



Preliminary Ecological Appraisal

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Report	Preliminary Ecological Appraisal
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Executive Summary

Ecosupport Ltd was instructed by Janus Architecture to undertake a Preliminary Ecological Appraisal (PEA) at Wakefield Road Depot, Barnsley. This was required in order to identify any potentially important ecological features that may be affected by the proposed development. As part of this assessment, the following surveys were undertaken:

- Walkover survey with UK Habs habitat assessment; and
- Preliminary Roost Assessment (PRA) of the buildings on site.

The following important ecological features were identified on site following the conclusion of the above survey work and may be subject to adverse impacts in the absence of suitable mitigation / compensation:

- Low potential for badgers and other terrestrial mammals; and
- Low potential for breeding and nesting birds.

In the absence of any mitigation measures, the proposed development is anticipated to result in, ***potential adverse impacts***. Mitigation, compensation and enhancement measures are set out within **Section 6.0** this report to ensure the protection of features and a net gain for biodiversity.

The site is considered to be exempt from statutory Biodiversity Net Gain requirements under the *de minimis* exemption as all works will be restricted to the built area of negligible biodiversity value.

1.0 INTRODUCTION

1.1 Brief

Ecosupport Ltd was instructed by Janus Architecture to undertake a Preliminary Ecological Appraisal (PEA) at Wakefield Road Depot (here after referred to as 'the site'). The purpose of this survey was to assess any ecological impacts that may arise as a result of the proposed development. The objectives of the survey were as follows:

- Identify and classify any priority habitats;
- Assess the ecological value of the site;
- Identify any signs of protected species and potential features that may support them
- Make recommendations for further survey work as necessary;
- Make recommendations for any necessary ecological avoidance and mitigation where possible at PEA stage.

NB: If the works do not take place within 18 months of this report¹ then the findings of this survey will no longer be considered valid and may require updating.

1.2 Site Description & Location

The site comprises of a bus depot and hardstanding located at the Wakefield Road Depot, Barnsley, S71 1NT (centred on OS grid reference SE 34880 08606) (**Fig 1**). The site is located within an industrial estate, northeast of Barnsley. The north of the site is bound by a parcel of woodland and agricultural fields, to the east by Wakefield Road and residential dwellings, the south and west by further industrial buildings. The immediate wider environment is predominantly urban. No priority habitats were identified on or adjacent to the site.

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

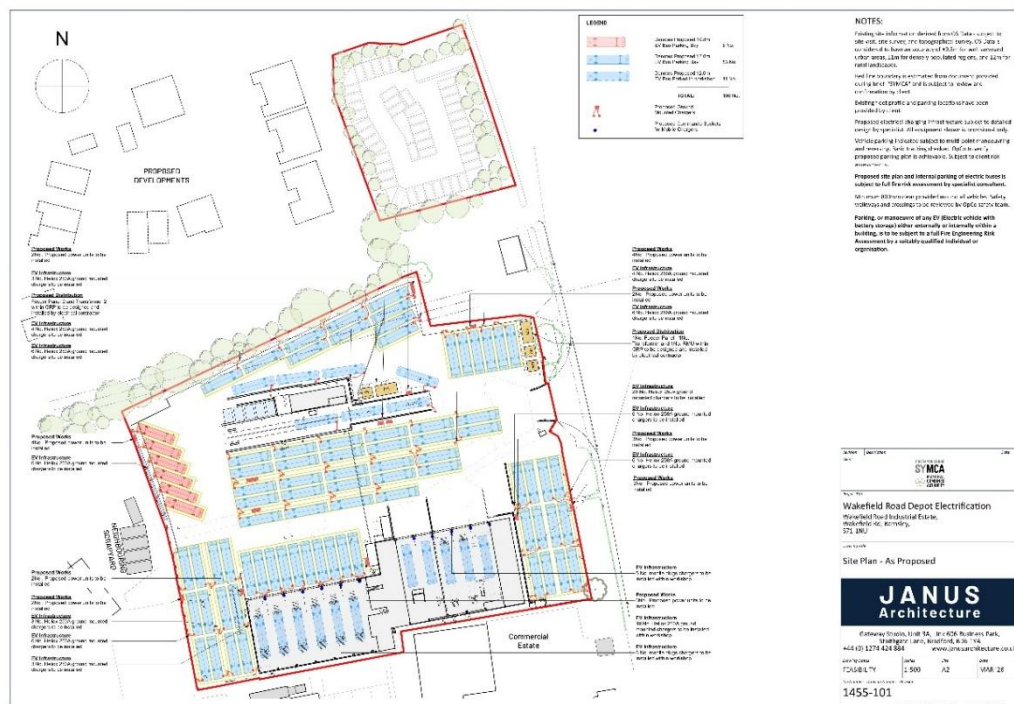
Figure 1. Approximate redline boundary of the site (Google Satellite, 2025).



