

Preliminary Ecological Appraisal Report

Birch Business Park
Reference: 82-299-R1-3
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EXECUTIVE SUMMARY

Site Address	Birch Business Park, Heywood, OL10 2SX
Coordinates	E 384271, N 408684
Site Area	Approximately 3.9 ha
Current Site Use and Adjacent Site Use	The comprised a range of habitats such as woodland, mixed scrub, willow scrub, ruderal/ephemeral, other neutral grassland, reedbeds, and individual trees. Boundary features comprised a hedgerow and line of trees. Birch Business Park is located adjacent to the site's western boundary. The wider area comprises agricultural land.
Designated Sites	The site is not located within 1 km of any statutory designated sites. However, the site is located within the impact risk zone of the following Sites of Special Scientific Interest (SSSIs):  Rochdale Canal SSSI and Special Area of Conservation (SAC) is located 3.7 km east of the site. The site is designated as an SSSI for its rare submerged and emergent vegetation including floating water-plantain (<i>Luronium natans</i>). The site is also designated as an SAC due to the presence of flowing water-plantain.  West Pennine Moors SSSI is located 9.7 km north of the site. This site is designated for its extensive mosaic of upland and upland fringe habitats. Due to the distance between the proposed site and designated sites and the small scale of the proposed works, no detrimental impacts on the statutory designated sites are anticipated as a result of the development. Furthermore, as per the criteria listed on MAGIC (accessed February 2025), the proposed site will not require further consultation with Natural England to proceed in relation to the SSSI. Additionally, a Habitats Regulation Assessment (HRA) on the SAC will not be required due to the distance of the site from the SAC and small size of the site/low impact of development. Pilsworth Site of Biological Importance (SBI) was located 860 m northwest of the site. The site comprises two large bodies of water connected via Brightley Brook. It is considered that the proposed development will not have any negative impacts on the SBI due to its distance from the site and the nature of the proposed works. Additionally, a significant increase in the number of visitors to the SBI is not anticipated as a result of the development, which comprises the creation of an industrial unit.
Survey Results	The site was found to comprise other neutral grassland, mixed scrub, willow scrub, broadleaved woodland, ruderal/ephemeral, reedbed, individual trees, native hedgerow and lines of trees. The site was found to have the following potential ecological constraints:  Opportunities for common amphibians throughout the entirety of the site.  Potential presence of great crested newts (<i>Triturus cristatus</i>) in WB1, WB2 and WB3 located within 250 m of the site boundary, and suitable terrestrial habitat on site.



Conclusions

- ✳ High commuting and foraging potential for bats along the hedgerows, scrub, and broadleaved woodland on site.
- ✳ Potential presence of badgers (*Meles meles*) within the local area and suitable foraging and sett-building opportunities on site.
- ✳ Potential presence of hedgehogs (*Erinaceus europaeus*) within the hedgerow, scrub, and woodland habitats.
- ✳ Potential presence of brown hare (*Lepus europaeus*) on site.
- ✳ Opportunities for nesting birds within the hedgerows, scrub, individual trees, line of trees, log and brash piles and woodland.
- ✳ Potential presence of reptiles within the hedgerow, scrub, and woodland.
- ✳ Potential presence of cinnabar on site.
- ✳ Invasive non-native species Himalayan balsam was identified in the mixed scrub and grassland. Field horsetail was also noted throughout the hedgerows on site.

The following further surveys are recommended to inform planning:

- ✳ Due to the significant loss in valuable habitat, further Bat Activity Surveys will be required, as per Collins (2023). One Night-time Bat Walkover (NBW) survey visit per season (spring- April/May, summer- June/July/August, autumn- September/October) will be required, with automatic/static bat detector surveys also undertaken for a minimum of five consecutive nights per month (April-October) in appropriate (or best available) weather conditions for bats.
- ✳ Great crested newt (GCN) eDNA surveys on WB1, WB2 and WB3 within 250 m of the site.
- ✳ Reptile Surveys undertaken between March to October (inclusive).
- ✳ Four Breeding Bird Surveys between March and June (Inclusive)
- ✳ A Habitats Regulations Assessment (HRA) should be undertaken to assess the potential effects of the development on the Rochdale Canal SAC. An Air Quality Assessment is required to inform the HRA.

