	Straight line distance: 45m southeast (SE) Connective Distance: >78m	SE 26089 21101	Flowing watercourse deemed unsuitable for breeding GCN. **No Likely Potential Constraint.**
D1	Ditch between arable fields	Straight line distance: 408m SE Connective Distance: >673m	SE 26320 20791	Field ditch separated from Site by Chickenley Beck, which is a barrier to GCN dispersal. **No Likely Potential Constraint.**

5.64 Given the above, GCN are considered likely to be absent from the application Site and are not considered to be an IEF in the context of this assessment.

Reptiles

5.65 From the desk study no records of reptiles were returned from within 1km of the Site boundary.

5.66 The Site provided some limited suitable foraging, and shelter habitat for reptiles along the woodland edges, however these were limited in extent and the majority of Site lacked the ecotones required for basking reptiles. The Site is also very isolated from the wider landscape as it is surrounded by residential development on all sides.

5.67 Given the above, reptiles are considered to be absent from the application Site and are not considered to be an IEF in the context of this assessment.

Birds

5.68 From the desk study one record of cuckoo was provided within 1km of the Site boundary.

5.69 The Site has some potential to support cuckoo and other woodland and urban edge species. Given the relative isolation of the Site within an urban area it was considered unlikely to support an important bird assemblage. However, the onsite woodland and trees will undoubtably support nesting birds. Therefore, nesting birds will be considered further within the Impact Assessment due to the protection afforded to all wild birds while nesting, but a geographic scale of importance will not be applied.

Other

5.70 The hedgehog population in Britain has rapidly declined in recent years with a third thought to be lost since 2020 [50]. Hedgehogs are listed as a Species of Principal Importance under NERC Act (2006) and as such are a material consideration during the planning process. The habitats on-site provide suitable foraging and shelter opportunities for hedgehog. Therefore, hedgehog would be considered of importance at a **Local** level.

5.71 During the suite of surveys, a fox *Vulpes vulpes* was noted onsite on several occasions. It is assumed there is a fox den within woodland W2 in the south of Site. Foxes receive protection under the Wild Mammals (Protection) Act 1996[51], which protects wild mammals from cruel acts, such as crushing or asphyxiation. Due to the likely presence of an active fox den onsite, there is potential for harm/killing of foxes during the construction phase. To ensure continued compliance with the legislation, foxes will be brought through into the Impact Assessment, but a geographic scale of importance will not be applied.

Summary of Important Ecological Features

5.72 The table below provides a summary of the important ecological features to be brought through into the detailed Impact Assessment, and their geographical significance.

[50] Wilson E & Wembridge, D (2018) *The State of Britain's Hedgehogs 2018.* British Hedgehog Preservation Society and Peoples Trust for Endangered Species.
[51] https://www.legislation.gov.uk/ukpga/1996/3/contents

Table 10: Summary of IEFs

Ecological Feature	Geographical Context
Denby Grange Colliery Ponds SAC	International
Habitats of Principal Importance (HPI)	Local
Kirklees Wildlife Habitat Network (KWHN)	Local
Semi-natural broadleaved plantation woodland	Local
Badger	N/A
Generalist bat species	Local
Roosting bats	N/A
Nesting Birds	N/A
Hedgehog	Local
Fox	N/A

6.0 IMPACT ASSESSMENT

PROPOSALS

6.1 A residential development is proposed to include 30 dwellings with associated infrastructure and greenspace. The woodland within the Site will be retained and managed to maximise its biodiversity value in the long-term.

DENBY GRANGE COLLIERY PONDS SAC

Potential Impacts

6.2 Given the extent of the development proposed within the existing urban environment and the intervening distance between the application Site and the SAC, impacts upon the international sites are expected to be imperceptible / nugatory for the following reasons:

- No habitats that qualify as designating features of the statutory site are present within the application Site;
- There appears to be no direct hydrological links from the Site to the designated site;
- No construction phase impacts, such as dust, noise and/or pollution are expected due the intervening distance (>5km)[52]; and
- An increase in recreational pressure once the development is complete is likely to be imperceptible / nugatory due to the small scale of the development (30 units) and the fact that the SAC has no formal public access.

[52] https://iaqm.co.uk/text/guidance/construction-dust-2014.pdf

Mitigation

6.3 None required.

Residual Effect

6.4 **Neutral**.

HABITATS OF PRINCIPAL IMPORTANCE (HPI)

Potential Impacts

6.5 Part of the Site is mapped as Deciduous Woodland HPI, however following the habitat assessment of the Site, the woodland was not considered to meet the definition of Lowland Mixed Deciduous Woodland[53,54,55] and instead best matched the definition of Other Broadleaf Woodland w1g[56], which is not a Habitat of Principle Importance. This was due to the abundance of sycamore and lack of diversity within the ground flora. Given the above, the proposals are not expected to directly impact HPI Woodland.

6.6 Several other parcels identified as Habitats of Principal Importance were identified within 1km of the Site boundary. The closest of which is located c. 100m north of the Site boundary. Given the intervening distance from the application Site no construction (pollution events including dust deposition) or operational impacts are anticipated.

6.7 An increase in recreational pressure on the publicly accessible HPIs once the development is complete is likely to be imperceptible / nugatory due to the low number of units proposed (30 units) and the fact that there are ample alternative walking / cycling / dog walking routes in close proximity to Site, namely the Greenway, which links Ossett to Dewsbury and is accessible off Station Road, Earlsheaton approximately 80m south of Site.

Mitigation

6.8 None required.

Residual Effect

6.9 **Neutral**.

KIRKLEES WILDLIFE HABITAT NETWORK (KWHN)

Potential Impacts

6.10 At its closest point, the KWHN is 55m south of the Site. The proposals are separated from the KWHN by houses and Ossett Road, therefore construction phase impacts through direct damage are not expected. Impacts from dust deposition may occur, which would

[53] Lowland Mixed Deciduous Woodland, UK Biodiversity Action Plan; Priority Habitat Descriptions. BRIG (ed. Ant Maddock) 2008
[54] Lowland Mixed Deciduous Woodland, Natural England document: https://publications.naturalengland.org.uk/file/4687590768771072, accessed 05.08.2024
[55] UKHab (2023) The UK Habitat Classifications – Habitat Definitions Version 2.0
[56] UKHab (2023) The UK Habitat Classifications – Habitat Definitions Version 2.0

be a temporary impact potentially leading to degradation of a small area of habitats mapped within the KWHN, which would be **not significant adverse** at a **Local** level.

6.11 There is also potential for operational phase impacts from increased recreational pressure from the new residents. However, as the KWHN closest to Site is mapped along the Greenway, which provides a substantial existing link between Ossett and Dewsbury, the impact is expected to be nugatory. This area has a designated footpath / cycle route and is actively managed for people to undertake recreational activities, with signage and littler bins along its length. This will ensure the associated habitats are not degraded by the additional footfall.

Mitigation

6.12 Best practice measures to reduce dust deposition will be employed during the construction phase and will be implemented through a Construction Environmental Management Plan (CEMP).