1.3 Proposed Development

The proposals entail the installation of EV infrastructure at the Ecclesfield Bus Depot to support electric buses (**Fig 2**).

Figure 2. Proposed site layout (Janus Architecture, Drawing No. 1455-101, March 2026).



2.0 RELEVANT LEGISLATION AND POLICY

2.1 Legislation

2.1.1 *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations (2019)*

This instrument makes changes to the three existing instruments which transpose the Habitats and Wild Birds Directives so that they continue to work (are operable) upon the UK's exit from the European Union (EU). These include The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017. This instrument also amends section 27 of the Wildlife and Countryside Act 1981 to ensure existing protections continue. The intention is to ensure habitat and species protection and standards as set out under the Nature Directives are implemented in the same way or an equivalent way when the UK exits the EU.

This transposes the EU Habitats Directive (Council Directive 92/43/EEC) into UK domestic law. It provides protection for sites and species deemed to be of conservation importance across Europe. It is an offence to deliberately capture, kill or injure species listed in Schedule 2 or to damage or destroy their breeding sites or shelter. It is also illegal to deliberately disturb these species in such a way that is likely to significantly impact on the local distribution or abundance or affect their ability to survive, breed and rear or nurture their young.

In order for activities that would be likely to result in a breach of species protection under the regulations to legally take place, a European Protected Species (EPS) licence must first be obtained from Natural England.

2.1.2 *The Wildlife and Countryside Act (1981) (as amended)*

This is the primary piece of legislation by which biodiversity is protected within the UK. Protected fauna and flora are listed under Schedules 1, 5 and 8 of the Act. They include all species of bats, making it an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost. Similarly, this Act makes it an offence to kill or injure any species of British reptiles and also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built).

The Wildlife & Countryside Act (1981) states that it is an offence to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9 part II of the Act. This list over 30 plants including Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*) and Parrot's Feather (*Myriophyllum aquaticum*).

2.1.3 *The Countryside and Rights of Way Act (2000)*

This Act strengthens the Wildlife & Countryside Act by the addition of "reckless" offences in certain circumstances, such as where there is the likelihood of protected species being present. The Act places a duty on Government Ministers and Departments to conserve biological diversity and provides police with stronger powers relating to wildlife crimes.

2.1.4 *Natural Environment and Rural Communities Act (2006)*

The Natural Environment and Rural Communities (NERC) Act 2006 requires that public bodies have due regard to the conservation of biodiversity. This means that Planning authorities must consider

biodiversity when planning or undertaking activities. Section 41 of the Act lists species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the *UK Post – 2010 Biodiversity Framework*.

2.1.5 Protection of Badgers Act

The Protection of Badgers Act (1992) relates to the welfare of Badgers (*Meles meles*) as opposed to nature conservation considerations. The Act prevents:

- The wilful killing, injury, ill treatment or taking of Badgers and / or
- Interference with a Badger sett
- Damaging or destroying all or part of a sett
- Causing a dog to enter a set and
- Disturbing a Badger while it is occupying a sett

Provisions are included within the Act to allow for the lawful licensing of certain activities that would otherwise constitute an offence under the Act.

2.1.6 The Environment Act (2021)

The Environment Act 2021 is the UK's new legislation for environmental protection in the UK, which includes protection of water quality, clean air, and biodiversity among other key protections. This Act provides the government power to set targets to reach long-term aims relating to the environment, which will be periodically reviewed and updated. This legislation also establishes a new environmental watchdog organisation, the Office for Environmental Protection (OEP), which will hold the government accountable on environmental issues.

Part 6 of The Environment Act relates to nature and biodiversity. This section makes provision for biodiversity net gain to be a condition of planning permission in England and a requirement for nationally significant infrastructure projects. Biodiversity net gain will require maintenance for a period of at least 30 years after the completion of enhancement works to be achieved.