The following mitigation is recommended:

- ✳ Common amphibians are to be removed by hand from the working area during the clearance phase.
- ✳ The lighting design should ensure retained habitats, and the adjacent waterbody (WB1) are maintained as dark areas during and post-construction.
- ✳ Updated badger walkover prior to start of works.
- ✳ Precautionary Working Methods for badger.



- ✧ Vegetation should be retained where possible. Where vegetation requires removal, it should be checked for the presence of hedgehog prior to removal. If any vegetation is too dense to be fully inspected, it should be trimmed to 50 cm and checked for hedgehog before being cleared to ground level. If trees are removed, their bases should be checked, prior to removal, for sheltering hedgehogs. It is recommended that any clearance takes place outside of December-March to avoid impacting hibernating hedgehogs.
- ✧ Vegetation should be retained where possible. If any vegetation requires removal, it should be removed outside of the breeding bird season (March to September inclusive). If this is not possible, a nesting bird check should be undertaken by a suitably qualified ecologist up to 48 hrs before works commence. If a nest, or nest in construction, is located, then a stand-off distance should be maintained until the young have fledged.
- ✧ Pre-commencement check of grassland fields for young hare.
- ✧ Precautionary Working Methods for reptiles.
- ✧ Common ragwort should be planted within areas of green open space to replace any plants lost to development to limit impacts on cinnabar.
- ✧ Invasive non-native Himalayan balsam to be removed by a suitably qualified contractor.
- ✧ The field horsetail on site is not considered a non-native invasive species; however, it is recommended that this be removed prior to the development because of the damage it can cause to hardstanding.

A 10% gain in biodiversity will be required on-site. If this cannot be achieved on-site, a conservation offset payment, or off-site compensation will be required.



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1. INTRODUCTION

1.1. BACKGROUND

E3P were commissioned by Yeargate to undertake a Preliminary Ecological Appraisal at Birch Business Park, hereafter referred to as “the site”.

This report has been prepared by Phoebe Parry BSc (Hons), Consultant Ecologist at E3P. Phoebe holds a qualifying CIEEM membership, a Level 4 Field Identification Skills Certificate (FISC) and has experience undertaking Preliminary Ecological Appraisals, protected species surveys and ecological mitigation for a wide variety of projects across the UK.

1.2. PROPOSED DEVELOPMENT

Development proposals comprise the construction of an industrial unit with associated access roads and car parking.

1.3. SITE LOCATION

The site is located adjacent to the east of Birch Business Park, approximately 2.2 km southwest of the centre of Heywood. Agricultural land borders the northern, eastern, southern site boundaries. The M62 is located 850 m south of the site. An active railway line is located 1 km north of the site. Please refer to Figure 1 for the approximate site location.

Figure 1 **Approximate Site Location**





1.4. OBJECTIVES

The objectives of the Preliminary Ecological Appraisal are as follows:

- ✧ Identify the major habitats present.
- ✧ Ascertain the presence or potential presence of any legally protected species and habitats.
- ✧ Recommend any further surveys or mitigation that may be required.

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



2. METHODOLOGY

2.1. DESKTOP STUDY

The following sources of information and ecological records were consulted:

- ✿ MAGIC – A web-based interactive mapping system, on which geographic information regarding key environmental schemes and designations are collated, including details of statutory conservation sites, accessed February 2025.
- ✿ Aerial mapping and ordnance survey maps.
- ✿ Local data records provided by Greater Manchester Ecology Unit (GMEU) on 21st February 2025.

A 1 km search area was utilised for the data search, with this being deemed an appropriate distance for the Zone of Influence of the site. The 1 km data search was selected due to the size of the site as well as the ecological value of the land surrounding the site, comprising predominantly agricultural land.

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

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

2.2. VEGETATION AND HABITATS

A Preliminary Ecological Appraisal of the proposed development site was undertaken by Phoebe Parry, on 11th February 2025. The weather was cold and overcast with strong winds. An updated walkover and habitat condition assessment was undertaken on 10th July 2025 by Phoebe Parry. The weather was warm and sunny.

The walkover survey was undertaken to the standard methodology as detailed by the UK Habitat Classification Version 2.0 (UKHab, 2023). The assessment follows the methodology as per “Guidelines for Preliminary Ecological Appraisal” (CIEEM, 2017).