Residual Effect

6.13 With the implementation of the above mitigation the residual effect would be **Neutral**.

SEMI-NATURAL BROADLEAVED PLANTATION WOODLAND

Potential Impacts

6.14 Some woodland losses have already taken place (~0.413 ha). The remaining woodland within the Site boundary (~1.17 ha) is retained within the Illustrative Masterplan. The felled woodland represents 35% of the woodland within the Site, so would be considered a **significant adverse** effect at a **Site** level, prior to compensation measures. Due to the relative abundance of woodland within Earlsheaton (there are a further 43 parcels of Deciduous Woodland HPI within 1km), this would be **not significant adverse** at a **Local** level, prior to compensation measures.

6.15 There are potential construction phase impacts to the retained woodland parcels through accidental damage, root compaction, pollution or dust deposition. In severe cases this could lead to losses. Given the abundance of woodland locally, this would be a **not-significant adverse** effect at a **Local** level, in the absence of mitigation.

6.16 Direct lighting of these habitats could also lead to crepuscular / nocturnal species avoiding these habitats, such as foraging, roosting, or commuting bats. This could lead to a **not-significant adverse** effect at a **Local** level.

6.17 Increased footfall / recreational pressure within the woodland from 30 additional residential units may result in the degradation of the ground flora. It is expected that much of the recreational impact will be absorbed by the Greenway walking / cycling / dog walking route located ~80m south of the Site. However additional residents could lead to increased fly-tipping / littering / dog fouling in the woodland, which could lead to a **not-significant adverse** effect at a **Local** level prior to mitigation.

Mitigation

6.18 The felling that has already taken place cannot be mitigated.

6.19 Root protection areas to protect the retained woodland, as well as pollution prevention measures during construction, through the adherence of best practice working methods, will protect these habitats during the construction phase. The above must be outlined within a CEMP.

6.20 The implementation of a sensitive lighting design in accordance with BCT Guidance[57], (during the construction and operational phases) with particular avoidance of light spill upon retained woodland parcels.

6.21 The implementation of a Biodiversity Management Plan (BMP) to secure management of the woodland for a minimum of 30-years. This will include measures to keep the woodland free from waste (fly-tipping / litter / dog waste). Information packs for homeowners will also include information on the biodiversity within the woodland to discourage these behaviours.

Residual Effect

6.22 The felling that has already taken place cannot be mitigated, this would be **not significant adverse** at a **Local** level, prior to compensation measures.

6.23 With the implementation of the above mitigation, the residual effect on retained woodland habits will be **Neutral**.

Compensation / Enhancement

6.24 To help offset the previous losses of woodland with the Site, the retained woodland will be maintained and managed in the long-term to maximise its value to local wildlife and target the creation of Lowland Deciduous Woodland HPI. This would be secured for a minimum of 30-years as part of a Biodiversity Net Gain Plan in conjunction with a detailed planning application. Should this not be sufficient to offset the losses and provide a 10% net gain enhancement in terms of woodland, additional offsetting would be required offsite.

BADGER

Potential Impacts

6.25 Although no setts were identified within the Site, badgers can dig new setts in a relatively short period of time. If a sett is within 30m of the working area, there is potential for badgers to be killed / injured or setts to be damaged / destroyed. This would be a **breach of the Protection of Badgers Act 1992**.

[57] https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2

Mitigation

6.26 An updated badger survey is required prior to works commencing to ensure compliance with the Badger Protection Act 1992[58]. If any setts are identified within 30m of the working area, these would be buffered from impacts until they can be closed under a Natural England licence.

Residual Effect

6.27 With the implementation of the above mitigation, the residual effect would be **Neutral**.

GENERALIST BAT SPECIES

Potential Impacts

6.28 Some suitable bat foraging / commuting habitat loss has already taken place (~0.413 ha of woodland). The remaining woodland within the Site boundary (~1.17 ha) is retained within the Illustrative Masterplan. The felled woodland represents 35% of the woodland within the Site and its loss would be considered a **not significant adverse** effect at a **Local** level on generalist bat species given the species assemblage associated with the overall site.

6.29 There are potential construction phase impacts to the retained woodland parcels through accidental damage, root compaction, pollution or dust deposition. In severe cases this could lead to losses. In the absence of mitigation this would be a **not-significant adverse** effect at a **Local** level.

6.30 Direct lighting of these habitats could also lead to bats avoiding these habitats altogether. This could lead to a **not-significant adverse** effect at a **Local** level.

Mitigation

6.31 The woodland felling that has already taken place cannot be mitigated.

6.32 Root protection areas to protect the retained trees and woodland, as well as pollution prevention measures during construction, through the adherence of best practice working methods, will protect these habitats during the construction phase.

6.33 Lighting during the construction phase will avoid the retained woodland and trees habitats. The above will be outlined in a CEMP.

6.34 As part of any future detailed development design, care should be taken to avoid inappropriate lighting of any new ecological landscape planting and retained boundary features (namely the retained woodland) or any new structural planting. Artificial light can deter some more sensitive species and can impact upon foraging and commuting routes. To minimise post development impacts, a sensitive lighting scheme should be adopted to ensure that boundary habitats / ecological landscape planting will not be illuminated. The lighting scheme will be designed in accordance with guidelines from BCT (2023)[59] i.e. light spill of 1 lux or less. Any external lighting from buildings or in public

[58] https://www.legislation.gov.uk/ukpga/1992/51/contents
[59] https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/

places adjacent to suitable bat habitats should be downward facing with LED lamps to prevent impacts from lighting.

Residual Effect

6.35 The felling that has already taken place cannot be mitigated, this would be **not significant adverse** at a **Local** level, prior to compensation measures.

6.36 With the implementation of the above mitigation, the residual effect from damage to retained suitable habitat and lighting will be **Neutral**.

Compensation / Enhancement

6.37 The retained woodland parcels will be retained and managed in the long-term to maximise their value for wildlife. Deadwood will be retained within the woodland to encourage invertebrates which will provide enhanced opportunities for foraging bats. These measures will offset the loss of foraging / commuting habitat which has already taken place to a **Neutral** level.

ROOSTING BATS

Potential Impacts

6.38 Roosting bats were found to be likely absent from onsite buildings B1 (a & b) and B2 following nocturnal surveys. However, due to the inherent bat roosting potential, there is a very minor risk that single roosting bats could be injured / killed, if present during the renovation works and / or works could result in the destruction / damage of a roost. This would be a **breach of legislation.**

Mitigation

6.39 Precautionary working methods will be adopted during building renovation, which will be outlined in a CEMP and will comprise a combination of the following measures;

- Prior to the works commencing onsite, all site operatives will receive a Toolbox Talk from an Ecological Clerk of Works;
- Prestart confirmatory surveys (internal/external assessment, and or nocturnal surveys) to confirm the continued absence of roosting bats;
- Supervision of removal of roosting features, such as the roof, and / or an on-call ECoW in case any evidence of roosting bats is found during the works;
- In the highly unlikely event that a bat is found during the works, works must **stop immediately** and advice sought from the ECoW. A derogation licence would need to be obtained from Natural England to legitimise the works.