The legislation also includes updates to existing environmental legislation, such as the NERC Act 2006, to strengthen biodiversity enhancement rather than just conservation and includes a requirement for local, or relevant, authorities to publish biodiversity reports. Further, The Environment Act places a requirement on responsible authorities to prepare local nature recovery strategies, which will outline nature conservation sites and priorities and opportunities for recovering or enhancing biodiversity within the local area. Within England, the legislation also provides Natural England with the power to publish 'species conservation strategies' and 'protected site strategies' to identify activities that may affect a species or site's status and outline their opinions on measures that would be appropriate to avoid, mitigate or compensate any adverse impacts.

2.2 Policy

2.2.1 National

The National Planning Policy Framework (NPPF) (2026) sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced.

Chapter 19 'Conserving and enhancing the natural environment' states planning decisions to safeguard and enhance the natural environment, recognising the hierarchy of designated sites and the wider value of natural capital. Development should be directed to land of least environmental value and must avoid, minimise or appropriately mitigate ecological impacts. The Framework emphasises nature recovery, requiring opportunities for habitat creation, restoration and strengthening ecological networks to be identified and delivered, informed by Local Nature Recovery Strategies. Proposals must incorporate high-quality green infrastructure and achieve statutory biodiversity net gain. Development affecting irreplaceable habitats should be refused unless wholly exceptional circumstances apply. For designated sites—including habitats sites, SSSIs and locally important wildlife sites—development is only acceptable where impacts are avoided or clearly justified and mitigated. Overall, Chapter 19 sets a clear expectation that development contributes positively to biodiversity, integrates nature-based solutions, and supports long-term ecological resilience.

Specifically, the NPPF states determining planning applications, local planning authorities should apply the following principles:

- 2 Development plans should safeguard and enhance the natural environment, and reflect the wider benefits from natural capital and ecosystem services, by using Local Nature Recovery Strategies, Protected Landscape Management Plans, River Basin Management Plans, National Forest Strategies, Community Forest Plans and other relevant evidence at the most appropriate level to:
 - 2.2 Set out the hierarchy of international, national and locally designated sites and areas of importance for their landscape, geodiversity or biodiversity value in the plan area, and identify other features which require particular consideration in managing development due to their environmental value such as chalk streams;
 - 2.3 Identify opportunities for the conservation, enhancement and recovery of landscapes, sensitive waterbodies, habitats and priority or threatened species, including through habitat restoration, the use of nature-based solutions, and the creation and strengthening of ecological networks that are more resilient to current and future pressures (including opportunities which exist at a catchment or landscape scale across plan boundaries);
 - 2.4 Steer the location of development, including through site allocations, in ways which utilise land of least environmental value where that would be consistent with other policies in this Framework. This should include limiting the scale and extent of development within Protected Landscapes, avoiding the use of higher quality agricultural land where land of poorer quality is available and avoiding and minimising harm to designated sites of importance for nature. Areas which could become of particular importance for nature identified in Local Nature Recovery Strategies should be taken into account as opportunities to integrate development with

environmental restoration, but should not necessarily preclude the allocation of land for development; and

- 2.5 Set out standards for green infrastructure provision, in a way which complements and/or incorporates those for recreational land (as set out in policy HC1). These should draw upon Natural England's Green Infrastructure Standards for England, tailored as necessary to local circumstances.
- 3 Development plans should only set local standards for biodiversity net gain which are in excess of the statutory net gain requirement where this is for specific site allocations, and is fully justified and deliverable. Local standards should not extend to categories of development which are exempt from statutory biodiversity net gain.

2.2.2 Local – Barnsley Metropolitan Borough Council

On a local scale, the site falls within the jurisdiction of Barnsley Metropolitan Borough Council and as such, the Biodiversity and Geodiversity within Barnsley Local Plan (Adopted March 2024). The following policies relating to nature conservation and biodiversity are considered relevant to this report:

Policy BIO1: Biodiversity and Geodiversity

Development will be expected to conserve and enhance the biodiversity and geological features of the borough by:

- Protecting and improving habitats, species, sites of ecological value and sites of geological value with particular regard to designated wildlife and geological sites of international, national and local significance, ancient woodland and species and habitats of principal importance identified via Section 41 of the Natural Environment & Rural Communities Act 2006 (for list of the species and habitats of principal importance) and in the Barnsley Biodiversity Action Plan;
- Maximising biodiversity and geodiversity opportunities in and around new developments;
- Conserving and enhancing the form, local character and distinctiveness of the boroughs natural assets such as the river corridors of the Don, the Dearne and Dove as natural floodplains and important strategic wildlife corridors;
- Proposals will be expected to have followed the national mitigation hierarchy (avoid, mitigate, compensate) which is used to evaluate the impacts of a development on biodiversity interest;
- Protecting ancient and veteran trees where identified;
- Encouraging provision of biodiversity enhancements.