A vegetation and habitat plan has been produced for the proposed development site (please refer to Appendix I). The mapping is based on the UK Habitat Classification Version 2.0 (UKHab, 2023).

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

Searches were carried out for the presence of invasive species, including those listed on the revised (April 2010) Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) including Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*).



2.3. FAUNA

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

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

2.4. PRELIMINARY ROOST ASSESSMENT

The Preliminary Roost Assessment (PRA) was undertaken by Phoebe Parry on 11th February 2025.

The survey involved undertaking a systematic search of the trees, searching for signs of bats, or spaces where bats would be able to access. The methodology followed that described in *Bat Surveys for Professional Ecologists, 4th Edition (Collins, 2023)*.

The trees were categorised for their bat roosting potential as described in Table 1 in accordance with Collins (2023).

Table 1 Bat Roosting Potential Classification of Trees

CATEGORY	DESCRIPTION
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

2.5. SURVEY LIMITATIONS

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

These constraints have been taken into consideration during the assessment.



3. SURVEY RESULTS

3.1. SITE CONTEXT

The site comprised an array of habitats valuable to local wildlife including reedbeds, lowland fen, scrub, other neutral grassland, and individual trees. These habitats can support a range of local wildlife such as amphibians, terrestrial mammals, birds and invertebrates. Brown hare (*Lepus europaeus*) are anticipated to utilise the open grassland on site. The linear features, hedgerows and line of trees, on site form protected foraging and commuting features for bats, birds and terrestrial mammals. The wider site comprised agricultural land which has limited value for wildlife due to the lack of floristic diversity. However, it may be utilised by brown hare and ground nesting birds.

A small watercourse culverts under the site's northeastern boundary. The watercourse surfaces for 20 m adjacent to the eastern site boundary. As the watercourse culverts for over 100 m either end of the exposed watercourse, it is anticipated to have limited value for local wildlife and is unlikely to be utilised as a commuting feature for aquatic mammals such as otter and water vole.

Several areas of Deciduous Woodland Biodiversity Action Plan (BAP) Priority Habitat were located within 1 km of the site boundary. The closest was located approximately 700 m south of the site. These woodland habitats are anticipated to support a range of fauna such as roosting and nesting bats and birds, respectively. These habitats have good connectivity to the site through a series of hedgerows forming agricultural field margins which act as commuting features.

An area of Open Mosaic Habitat is located approximately 730 m southwest of the site. Such habitat comprises brownfield land that, due to previous disturbance and modification, supports a notable diversity of habitats within close proximity. As such, they are anticipated to provide valuable habitat for a variety of fauna, including rich assemblages of invertebrates.

Three waterbodies (WB1, WB2 and WB3) were located within 250 m of the site boundary. WB1 was located adjacent to the northwestern site boundary. WB2 and WB3 were located 210 m northwest of the site and 230 m south of the site, respectively. These waterbodies may support breeding great crested newts (*Triturus cristatus*) and common amphibians. Due to the lack of physical barriers, it is anticipated that common amphibians and great crested newts may utilise the site in their terrestrial phase.

3.2. DESIGNATED SITES

The site is not located within 1 km of any statutory designated sites.

However, the site is located within the Impact Risk Zone of the following Sites of Special Scientific Interest (SSSIs):

- ✳ Rochdale Canal SSSI and Special Area of Conservation (SAC) is located 3.7 km east of the site. The site is designated as an SSSI for its rare submerged and emergent vegetation including floating water-plantain (*Luronium natans*). The site is also designated as an SAC due to the presence of flowing water-plantain.
- ✳ West Pennine Moors SSSI is located 9.7 km northwest of the site. This site is designated for its extensive mosaic of upland and upland fringe habitats.

Due to the distance between the proposed site and designated sites and the small scale of the proposed works, no detrimental impacts on the statutory designated sites are anticipated as a result of the development. Furthermore, as per the criteria listed on MAGIC (accessed February 2025), the proposed site will not require further consultation with Natural England to proceed in relation to the SSSI.



Additionally, a Habitats Regulation Assessment (HRA) on the SAC will not be required due to the distance of the site from the SAC and small size of the site/low impact of development.