Residual Effect

6.40 With the implementation of the above mitigation, the residual effect will be **Neutral**.

Compensation / Enhancement

6.41 The provision of bat boxes on the proposed houses, as well as on suitable, retained trees within the woodland, will provide new roosting sites for generalist bat species.

6.42 This is expected to have a **not-significant positive** effect.

NESTING BIRDS

Potential Impacts

6.43 All wild birds species are protected while nesting by the Wildlife and Countryside Act (1981) (as amended). This legislation protects wild birds, their nests and eggs from intentional harm, and makes it illegal to intentionally kill, injure or take any wild birds; take, damage or destroy the nest of a wild bird while the nest is in use of being build or take / destroy an egg of a wild bird.

6.44 Prior to mitigation, there is a potential impact to nesting birds within on-site habitats during the Site clearance operations, if this is undertaken within the breeding bird season (March – September). Operations could result in the destruction of nests / eggs or the killing of chicks, which would be a **breach of the WCA**.

Mitigation

6.45 To comply with relevant legislation, any removal of vegetation should be timed to avoid the nesting season where possible (March to September inclusive, although dates do vary depending on the species and weather conditions). Where it is not feasible, affected areas should be checked for nests in advance by an experienced ecologist. Any active nests identified should be left with a minimum buffer of 5m to be identified by the ecologist, until such time as all birds have fledged.

Residual Effect

6.46 With the implementation of the above mitigation, it is considered that the residual impact on nesting birds due to a breach of legislation would be **Neutral**.

Compensation / Enhancement

6.47 The provision of a range of bird boxes on the proposed houses, as well as on suitable, retained trees within the woodland, will provide new nesting sites for the local bird population.

6.48 This is expected to have a **not-significant positive** effect at a **Local** level for the local bird population.

HEDGEHOG

Potential Impacts

6.49 The habitats of most value to hedgehog (broadleaved woodland) will be retained within the proposals. However, the development could result in the killing / injury of individuals

and disturbance of hedgehogs within potential areas of shelter (i.e the removal of scrub). This is thought to have a **not-significant adverse** effect at **Local** level, prior to mitigation measures.

Mitigation

6.50 In order to minimise risk, it is recommended that vegetation removal is undertaken in a precautionary manner. This should comprise a visual check of suitable vegetated areas prior to removal followed by the cutting of vegetation to 150mm above ground level. This will be followed by a check of the area by the ECoW. The vegetation would then be cut to ground level. Cut vegetation must be removed from the working area. Any areas of suitable shelter such as brash piles will be removed by hand.

6.51 During any excavations, an access ramp must be provided overnight (or excavations covered) to allow trapped animals an escape route. Chemicals should be stored in secure compounds and open pipes should be temporarily capped at the end of each working day to prevent any animals gaining access. These precautions will protect wildlife such as hedgehog from harm during works. This must be outlined within the CEMP.

6.52 Fencing and buffers will be implemented to protect the retained woodland and trees, along with pollution prevention measures to prevent damage to these habitats during construction. These must be outlined within the CEMP.

6.53 If boundary treatments are required, hedgehog holes (13cm x 13cm) should be provided to allow access to the proposed habitats.

Residual Effect

6.54 With the implementation of the above mitigation, the significance of residual effects is considered to be **Neutral**.

FOX

Potential Impacts

6.55 Foxes receive protection under the Wild Mammals (Protection) Act 1996, which protects wild mammals from cruel acts, such as crushing or asphyxiation. The potential fox den within woodland W2 will be retained within the proposals. However, should any works within the woodland be required, there is a potential for harm/killing of foxes during the works.

Mitigation

6.56 Woodland W2 will be protected from construction phase impacts with the implementation of best working practices and RPAs, as outlined in a CEMP. Should any works be undertaken in the woodland, these will be undertaken in a precautionary manner. This would comprise sectional excavation with visual checks after each excavation to avoid harm to any animals that may be residing underground.

Residual Effect

6.57 With the implementation of the above mitigation, the residential effect is considered to be **Neutral.**

Table 11: Impact Assessment Summary Table

Important Ecological Feature (Geographical Context)	Potential Impact	Nature of Effect	Mitigation & Implementation	Residual Effect after Mitigation	Compensation & Enhancement	Significance of effect after Mitigation, Compensation & Enhancement
Denby Grange Colliery Ponds SAC (International)	No potential impact pathways.	Nugatory	N/A	Neutral	N/A	N/A
Habitats of Principal Importance (Local)	No potential impact pathways.	Nugatory	N/A	Neutral	N/A	N/A
Kirklees Wildlife Habitat Network (Local)	Dust deposition during the construction phase.	Temporary impact potentially leading to damage/ degradation of habitats.	Dust deposition prevention measures to be employed during construction phase. **CEMP as a condition.**	Neutral	N/A	N/A
Semi-natural broadleaved plantation woodland (Local)	Loss of recently felled woodland	Permanent loss of 35% of the woodland onsite – previously felled.	N/A	Not-significant adverse at a Local level.	Long-term management of the retained woodland to target Lowland Mixed Deciduous Woodland HPI, to be secured within BNG agreement with a detailed planning application. If required, further offsetting to ensure a 10% uplift in biodiversity units overall, with woodland trading rules met.	Not significant positive at a Local level.
	Damage to retained woodlands via physical damage,	Temporary impact potentially leading to damage/	Pollution prevention measures to be employed during construction phase. **CEMP as a condition.**	Neutral	N/A	N/A

Important Ecological Feature (Geographical Context)	Potential Impact	Nature of Effect	Mitigation & Implementation	Residual Effect after Mitigation	Compensation & Enhancement	Significance of effect after Mitigation, Compensation & Enhancement
	dust or pollution event.	degradation of habitats.				
	Lighting of the woodland	Crepuscular / nocturnal species avoiding these habitats.	**Sensitive lighting design in accordance with BCT Guidance as a condition.**	Neutral	N/A	N/A
	Increased recreational pressure during the operational phase	Damage/ degradation of habitats from litter / fly-tipping, dog fouling etc.	Homeowner packs and long-term management to remove waste. **Biodiversity Management Plan (BMP) as a condition.**	Neutral	N/A	N/A
Badger (N/A)	If any setts are created prior to construction, site works could lead to the killing / injury of badgers and/or disturbance / destruction of their setts.	Breach of legislation.	Updated badger survey carried out prior to works commencing to ensure compliance with the Badger Protection Act 1992. If any setts are identified within 30m of the working area, these would be buffered from impacts until they can be closed under licence. **Pre commencement badger check as a condition.**	Neutral.	N/A	N/A
	Harm or entrapment of individuals during the construction phase.	Injury / death of individuals.	During any excavations, an access ramp should be provided overnight to allow trapped animals an escape route. Chemicals should be stored in secure compounds and open pipes should be temporarily	Neutral.	N/A	N/A

Important Ecological Feature (Geographical Context)	Potential Impact	Nature of Effect	Mitigation & Implementation	Residual Effect after Mitigation	Compensation & Enhancement	Significance of effect after Mitigation, Compensation & Enhancement
			capped at the end of each working day to prevent any animals gaining access. **CEMP as a condition.**			
Generalist bat species (Local)	Loss of foraging habitat for bats.	Permanent loss of 26% of the woodland onsite – previously felled. The remaining woodland is to be retained & enhanced.	N/A	Not-significant adverse at a Local level.	Long-term management of the retained woodland to target Lowland Mixed Deciduous Woodland HPI, maximising the biodiversity value for foraging & commuting bats.	Neutral.
	Disturbance of bats in retained habitats due to lighting.	Bat species avoiding these habitats.	**Sensitive lighting design in accordance with BCT Guidance as a condition.**	Neutral	N/A	N/A
Roosting bats (N/A)	Roosting bats are likely absent from buildings B1 (a & b) and B2 following nocturnal surveys, however precautionary working methods are recommended in the highly unlikely event roosting bats are present.	Injury / death of individuals, if present. Destruction / damage of a roost, if present. Breach of legislation.	Non-licensable precautionary working methods during building renovation. **CEMP as a condition.**	Neutral.	Provision of a variety of bat boxes within new houses and on suitable, retained trees within the woodland.	Not significant positive effect.