Development which may harm a biodiversity or geological feature or habitat, including ancient woodland and aged or veteran trees found outside ancient woodland, will not be permitted unless effective mitigation and/or compensatory measures can be ensured;

Development which adversely affects a European Site will not be permitted unless there is no alternative option and imperative reasons of overriding public interest (IROPI).

Policy GI1: Green Infrastructure

We will protect, maintain, enhance and create an integrated network of connected and multifunctional Green Infrastructure assets that:

- Provides attractive environments where people want to live, work, learn, play, visit and invest;
- Meets the environmental, social and economic needs of communities across the borough and the wider City Regions;
- Enhances the quality of life for present and future residents and visitors;
- Helps to meet the challenge of climate change;
- Enhances biodiversity and landscape character;
- Improves opportunities for recreation and tourism;
- Respects local distinctiveness and historical and cultural;
- Maximises potential economic and social benefits;
- Secures and improves linkages between green and blue spaces.

At a strategic level Barnsley's Green Infrastructure network includes the following corridors which are shown on the Green Infrastructure Diagram (see below):

- River Dearne Valley Corridor;
- River Dove Valley Corridor;
- River Don Valley Corridor;
- Dearne Valley Green Heart Corridor;
- Historic Landscape Corridor.

The network of Green Infrastructure will be secured by protecting open space, creating new open spaces as part of new development, and by using developer contributions to create and improve.

Green Infrastructure We have produced a Green Infrastructure Strategy for Barnsley which is informed by the Leeds City Region and South Yorkshire Green Infrastructure Strategies.

Policy GS1: Green Space

We will work with partners to improve existing green space to meet the standards in our Green Space Strategy.

Green Spaces are green open areas which are valuable for amenity, recreation, wildlife or biodiversity and include types such as village greens, local open spaces, country parks, formal gardens, cemeteries, allotments, woodlands, recreation grounds, sports pitches and parks.

Proposals that result in the loss of green space, or land that was last used as green space, will not normally be allowed unless:

- An assessment shows that there is too much of that particular type of green space in the area which it serves and its loss would not affect the existing and potential green space needs of the borough; or
- The proposal is for small scale facilities needed to support or improve the proper function of the green space; or
- An appropriate replacement green space of equivalent or improved quality, quantity and accessibility is provided which would outweigh the loss.

In order to improve the quantity, quality and value of green space provision we will require qualifying new residential developments to provide or contribute towards green space in line with the standards set out in the Green Space Strategy and in accordance with the requirements of the Infrastructure and Planning Obligations Policy. The Supplementary Planning Document 'Open Space Provision on New Housing Developments' offers guidance to developers on what will be expected in terms of open space provision in order to achieve those standards.

Where there is a requirement to provide new green space an assessment will be carried out to determine the most appropriate provision, taking into account site characteristics and constraints. In cases where it is deemed unsuitable to make provision for open space within or adjacent to a development site, suitable off-site open space facilities may be acceptable either as new facilities or improvements to those existing. Where appropriate new green space should secure access to adjacent areas of countryside.

3.0 METHODOLOGY

3.1 Desk Study

3.1.1 Waterbodies

Any ponds located within 250m of the proposed development were searched for using Ordnance Survey maps and available aerial images.

3.1.2 Designated Sites, Priority Habitats & Protected Species

A search for designated sites and granted European Protected Species Licences (EPSLs) within 2km of the site was undertaken using freely available online resources. In addition, a search was undertaken for any priority habitats on or nearby to the site.

3.2 Field Survey

3.2.1 Habitats

The field survey work, which forms the basis of the findings of this report, was carried out by Laura Chidlow MSci (Hons), Assistant Project Ecologist with Ecosupport Ltd on the 13th of February 2026.

Habitats on site pre-development were identified in accordance with the categories specified for a UK Habitats survey, using Habitat Definitions Version 2.0 (UKHab Ltd., 2023). This was chosen as an appropriate habitat categorisation system as it fits within the Statutory Biodiversity Metric calculation. Where appropriate primary habitat codes were used although for some habitat types, the use of secondary habitat codes was necessary as well.