Pilsworth Site of Biological Importance (SBI) was located 860 m northwest of the site. The site comprises two large bodies of water connected via Brightley Brook.

It is considered that the proposed development will not have any negative impacts on the SBI due to its distance from the site and the nature of the proposed works. Additionally, a significant increase in the number of visitors to the SBI is not anticipated as a result of the development, which comprises the creation of an industrial unit.

3.3. HABITATS

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

3.3.1. RUDERAL/ EPHEMERAL

The centre of the site comprised ruderal/ ephemeral land associated with historical disturbance to the soil. Vegetation cover was sparse. Species included great willowherb (*Epilobium hirsutum*), smooth meadow grass (*Poa pratensis*), white clover (*Trifolium repens*), creeping buttercup (*Ranunculus repens*), black medic (*Medicago lupulina*) and nettle (*Urtica dioica*).

Figure 2 Showing Ruderal / Ephemeral





3.3.2. OTHER NEUTRAL GRASSLAND (G3)

Other neutral grassland was present on the north and east of the site. The northern parcel of grassland had colonised waterlogged soil and comprised more wetland-tolerant plant species such as bulrush (*Scirpoides holoschoenus*), common reed (*Phragmites australis*), soft rush (*Juncus effusus*), jointed rush (*Juncus articulatus*), and pendulous sedge. Himalayan balsam (*Impatiens glandulifera*) and field horsetail were also present within the wetland grassland. The eastern parcel comprised dryer soil. Species included cock's foot (*Dactylis glomerata*), creeping bent (*Agrostis stolonifera*), creeping buttercup (*Ranunculus repens*), teasel (*Dipsacus fullonum*), small teasel (*Dipsacus pilosus*), fescue species (*Festuca* sp), broadleaved dock (*Rumex obtusifolius*), white clover (*Trifolium repens*), willowherb species (*Epilobium*), ragwort (*Jacobaea vulgaris*), bittercress species (*Cardamine* sp.), mouse ear species (*Cerastium* sp.), tufted hair grass (*Deschampsia cespitosa*) and compact rush (*Juncus conglomeratus*).

Figure 3 Other Neutral Grassland (Dry soil)



Figure 4 Showing Other Neutral Grassland (Wet Soil)





3.3.3. WILLOW SCRUB (H3J)

An area of scrub dominated by willow species (*Salix sp*) was present in the northeast of the site. Other species included soft rush, creeping bent, and reed canary grass.

Figure 5 Showing Willow Scrub



3.3.4. MIXED SCRUB (H3H)

An area of mixed scrub was present in the west of the site. Species included silver birch (*Betula pendula*), dogwood (*Cornus sanguinea*), willow species, alder (*Alnus glutinosa*), bramble (*Rubus fruticosus agg.*), hawthorn (*Crataegus monogyna*), ragwort, pendulous sedge (*Carex pendula*) and teasel. In addition, invasive non-native species Himalayan balsam was also present in the southwest corner of the site.

Figure 6 Showing Mixed Scrub





3.3.5. OTHER WOODLAND; BROADLEAVED (W1G)

A small area of broadleaved woodland was located along the western site boundary. Species present within the woodland included silver birch, willow species, and alder. The ground flora comprised bramble, pendulous sedge, broadleaved dock and ragwort.

Figure 7 Showing Broadleaved Woodland



3.3.6. REEDBED (F2E)

An area of reedbed dominated by common reed was present on the east of the site. Bulrush and nettle were also present, but infrequent, within the reedbed.

Figure 8 Showing Reedbeds





3.3.7. INDIVIDUAL TREES (W32)

A number of individual trees were noted throughout the site. Species included willow species, pedunculate oak (*Quercus robur*) and silver birch.

Figure 9 Showing Individual Trees



3.3.8. LINE OF TREES (W33)

Two lines of trees (LoT1 and LoT2) were present on site. Please refer to Table 2 for the line of trees descriptions.

Table 2 Line of Trees

REFERENCE	DESCRIPTION	PHOTOGRAPH
LT1	A line of trees (LoT1) was present adjacent to WB1 along part of the western site boundary. Tree species entirely comprised willow species.	