Important Ecological Feature (Geographical Context)	Potential Impact	Nature of Effect	Mitigation & Implementation	Residual Effect after Mitigation	Compensation & Enhancement	Significance of effect after Mitigation, Compensation & Enhancement
Nesting Birds (N/A)	Risk of disturbance, killing or injury of nesting birds.	Breach of legislation.	Vegetation clearance will be carried out outside the nesting bird season (March-September inclusive) or vegetation will be checked by an ecologist and any nesting birds allowed to fledge prior to removal. **CEMP as a condition.**	Neutral	Inclusion of a variety of nest boxes within new houses and on suitable, retained trees within the woodland.	Not significant positive effect at a Local level.
Hedgehog (Local)	Loss of potential foraging and nesting habitat.	Permanent loss of suitable habitat.	N/A	Not significant adverse effect at a Local scale.	Creation of suitable foraging habitat, installation of hedgehog gaps in boundary garden fences. Provision of hedgehog houses.	Not significant positive at a Local level.
	Risk of killing or injury during site clearance operations.	Injury / death of individuals, if present.	Precautionary working methods for vegetation clearance. **CEMP as a condition.**	Neutral	N/A	N/A
Fox (N/A)	Risk of killing or injury during any required works within woodland W2.	Injury / death of individuals, if present.	Precautionary working methods for any works within woodland W2. **CEMP as a condition.**	Neutral	N/A	N/A

7.0 RESIDUAL EFFECTS

7.1 The mitigation measures are provided within Table 11 above. With the implementation of these no **significant** negative residual effects are envisaged.

8.0 CUMULATIVE EFFECTS

Kirklees Councils website was reviewed for planning permissions / developments submitted within the last 5 years to check for any potential cumulative effects.

8.1 Adjacent to the southern Site boundary is an active construction site at 5-7, Ossett Lane, Earlsheaton, Dewsbury, WF12 8LU. This has outline permission (Planning Ref: 2021/91695) for the erection of 5 residential dwellings. The reserved matters application (Planning Ref: 2023/61/90833/E) was informed by an Ecological Impact Assessment produced by Enzygo Environmental Consultants (Ecological Impact Assessment, Ossett Lane, Dewsbury, April 2023, Report Ref: SHF.1888.002.EC.R.001). This detailed protection measures for the woodland within the application Site comprising protection fencing and sensitive lighting, reporting no significant effects on the woodland or species using the woodland (namely bats). With the implementation of the mitigation, no cumulative effects are anticipated on the woodland or the local bat population.

8.2 Land adjacent to, 196 Wakefield Road, Earlsheaton, Dewsbury, WF12 8AH has planning permission for the erection of 5 dwellings (class C3) and ancillary office accommodation, formation of associated access, car parking and landscaping (outline Planning Ref: 2023/62/93097/E, discharge of conditions Planning Ref: 2024/44/92267/E) and is located ~400m north of the application Site. This proposed site had similar IEFs to the application Site, such as woodland and bats (roosts & foraging). However no cumulative impacts are expected as the submitted ecology report stated there would be no residual effects on these IEFs following the proposed mitigation and compensation measures (Arbtech, Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA), November 2023).

8.3 Clough Farm, Long Lane, Earlsheaton, Dewsbury, WF12 8LQ is 700m south of the application Site and has an active planning application for 24 dwellings (Plan Ref: 2024/62/91476/E). The Biodiversity Net Gain Statement by BWB Environment, dated April 2024 (Report Ref: LLE-BWB-ZZ-XX-T-EE-0002) shows the site dominated by mixed, native scrub, with woodland along the eastern boundary. There are not expected to be cumulative impacts on Deciduous Woodland as, according to the Arboriculture Report (BWB Environment, March 2024, Report Ref: LLE-BWB-ZZ-XX-T-EE-0003_Arboricultural Survey) the eastern woodland will not be impacted by this application as it is under third party ownership.

8.4 Headland House, 9, Headland Lane, Earlsheaton, Dewsbury, WF12 8JS is 300m west of Site and has approval for the erection of 5 detached dwellings (outline Planning Ref: 2019/62/90263/E, condition discharge Planning Ref: 2023/44/93274/E). This had an Ecological Design Strategy submitted to satisfy the conditions attached to the approval. This provided measures to protect IEFs, such as woodland and trees, hedgehogs and bats,

which would negate any residual effects (Elite Ecology, Ecological Design Strategy, March 2022) therefore no cumulative effects are anticipated.

8.5 The remaining applications were small scale, including homeowner and change of use applications. No cumulative effects are anticipated from these developments.

9.0 MONITORING

9.1 Monitoring is recommended to ensure that effective mitigation is maintained during construction and operation. This could include quarterly checks during construction and throughout habitat establishment and management. Some stages of the site clearance will require supervision by a suitably qualified ecologist, such as nesting bird checks if clearance is undertaken during bird breeding season).

10.0 BIODIVERSITY ENHANCEMENTS

10.1 In accordance with NPPF (2023), The Environment Act 2021, and Policy LP30 of Kirklees Local Plan[60], the development should incorporate features to encourage biodiversity, and retain and where possible enhance existing features of nature conservation value within the site.

10.2 The Impact Assessment section identified ecological enhancements that should be incorporated into the development proposal. Outlined below are further additional measures for consideration:

- New landscape planting including trees and shrubs to use native species which bear fruit and nectar.
- Installation of a variety of bird and bat boxes upon mature trees and new dwellings.
- Installation of invertebrate boxes within new dwellings e.g., bee houses.
- Any formal lawn areas should where possible be seeded with a species rich flowering lawn mix such as EL1 – Flowering Lawn Mix, Emorsgate Seeds.

11.0 BIODIVERSITY IMPACT ASSESSMENT

11.1 The Statutory Biodiversity Metric (BM) provides the baseline of the Site as **14.86 Biodiversity Habitat Units** (HU).

11.2 Detailed Biodiversity Net Gain calculations will be undertaken at a later stage when detailed landscaping proposals are available (full / reserved matters stage).