3.2.2 Badger

The site was thoroughly searched for evidence of use by Badgers (*Meles meles*), with the specific aim of identifying the presence and location of any setts. In accordance with the *Badgers and Development: A Guide to Best Practice and Licensing* (Natural England, 2011) guidance, the survey accounted for a 30m from the site's boundary (observed where possible i.e. does not conflict with private dwellings). Evidence of Badgers could include latrines, dung pits, feeding remains and foraging evidence, trails and setts.

3.2.3 Bats

3.2.3.1 Preliminary Roost Assessment (PRA)

A preliminary roost assessment of the building on site was undertaken by Laura Chidlow of Ecosupport in February 2026 (working under Darla Brown NE class level 2 Bat License). This followed BCT (Collins (ed) 2023) best practice survey guidelines searching for any PRFs / evidence of bat occupation and assigning a roost potential assessment as outlined in **Table 1** below.

Table 1. Guidelines for assessing the potential suitability of a built structure for roosting bats (reproduced from BCT (Collins (ed) 2023).

Suitability	Description of Roosting Habitats
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.

Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ² and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ³).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ² and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ² and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g., maternity or classic cool/stable hibernation site.
2 For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance. 3 Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten et al., 2016 and Jansen et al., 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.	

3.3 Assessment Methodology

3.3.1 Introduction

The methodology for the assessment of the likely ecological effects of the proposed development is based on CIEEM's *Guidelines for Ecological Assessment in the UK* (CIEEM 2018). Although this assessment does not constitute a formal Ecological/ Environmental Impact Assessment, the CIEEM guidelines provide a useful framework for assessing ecological impacts at any level.

3.3.2 Valuation

Features of ecological interest are valued on a geographic scale. Value is assigned on the basis of legal protection, national and local biodiversity policy and cultural and/or social significance.

3.4 Limitations

3.4.1 Habitats

Although the survey was taken outside the optimum timing for the identification of botanical interest species, it was considered that the majority of species present could be suitably identified; this was therefore not considered to represent a significant limitation to the overall assessment. This survey does not constitute a full site assessment for invasive species, such as Japanese Knotweed (*Reynoutria japonica*).

4.0 ECOLOGICAL BASELINE

4.1 Desktop Search

4.1.1 Designated Sites

Using freely available online resources, one statutory designated site was identified within 2km of the site. This is Dearne Valley Park LNR (approximately 1.27km south-east) (**Fig 3**).

Figure 3. Statutory Designated sites from within 2km of the site.



4.1.2 Priority habitats

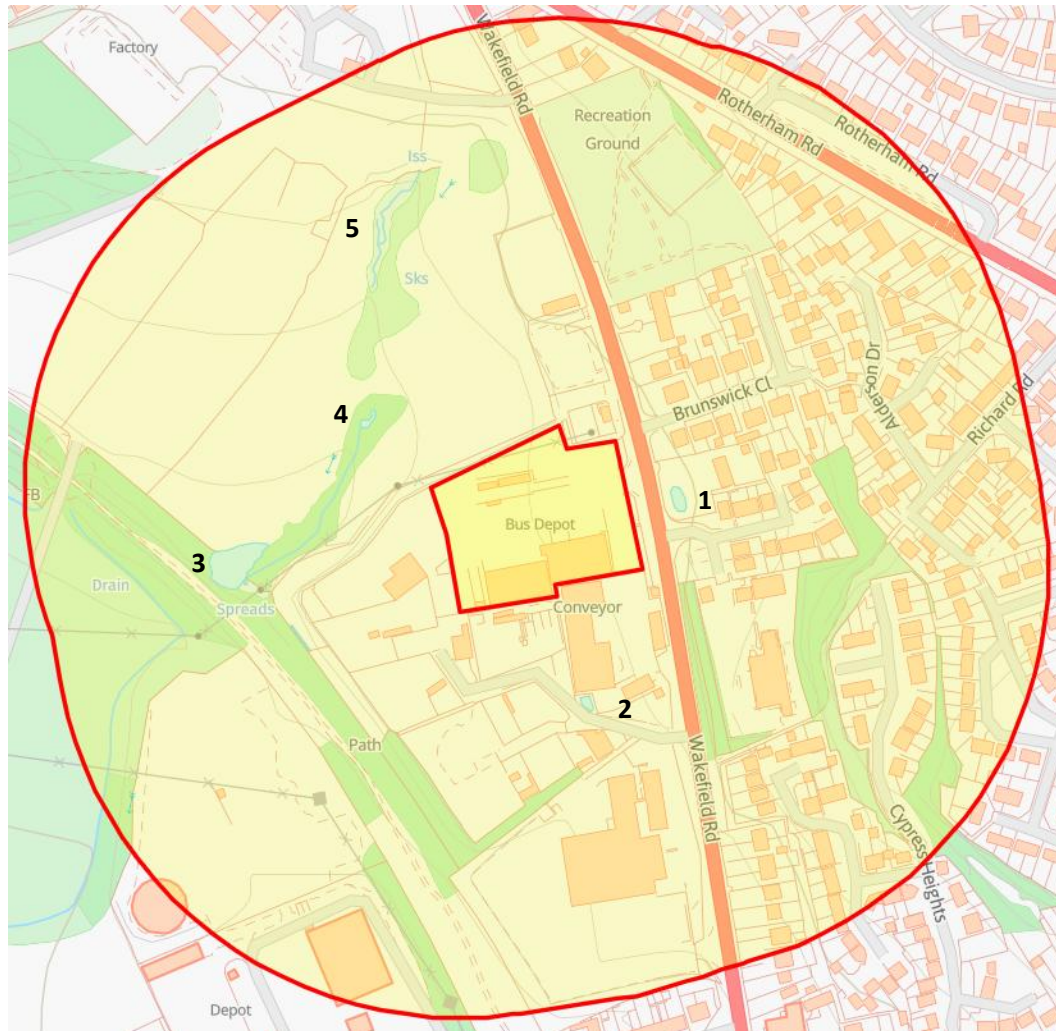
No priority habitat was identified either on or adjacent to the site, with the closest being an area of Deciduous Woodland located approximately 110m west of the site.