11.3 The Illustrative Masterplan shows the remaining woodland as retained. In terms of BNG, this should be managed to maximise its biodiversity value and target the creation of Lowland Mixed Deciduous Woodland HPI. Enhancements would then be secured for a minimum of 30-years.

[60] https://www.kirklees.gov.uk/beta/planning-policy/pdf/local-plan-strategy-and-policies.pdf

11.4 If a 10% net gain cannot be achieved on-site, compensation may be required via off-site habitat provisions or a Biodiversity Credit. The Biodiversity Credit will be calculated based on the Biodiversity Units required for the Local Planning Authority (LPA) or another third-party Habitat Bank (to be approved by the LPA) to take on responsibility to deliver the net gain for biodiversity.

11.5 The delivery of net gain can be calculated once a final layout and landscaping plan is produced (full / reserved matters stage).

APPENDIX A: BOTANICAL SPECIES LIST

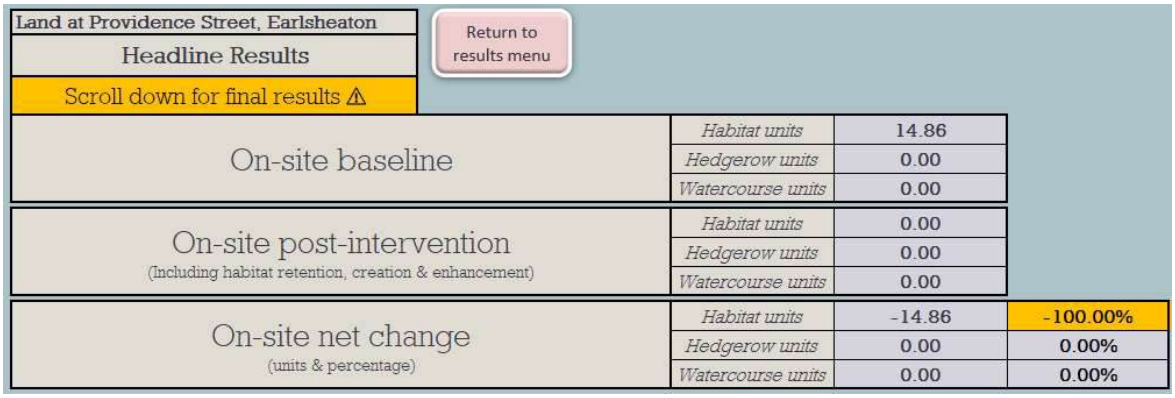
The habitat types were mapped within the site and a representative species list for each habitat type recorded. Species lists are not exhaustive of all flora present in each habitat type.

Common Name	Scientific Name	DAFOR
Broadleaved Woodland – W1		
Bramble	*Rubus fruticosus agg.*	F
Cherry	*Prunus avium*	O
Cherry laurel	*Prunus laurocerasus*	O
Common hogweed	*Heracleum sphondylium*	LA
Common ivy	*Hedera helix*	LA
Cow parsley	*Anthriscus sylvestris*	F
Elder	*Sambucus nigra*	O
Hawthorn	*Crataegus monogyna*	O
Holly	*Ilex aquifolium*	O
Sycamore	*Acer pseudoplatanus*	A
Broadleaved Woodland – W2		
Ash	*Fraxinus excelsior*	O
Bramble	*Rubus fruticosus agg.*	F-LD
Cherry	*Prunus avium*	O
Cleavers	*Galium aparine*	LF
Common hogweed	*Heracleum sphondylium*	O
Common ivy	*Hedera helix*	LD
Cow parsley	*Anthriscus sylvestris*	O-LA
Creeping buttercup	*Ranunculus repens*	LF
Dandelion	*Taraxacum officinale agg.*	O
Elder	*Sambucus nigra*	O
Hawthorn	*Crataegus monogyna*	F
Hedge bindweed	*Calystegia sepium*	LF
Holly	*Ilex aquifolium*	O
Nettle	*Urtica dioica*	O-LA
Pedunculate oak	*Quercus robur*	O
Privet	*Ligustrum sp.*	R
Silver birch	*Betula pendula*	O
Spanish bluebell	*Hyacinthoides hispanica*	R
Sycamore	*Acer pseudoplatanus*	A
Willow	*Salix sp.*	O
Wood avens	*Geum urbanum*	O
Amenity grassland		
Daisy	*Bellis perennis*	O
Dandelion	*Taraxacum officinale agg.*	O
Perennial rye-grass	*Lolium perenne*	D
Tall ruderal vegetation		
Barberry	*Berberis vulgaris*	R
Bramble	*Rubus fruticosus agg.*	F
Cleavers	*Galium aparine*	F
Common hogweed	*Heracleum sphondylium*	F
Common ivy	*Hedera helix*	O
Common nettle	*Urtica dioica*	F

Dandelion	*Taraxacum officinale agg.*	F
Elder	*Sambucus nigra*	R
Hawthorn (saplings)	*Crataegus monogyna*	O
Lesser celandine	*Ficaria verna*	A
Spanish bluebell	*Hyacinthoides hispanica*	R
Speedwell	*Veronica sp.*	O
Sycamore (saplings)	*Acer pseudoplatanus*	O
Wood avens	*Geum urbanum*	F
Yorkshire-fog	*Holcus lanatus*	F
Poor semi-improved grassland		
Bent grass species	*Agrostis sp.*	A
Bramble	*Rubus fruticosus agg.*	LA
Broad-leaved dock	*Rumex obtusifolius*	O
Cleavers	*Galium aparine*	O
Cock's-foot	*Dactylis glomerata*	F
Comfrey	*Symphytum officinale*	R
Common nettle	*Urtica dioica*	LA
Common ragwort	*Jacobaea vulgaris*	O
Creeping thistle	*Cirsium arvense*	O
Daffodil	*Narcissus pseudonarcissus*	R
Dandelion	*Taraxacum officinale agg.*	O
Perennial ryegrass	*Lolium perenne*	F
Rosebay willowherb	*Chamaenerion angustifolium*	F
Smooth Cat's-ear	*Hypochaeris glabra*	LF
Yorkshire fog	*Holcus lanatus*	F
Bramble scrub		
Bramble	*Rubus fruticosus agg.*	D
Common nettle	*Urtica dioica*	O
Cleavers	*Galium aparine*	O
Raspberry	*Rubus idaeus*	LF

DAFOR, D=dominant, A=abundant, F=frequent, O=occasional, R=Rare, L=Locally

APPENDIX B: STATUTORY METRIC BASELINE



Land at Providence Street, Earlsheaton			
Headline Results	Return to results menu		
Scroll down for final results ⚠			
On-site baseline	*Habitat units*	14.86	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site net change (units & percentage)	*Habitat units*	-14.86	-100.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%

Unit Type	Target	Baseline Units	Units Required
Habitat units	10.00%	14.86	16.35
Hedgerow units	10.00%	0.00	0.00
Watercourse units	10.00%	0.00	0.00

APPENDIX C: INTERNAL / EXTERNAL BAT BUILDING ASSESMENTS

Building Reference Number	Building External Description / Potential Access Points / Evidence of Occupation	Building Internal Description / Potential Roost Features / Evidence of Occupation	Roost Potential Classification: Negligible, Low, Moderate, High or Confirmed Roost	Building Photographs
B1a	**Description:** Single storey, sandstone brick building with a hipped roof and slate roof tiles. Used as office storage. **Potential Access Points**: Cracked roof ridge possible access into roof void. **Potential Roost Features:** Cracked roof ridge and gaps in degraded mortar. **Evidence:** No evidence of bat occupation.	**Description:** Limited access into void but the void had no underlining, and a false ceiling fitted to create a void. Heavily cobwebbed. Some light ingress at the ridge. **Evidence:** No evidence of bat occupation.	**Moderate**	  

Building Reference Number	Building External Description / Potential Access Points / Evidence of Occupation	Building Internal Description / Potential Roost Features / Evidence of Occupation	Roost Potential Classification: Negligible, Low, Moderate, High or Confirmed Roost	Building Photographs
B1b	**Description:** Single storey, sandstone brick building with a pitched roof and slate roof tiles. Used as a garage workshop and office. **Potential Access Points**: Lifted roof tiles possible access into roof void. **Potential Roost Features:** Lifted/damaged roof tiles, and a gap in stone lintel on the southern aspect. **Evidence:** No evidence of bat occupation.	**Description:** Partial roof void with no underlining, queen post trusses, false ceiling fitted to create a void. Lots of cobwebs, some light ingress from tiles near the ridge. Cellar with no access permitted, though there was no potential access points into the cellar noted during the external building assessment. **Evidence:** No evidence of bat occupation.	**Moderate**	   

Building Reference Number	Building External Description / Potential Access Points / Evidence of Occupation	Building Internal Description / Potential Roost Features / Evidence of Occupation	Roost Potential Classification: Negligible, Low, Moderate, High or Confirmed Roost	Building Photographs
B2	**Description:** Single storey, sandstone brick building with a pitched, corrugated metal roof. Used as a garage. **Potential Access Points**: None of note **Potential Roost Features:** Missing degraded bricks on northern aspect but didn't extend further. Beneath metal barge boards. **Evidence:** No evidence of bat occupation.	**Description:** Limited access into void but could see through missing ceiling panels of false ceiling fitted to create a void, no underlining present. **Evidence:** No evidence of bat occupation.	**Low**	   

APPENDIX D: STATIC DETECTOR RESULTS

Recording Period	Unit No.	Start Date	End Date	Survey Hours	Total Av. per hour	Total Registrations	Common Pipistrelle			Noctule			Myotis Species			Nyctalus Species			Pipistrelle Species			Brown Long-eared		
							Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour	Period Total	Peak Count	Av. Per Hour
Apr	11	24/04/24	29/04/24	50:29:33	0.713	36	36	22	0.713	0	0	0.000	0	0	0.000	0	0	0.000	0	0	0.000	0	0	0.000
Apr	14	24/04/24	29/04/24	50:29:33	10.794	545	545	224	10.794	0	0	0.000	0	0	0.000	0	0	0.000	0	0	0.000	0	0	0.000
May	12	15/05/24	20/05/24	44:15:48	19.271	853	827	200	18.684	3	2	0.068	20	10	0.452	3	2	0.068	0	0	0.000	0	0	0.000
May	13	15/05/24	20/05/24	44:15:48	22.886	1013	995	326	22.479	8	3	0.181	2	1	0.045	8	4	0.181	0	0	0.000	0	0	0.000
Jun	04	26/06/24	01/07/24	40:01:30	1.199	48	32	15	0.800	7	4	0.175	8	8	0.200	1	1	0.025	0	0	0.000	0	0	0.000
Jun	09	26/06/24	01/07/24	40:01:30	10.668	427	399	107	9.969	14	6	0.350	0	0	0.000	6	6	0.150	8	7	0.200	0	0	0.000
Jul	05	11/07/24	16/07/24	42:13:44	0.545	23	19	11	0.450	4	3	0.095	0	0	0.000	0	0	0.000	0	0	0.000	0	0	0.000
Jul	13	11/07/24	16/07/24	42:13:44	22.923	968	951	251	22.520	7	4	0.166	0	0	0.000	5	3	0.118	2	1	0.047	3	2	0.071
Aug																								
Aug																								
Sep																								
Sep																								
Oct																								
Oct																								
			Totals:	354:01:11	11.053	3913	3804	326	10.745	43	6	0.121	30	10	0.085	23	6	0.065	10	7	0.028	3	2	0.008

FUTURES ECOLOGY
Carrwood Park, Swillington Common Farm, Selby Road, Leeds, LS15 4LG
Telephone: 01133 372185

Unit 9, The Tangent Business Hub, Weighbridge Road, Shirebrook, Mansfield, Derbyshire, NG20 8RX
Telephone: 01623 749709

Site Boundary

Site Buffers

1km Buffer

2km Buffer

10km Buffer

Protected and Notable Species

- Common pipistrelle bat
- Soprano pipistrelle bat
- Pipistrelle bat species
- Noctule bat
- Leisler's bat
- Daubenton's bat
- Brown long-eared bat
- Unidentified bat species
- European otter
- Common cuckoo
- Giant hogweed
- Himalayan balsam
- Japanese knotweed

Designated sites

HPI

- Deciduous Woodland
- No main habitat but additional habitats present

Habitat Networks

- West Yorkshire WHN_region

Denby Grange Colliery Ponds

Special Areas of Conservation (SAC)

0 0.5 1 km

0 2.5 5 km

Client:	Precious Holdings	Plan Reference:	FE385_01	Author:	CC
Project:	Land at Providence Street, Earlsheaton, Dewsbury	Project Reference:	FE385	Date:	20/8/2024
Title:	Figure 1 - Site Location & Desk Study Results Plan	Report Reference:	FE385/EclA01	Scale:	1:20,000

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FUTURESECOLOGY
Carrwood Park, Swillington Common Farm, Selby Road, Leeds, LS15 4LG
Telephone: 01133 372185

Unit 9, The Tangent Business Hub, Weighbridge Road, Shirebrook, Mansfield, Derbyshire, NG20 8RX
Telephone: 01623 749709

Key

- Site Boundary
- Priority Habitat Inventory; Deciduous Woodland Habitat of Principle Importance (HPI)

Habitats

- Buildings - moderate bat roost potential
- Buildings - low bat roost potential
- Hardstanding
- SI — Poor semi-improved grassland
- Other tall herb and fern - ruderal
- Scrub - dense/continuous (bramble scrub)
- Broadleaved woodland - semi-natural
- Broadleaved woodland - recently felled
- Broadleaved tree
- Scrub - scattered
- Target note

TN1- Spanish bluebell and garden waste
TN2- Shipping containers

Client:	Precious Holdings	Plan Reference:	FE385_02	Author:	MB / KEH
Project:	Land at Providence Street, Earlsheaton, Dewsbury	Project Reference:	FE385	Date:	19/8/2024
Title:	Figure 2 - Habitat Plan	Report Reference:	FE385_EclA01	Scale:	NTS @ A3

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FUTURESECOLOGY
Carrwood Park, Swillington Common Farm, Selby Road, Leeds, LS15 4LG
Telephone: 01133 372185