4.1.3 Protected Species

There were two European Protected Species (EPSL) identified within 2km of the site. These were for GCN and located approximately 1.92km west of the site.

4.1.4 Waterbodies

Using freely available online resources, five suitable waterbodies were identified within 250m of the site (**Fig 4**).

Figure 4. Waterbodies within 250m of the site

4.2 Vegetation Survey Results

The vegetation within the site has been described below using the UK Habs Habitat Definitions Version 2.0 (UKHab Ltd., 2023). The below species noted should not be considered an exhaustive list and instead refer to dominant, characteristic and other noteworthy species associated with each community within the survey area. The habitat types on site comprise:

- Developed Land, Sealed Surface (u1b);
- Buildings (u1b5); and
- Native Hedgerow (h2a) with secondary code 11 (Hedgerow with Trees).

4.2.1 Developed Land; Sealed Surface

The majority of the site comprises hardstanding, developed land (u1b), which forms parking and access throughout the bus depot (**Fig 5**).

Figure 5. View of the developed land, sealed surface on site (February 2026).



4.2.2 Buildings (u1b5)

There is one large warehouse, further described in **Section 4.3.1**.

4.2.3 Native Hedgerow (h2a) with secondary code 11 (Hedgerow with Trees)

Native Hedgerows with trees are present along the northern and southern boundaries of the car park to the north of the depot (**Fig 6a**), and along the northern and eastern boundaries of the main depot (**Fig 6b**). General species composition included Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Bramble (*Rubus fruticosus*), Willow spp (*Salix* spp.), Oak (*Quercus robur*), Holly (*Ilex aquifolium*), and Ash (*Fraxinus excelsior*).

Figure 6. View of the native hedgerows with trees in **a.** northern parcel and **b.** the southern parcel (February 2026).



4.3 Bat Survey Results

4.3.1 Preliminary Roost Assessment (PRA)

An assessment of the singular bus depot and servicing building was undertaken on site, with the results outlined below.

The building is partially a brick-built structure where the offices are located, but the remainder of the building is a steel base structure with a single-skinned metal exterior and a slanted flat roof with transparent panels to allow light penetration into the building (**Fig 7**). No PRFs or any evidence of bats were identified in the building on site, and it is subject to high levels of activity and lighting throughout the day and night. Therefore, the building on site is considered to be of **negligible potential** for roosting bats.

Figure 7. Bus Depot and servicing building with negligible bat potential (February 2026).



4.3.2 Foraging and Commuting Habitat

The site and the surrounding environment are predominantly urban habitats, of no value to bats. A native hedgerow with trees is present along the northern site boundary of the larger parcel and surrounding the smaller parcel; however, the site is in constant use, with security lighting present around the buildings and parking area. Therefore, it is unlikely that these areas would provide opportunities for foraging and commuting bats considering the suitable habitat in the wider environment. Furthermore, the hedgerow will not be impacted by the proposals. Taking the above into consideration, the site is considered to be of **negligible potential** for foraging and commuting bats.

4.4 Badgers & Other Terrestrial Mammals

During the walkover, no evidence of badgers was noted on site. The site is comprised predominantly of hardstanding, which offers no value to badgers, as well as hedgerows, with the immediate environment being urban with a network of busy roads. However, the woodland and green space beyond the northern site boundary within the surrounding environment may be of more value to badgers, offering suitable commuting and foraging habitat. Fences are present around the perimeter of the site; however, it is possible that there may be holes where badgers can gain access. As a result, it is considered that there is **low potential** on site for Badgers and other terrestrial mammals such as Hedgehogs (*Erinaceus europaeus*).

4.5 Reptiles

The majority of the site is hardstanding with the only vegetation present in the form of native hedgerows along some of the site boundaries. Furthermore, the works are currently anticipated to impact the urban habitats on site. Consequently, the area of impact is considered to offer **negligible potential** for reptiles.

4.6 Great Crested Newts

Similar to reptiles, the habitats on site comprise predominantly hardstanding, which is not suitable for Great Crested Newts (GCN). Although the hedgerows on site do offer some limited suitability for GCN, they are not to be impacted by the proposals. There are five suitable waterbodies within 250m of the site, with pond 1 separated by Wakefield Road, which acts as a significant barrier for dispersal to the site. The other four ponds are within commutable distance, but due to the very limited suitable habitat on-site and considering the area of impact is limited to urban habitats, the area of impact is considered to offer **negligible potential** for reptiles.

4.7 Hazel Dormouse

The hedgerow with trees bounding the car park is isolated from any suitable environment, and the remainder of the site offers no suitability for Hazel Dormice (*Muscardinus avellanarius*). Additionally, no records of dormice were identified within the area. Given the isolation of the site and highly urban nature of the surrounding environment, it is considered that there is **negligible potential** for dormice.

4.8 Birds

The hedgerows present on the main depot site offer some suitability for breeding and nesting birds; the surrounding habitats also provide an optimal mosaic of habitats such as woodland, scrub and grassland parcels. The building, however, is subject to constant disturbances from buses leaving and returning. Therefore, the site is considered to be of **low potential** for breeding and nesting birds.

5.0 LIKELY ECOLOGICAL IMPACTS IN ABSENCE OF MITIGATION

5.1 Introduction

The CIEEM guidelines (CIEEM 2018) require that the potential impacts of the proposals should be considered in absence of mitigation. In order for a significant adverse effect to occur, the feature being affected must be at least of local value. However, in some cases, features of less than local value may be protected by legislation and/or policy and these are also considered within the assessment. Although significant effects may be identified at this stage of the assessment, it is often possible to provide appropriate mitigation.

5.2 Site Preparation and Construction

5.2.1 Impacts to Habitats

The proposals will be restricted to alterations to the existing hard standing and buildings, which are habitats of negligible biodiversity value. The surrounding hedgerows with trees would be considered a habitat of **site value**; however, these are to be retained as part of the proposals. Furthermore, this habitat is already largely fenced off within the compound that would protect the hedgerow from impacts from machinery. Though it may be possible that the hedgerow may require some light pruning to facilitate the proposals. Root compaction from the proposals is not considered likely as the entire area of impact is already hardstanding and used by buses, so installation of EV infrastructure is unlikely to have further significant impacts. Therefore, it is considered that there will be **potentially minor impacts** to habitats of **site value**.

5.2.2 Impacts to Wildlife

The proposed works may involve groundworks and the creation of some excavations. This may lead to the potential for Badgers, Hedgehogs, and other terrestrial mammals becoming trapped or injured during the works. Therefore, in the absence of mitigation **an adverse impact is possible** at the **local level**.

The hedgerows on site have suitability for nesting birds. While it is expected to be retained, any pruning to branches could result in disturbance or direct impacts to nesting birds, which could have a **potential adverse impact** at the **site level**.

5.2.3 Impacts to Designated Sites

The site does not lie within or adjacent to any designated sites. Considering the relatively low impacts of the proposed works and the considerable distance to the closest designated site, **negligible impacts** on designated sites are expected during preparation and construction.