Unit 9, The Tangent Business Hub, Weighbridge Road, Shirebrook, Mansfield, Derbyshire, NG20 8RX
Telephone: 01623 749709

Key

Site Boundary

Site Buffers

250m Buffer

500m Buffer

Waterbodies

Watercourses

Client:	Precious Holdings	Plan Reference:	FE385_03	Author:	CC / KEH
Project:	Land at Providence Street, Earlsheaton, Dewsbury	Project Reference:	FE385	Date:	20/8/2024
Title:	Figure 3 - Waterbody Plan	Report Reference:	FE385/EclA01	Scale:	1:5,000

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FUTURESECOLOGY
Carrwood Park, Swillington Common Farm, Selby Road, Leeds, LS15 4LG
Telephone: 01133 372185

Unit 9, The Tangent Business Hub, Weighbridge Road, Shirebrook, Mansfield, Derbyshire, NG20 8RX
Telephone: 01623 749709

Key

Site Boundary

Emergence/Re-entry

Bat contacts

- Common pipistrelle bat
- Nathusius' pipistrelle
- Flight lines

Habitats

- Buildings - moderate bat roost potential
- Buildings - low bat roost potential
- Hardstanding
- Other tall herb and fern - ruderal
- Broadleaved woodland - semi-natural

Client:	Precious Holdings	Plan Reference:	FE385_04	Author:	CC
Project:	Land at Providence Street, Earlsheaton	Project Reference:	FE385	Date:	20/8/2024
Title:	Figure 4: Dusk Emergence Survey – 1st July 2024	Report Reference:	FE385/BAT01	Scale:	1:175

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Surveyor: CC				
Reference	Time	Species	Behaviour	Passes
2	22:07	Common Pipistrelle	Pass	1
N/A	22:14	Noctule	Non-Visual	1
N/A	22:21	Common Pipistrelle	Non-Visual	1

Surveyor: KW				
Reference	Time	Species	Behaviour	Passes
1	22:06	Common Pipistrelle	Pass	1
1	22:10	Common Pipistrelle	Pass	1
3	22:20	Nathusius' Pipistrelle	Pass	1
N/A	22:25	Common Pipistrelle	Non-Visual	2
N/A	22:37	Common Pipistrelle	Non-Visual	3

Surveyor: IR				
Reference	Time	Species	Behaviour	Passes
N/A	21:58	Common Pipistrelle	Non-Visual	2
4	22:08	Common Pipistrelle	Pass	1
N/A	22:10	Common Pipistrelle	Non-Visual	1
N/A	22:14	Noctule	Non-Visual	1
N/A	22:21	Nathusius' Pipistrelle	Non-Visual	1
N/A	22:22	Common Pipistrelle	Non-Visual	2
5	22:22	Common Pipistrelle	Foraging	1
N/A	22:23	Common Pipistrelle	Non-Visual	1
N/A	22:23	Common Pipistrelle	Non-Visual	1
5	22:26	Common Pipistrelle	Foraging	2
6	22:28	Common Pipistrelle	Foraging	4

Surveyor: JSE				
Reference	Time	Species	Behaviour	Passes
N/A	21:58	Common Pipistrelle	Non-Visual	2
4	22:08	Common Pipistrelle	Pass	1
N/A	22:10	Common Pipistrelle	Non-Visual	1
N/A	22:14	Noctule	Non-Visual	1
N/A	22:21	Nathusius' Pipistrelle	Non-Visual	1
N/A	22:22	Common Pipistrelle	Non-Visual	2
5	22:22	Common Pipistrelle	Foraging	1
N/A	22:23	Common Pipistrelle	Non-Visual	1
N/A	22:23	Common Pipistrelle	Non-Visual	1
5	22:26	Common Pipistrelle	Foraging	2
6	22:28	Common Pipistrelle	Foraging	4

FUTURESECOLOGY
Carrwood Park, Swillington Common Farm, Selby Road, Leeds, LS15 4LG
Telephone: 01133 372185

Unit 9, The Tangent Business Hub, Weighbridge Road, Shirebrook, Mansfield, Derbyshire, NG20 8RX
Telephone: 01623 749709

Key

Site Boundary

Bat contacts

Common pipistrelle bat

Flight lines

Emergence/Re-entry

Surveyor locations

Camera

Surveyor

Habitats

Buildings - moderate bat roost potential

Buildings - low bat roost potential

Hardstanding

Other tall herb and fern - ruderal

Broadleaved woodland - semi-natural

Client:	Precious Holdings	Plan Reference:	FE385_05	Author:	CC
Project:	Land at Providence Street, Earlsheaton	Project Reference:	FE385	Date:	20/8/2024
Title:	Figure 5: Dusk Emergence Survey – 16th August 2024	Report Reference:	FE385/BAT01	Scale:	1:175

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Surveyor: JH				
Reference	Time	Species	Behaviour	Passes
1	21:10	Common Pipistrelle	Pass	1
N/A	21:11	Noctule	Non-Visual	1
N/A	21:18	Common Pipistrelle	Non-Visual	1
2	21:21	Common Pipistrelle	Pass	2
N/A	21:22	Common Pipistrelle	Non-Visual	1
N/A	21:27	Common Pipistrelle	Non-Visual	1
N/A	21:42	Common Pipistrelle	Non-Visual	1
N/A	21:46	Common Pipistrelle	Non-Visual	1
N/A	21:48	Common Pipistrelle	Non-Visual	1
N/A	21:53	Common Pipistrelle	Non-Visual	1
N/A	21:57	Common Pipistrelle	Non-Visual	1
N/A	21:59	Common Pipistrelle	Non-Visual / Social	2
N/A	22:01	Common Pipistrelle	Non-Visual / Social	2

Surveyor: SH				
Reference	Time	Species	Behaviour	Passes
N/A	21:04	Common Pipistrelle	Non-Visual	1
N/A	21:11	Common Pipistrelle	Non-Visual	1
N/A	21:12	Noctule	Non-Visual	1
N/A	21:17	Common Pipistrelle	Non-Visual	1
N/A	21:22	Common Pipistrelle	Non-Visual	1
N/A	21:29	Common Pipistrelle	Non-Visual	1
N/A	22:01	Common Pipistrelle	Non-Visual	1

Surveyor: AS				
Reference	Time	Species	Behaviour	Passes
3	21:16	Common Pipistrelle	Pass	1
N/A	21:11	Noctule	Non-Visual	1
4	21:18	Common Pipistrelle	Pass	1
N/A	21:22	Common Pipistrelle	Non-Visual	1
N/A	21:28	Common Pipistrelle	Non-Visual	1
N/A	21:32	Common Pipistrelle	Non-Visual	1
N/A	21:42	Common Pipistrelle	Non-Visual	1
N/A	21:47	Common Pipistrelle	Non-Visual	1
N/A	21:49	Common Pipistrelle	Non-Visual	1
N/A	21:54	Common Pipistrelle	Non-Visual	1
N/A	21:58	Common Pipistrelle	Non-Visual	2

FUTURESECOLOGY
Carrwood Park, Swillington Common Farm, Selby Road, Leeds, LS15 4LG
Telephone: 01133 372185