5.3 Site Operation

5.3.1 Impacts to Wildlife

Similarly, it is not expected there will be any impacts to wildlife during site operation. The layout will be relatively unchanged with the addition of EV infrastructure throughout, and it will be used in the same way. There is already flood lighting present throughout the developed area and therefore any minor additions are unlikely to have a significant impact. Therefore, **negligible impacts** on wildlife are expected during operation.

5.3.2 Impacts to Habitats & Designated Sites

It is not expected there will be any changes in impact as a result of the site operation compared to its current use. However, the introduction of EV infrastructure including power units, transformers and chargers could add some risks such as potential increased risk of fire. Increased fire risk could potentially impact on the hedgerows and surrounding woodland habitat. Therefore, while the risks are relatively low, there is **potential impact** to habitats of **local value**.

6.0 MITIGATION & ENHANCEMENTS

6.1 Introduction

The below sections outline recommendations, proposed mitigation and compensation appropriate and proportionate. In addition to this, measures are outlined to protect the existing features of value and provide enhancements post development.

6.2 Protection of Retained Habitats

All existing trees and hedgerows adjacent to the site will be retained and will be protected from damage during the works. The site boundaries outside the area of impact will be fenced using Heras fencing or similar, to prevent access by machinery. Where large, mature trees are present, they will be protected using standard arboricultural tree protection measures, which include protection of the canopy and prevention of root compaction.

This fencing will also provide protection for wildlife species that may be using the margins of the site including bats, birds, reptiles, and other mammals. No vehicles will enter the protective ring fencing and no materials will be stored within their circumference. All protective fencing must be in place prior to any construction machinery arriving on site, before any works on site get underway, and will remain in place until all work is completed. This will minimise the level of disturbance within the woodland, boundary habitat / buffer areas during the works and ensure the habitats and any wildlife species that may be using them are protected.

6.3 Badgers & Other Terrestrial Mammals

During the construction phase, any open excavations left overnight will either be covered to prevent commuting Badgers and other terrestrial mammals falling in or escape ladders will be used to prevent them from becoming trapped. Any open pipework will be checked and then capped nightly.

6.4 Avoidance of Impacts to Breeding and Nesting Birds

In order to avoid disturbance of breeding and nesting birds or damage to their nests, any works to the hedgerows or trees (e.g. removing branches) should avoid bird nesting season (typically March – August, dependent on weather). If this is not possible, the habitat should be thoroughly checked by an ecologist immediately prior to works. If any active nests are found, they should be left undisturbed with a suitable buffer within which works cannot take place (ca. 5m) until nestlings have fledged.

6.5 Enhancements

6.5.1 Bat Boxes

To act as a biodiversity enhancement, a total of 1 No. bat box will be erected onto a suitably retained tree on site. The following model will be installed (if these are not available, an alternative model can be used if agreed with the ecologist):

- 1 No Vivara Pro Large Multi Chamber Woodstone bat box

The Woodstone bat box will be erected at a location on a mature tree at approximately 3-5m height, in a location that will receive at least partial sunlight, with clear flightlines.

6.5.2 Bird Boxes

In addition, a total of 1 No. bird box will be erected onto a suitably retained tree on site. Vivara pro Seville or Barcelona Bird Box are recommended models for general bird boxes. These will provide suitable nesting opportunities for a variety of bird species and will increase the nesting opportunities for birds on site. These will be installed on a mature tree in a sheltered location at approximate heights of 1.5-3m.

6.5.3 Biodiversity Net Gain

It is understood that all works will be limited to the existing developed area (i.e. u1b and u1b5 habitats) of negligible biodiversity value and all perimeter vegetation will be retained and protected, with the exception of some light pruning and branch removal. Therefore, it is considered that the site falls under the *de minimis* exemption for BNG, and the site will not be required to demonstrate a net gain in habitats. With the recommendations for enhancement above, it is considered that the site will provide a sufficient net gain in biodiversity.

7.0 CONCLUSION

A Preliminary Ecological Appraisal was undertaken of the site at Wakefield Road Depot for the proposed development for the installation of EV infrastructure for electric buses. The assessment has the potential for nesting birds within the hedgerows and trees along the site boundaries and foraging and commuting badgers on-site. Mitigation measures have been specified in this report, and targeted enhancements have been provided to ensure the site results in a net gain to biodiversity.

8.0 REFERENCES

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