Unit 9, The Tangent Business Hub, Weighbridge Road, Shirebrook, Mansfield, Derbyshire, NG20 8RX
Telephone: 01623 749709

Site Boundary

Bat contacts

Common pipistrelle bat

Flight lines

Transects

Transect point counts

Transect route

Habitats

Waterbody Line

Broadleaved tree

Scrub - scattered

Target note

Buildings - moderate bat roost potential

Buildings - low bat roost potential

Hardstanding

Poor semi-improved grassland

Other tall herb and fern - ruderal

Scrub - dense/continuous (bramble scrub)

Broadleaved woodland - recently felled

Broadleaved woodland - semi-natural

Client:	Precious Holdings	Plan Reference:	FE385_06	Author:	CC
Project:	Land at Providence Street, Earlsheaton	Project Reference:	FE385	Date:	20/8/2024
Title:	Figure 6: Nighttime Bat Walkover Spring 2024	Report Reference:	FE385/BAT01	Scale:	1:1,000

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Reference	Time	Species	Behaviour	Habitat	Passes
Start Point	20:55	N/A	N/A	Woodland	N/A
PC1	21:34 - 21:55	Common pipistrelle	Pass	Woodland edge	3
2	21:34	Common pipistrelle	Pass	Gardens (Urban)	1
1/3	21:37	Common pipistrelle	Foraging	Woodland edge / Bramble	2
1	21:38	Common pipistrelle x2	Pass	Woodland edge / Bramble	3
1/3	21:39	Common pipistrelle	Pass	Woodland edge / Bramble	1
1/3/4	21:42	Common pipistrelle x3	Social	Woodland edge / Bramble	Continuous
1/3	21:45	Common pipistrelle	Pass	Woodland edge	1
1/3	21:45	Common pipistrelle x2	Pass	Wood edge	Continuous
1/3	21:50	Common pipistrelle	Pass	Bramble	1
1/3	21:54	Common pipistrelle	Pass	Bramble	1
PC2	22:03 - 22:08	N/A	N/A	N/A	N/A
PC3	22:16 - 22:21	N/A	N/A	N/A	N/A
PC4	22:28 - 22:33	N/A	N/A	N/A	N/A
5	22:40	Common pipistrelle	Non-visual	Woodland edge	1
5	22:41	Common pipistrelle	Pass	Woodland edge	1
PC5	22:44 - 22:49	N/A	N/A	N/A	N/A
PC5	22:44	Common pipistrelle	Non-visual	Woodland	1
PC5	22:46	Common pipistrelle	Non-visual	Woodland	1
PC6	23:01 - 23:06	N/A	N/A	N/A	N/A
6	23:07	Common pipistrelle	Non-visual	Ruderal vegetation	1
PC7	23:10 - 23:15	N/A	N/A	N/A	N/A
PC7	23:10	Common pipistrelle	Non-visual	Ruderal vegetation	2
PC7	23:11	Common pipistrelle	Non-visual	Ruderal vegetation	1

FUTURESECOLOGY
Carrwood Park, Swillington Common Farm, Selby Road, Leeds, LS15 4LG
Telephone: 01133 372185

Unit 9, The Tangent Business Hub, Weighbridge Road, Shirebrook, Mansfield, Derbyshire, NG20 8RX
Telephone: 01623 749709

Site Boundary

Bat contacts

- Common pipistrelle bat
- Noctule bat
- Flight lines

Transects

- Transect point counts
- Transect route

Habitats

- Waterbody Line
- Broadleaved tree
- Scrub - scattered
- Target note
- Buildings - moderate bat roost potential
- Buildings - low bat roost potential
- Hardstanding
- Poor semi-improved grassland
- Other tall herb and fern - ruderal
- Scrub - dense/continuous (bramble scrub)
- Broadleaved woodland - recently felled
- Broadleaved woodland - semi-natural

Client:	Precious Holdings	Plan Reference:	FE385_07	Author:	CC
Project:	Land at Providence Street, Earlsheaton	Project Reference:	FE385	Date:	20/8/2024
Title:	Figure 7: Nighttime Bat Walkover Summer 2024	Report Reference:	FE385/BAT01	Scale:	1:1,000

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Reference	Time	Species	Behaviour	Habitat	Passes
Start Point	20:36	N/A	N/A	Woodland	N/A
1	20:49	Noctule	Non-Visual / Foraging	Woodland	1
2	20:59 - 21:06	Common Pipistrelle	Foraging	Overgrown brambles / Woodland	Continuous
2	21:11 - 21:13	Common Pipistrelle	Foraging	Overgrown brambles / Woodland	Continuous
2	21:20	Common Pipistrelle	Foraging	Overgrown brambles / Woodland	1
PC1	21:21 - 21:26	N/A	N/A	N/A	N/A
3	21:22	Common Pipistrelle	Foraging	Overgrown brambles / Woodland	1
4	21:25	Common Pipistrelle	Foraging	Overgrown brambles / Woodland	1
5	21:26	Common Pipistrelle	Pass	Between gaps in trees	1
PC2	21:29 - 21:34	N/A	N/A	N/A	N/A
6	21:29	Common Pipistrelle	Foraging	Over woodland / Brambled	3
6	21:34	Common Pipistrelle	Non-Visual / Foraging	Over woodland / Brambled	1
7	21:45	Common Pipistrelle	Non-Visual / Foraging	Over woodland / Brambled	1
8	21:48	Common Pipistrelle	Non-Visual / Foraging	Over woodland / Brambled	1
PC3	N/A	N/A	N/A	Could not be reached	N/A
PC4	21:54 - 21:59	N/A	N/A	N/A	N/A
PC5	22:07 - 22:12	N/A	N/A	N/A	N/A
PC6	22:24 - 22:30	N/A	N/A	N/A	N/A
9	22:26	Common Pipistrelle	Non-Visual / Pass	Edge of trees / Open Habitat	1
9	22:27	Common Pipistrelle	Non-Visual / Pass	Edge of trees / Open Habitat	1
10	22:34	Common Pipistrelle	Non-Visual / Pass / Social	Edge of trees / Open Habitat	1
PC7	22:37 - 22:42	N/A	N/A	N/A	N/A

FUTURESECOLOGY
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Telephone: 01133 372185

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Telephone: 01623 749709

- Site Boundary

Static Detector Locations

- April
- May
- June
- July

Habitats

- Waterbody Line
- Broadleaved tree
- Scrub - scattered
- Target note
- Buildings - moderate bat roost potential
- Buildings - low bat roost potential
- Hardstanding
- SI — Poor semi-improved grassland
- Other tall herb and fern - ruderal
- Scrub - dense/continuous (bramble scrub)
- Broadleaved woodland - recently felled
- Broadleaved woodland - semi-natural

Client:	Precious Holdings	Plan Reference:	FE385_08	Author:	CC / KEH
Project:	Land at Providence Street, Earlsheaton	Project Reference:	FE385	Date:	22/8/2024
Title:	Figure 8: Static Bat Detector Location Plan	Report Reference:	FE385/BAT01	Scale:	1:1,000

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