REFERENCE	DESCRIPTION	PHOTOGRAPH
LT2	Line of trees 2 (LoT2) extended along part of the southern site boundary. Species included willow species and silver birch.	

3.3.9. SPECIES-RICH NATIVE HEDGEROW (H2A)

A species-rich native hedgerow (H1) was located along the northern site boundary. Species included hawthorn, dogrose (*Rosa canina*), elder (*Sambucus nigra*), and holly (*Ilex aquifolium*). The hedgerow was approximately 3 m tall and 2 m wide.

Figure 10 Showing Hedgerow 1



3.3.10. LOG/BRASH PILES

A number of log and brash piles were present throughout the site.



Figure 11 **Showing Log and Brash Piles**





3.4. PROTECTED AND NOTABLE SPECIES

3.4.1. AMPHIBIANS

Consultation GMEU identified numerous records of great crested newt within the 1 km search area. Historic survey records from 2004 on WB1 and WB3 found WB1 to be absent and WB3 to be positive for great crested newts. The closest recent records were all located 710 m south of the site associated with disused farmland. The records range from 2009 to 2021.

Consultation with MAGIC did not identify any great crested newt European Protected Species Licences within the 1 km search area. The closest licence was located approximately 2 km east of the site, adjacent to Junction 19 of the M62, active between October 2017 and December 2017 for the damage and destruction of a great crested newt breeding and resting place.

Great crested newts' upper dispersal limit is generally considered to be up to 250 m from a waterbody (though occurrence of greater distances does exist where habitat connectivity is of high quality) (English Nature, 2001). As the majority of the surrounding area comprised agricultural land, which provide limited ecological value and connectivity for great crested newts, 250 m from the site was deemed an appropriate distance from the site. Three waterbodies (WB1, WB2, and WB3) were located within 250 m of the site boundary. A HSI Assessment was undertaken on the three waterbodies. WB1 and WB2 were assessed as being GOOD and WB3 was assessed as POOR. All the waterbodies could support great crested newts. The habitats on site, including the woodland, scrub, log and brash piles, grassland, hedgerow and understorey of trees, could also support the species in their terrestrial phase, providing suitable refuge. As such, great crested newts may be present on site.

Records of common toad (*Bufo bufo*) were identified 710 m south of the site associated with disused farmland. The records ranged from 2011 to 2020. Due to the lack of waterbodies within the site, the site does not offer suitable habitat for breeding common amphibians. However, the reedbed, other neutral grassland, scrub hedgerows, log and brash piles, and woodland on site all provide suitable shelter and protection for the species group within their terrestrial phase. As such, common amphibians are anticipated to be present on site.

3.4.2. BATS

Consultation with GMEU identified records of bat species within the 1 km search area comprising common pipistrelle (*Pipistrellus pipistrellus*). The closest of these was from 2022, located approximately 460 m south of the site associated with a farmhouse. Several common pipistrelle bat roosts from 2016 were located 820 m north of the site associated with an industrial estate.

Consultation with MAGIC identified the presence of one Natural England Bat Mitigation Licence within the 1 km search area. This was located approximately 720 m northeast of the site, associated with a residential building, active between September 2019 and November 2019 for the destruction of a common pipistrelle non-breeding roost.

No buildings or structures were identified within the site boundary. All trees that could be accessed were assessed for their suitability to support roosting bats, as detailed in Collins (2023), and were found to have no bat roosting potential as they lacked maturity and/or any potential roost features suitable to support roosting bats.

The habitats on site are likely to attract invertebrate prey and in turn provide valuable foraging opportunities for the species group. In particular, the reedbed and adjacent waterbody (WB1) form high quality foraging features for the species group while the hedgerows and lines of trees bordering the site form linear commuting features. As such, the site is assessed as having High foraging and commuting value for bats.



3.4.3. BADGER

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

No badger setts were located on-site or within 30 m of the site boundary. However, the woodland, scrub, understorey of hedgerows, trees and lines of trees could provide sett-building opportunities for badger. The habitats on site also provide foraging opportunities for the species.

3.4.4. OTHER TERRESTRIAL MAMMALS

GMEU did not identify any records of European hedgehog within the 1 km search area. The site was assessed as providing suitable refuge and foraging habitat for hedgehogs within the scrub, woodland, individual tree, line of trees, log and brash piles, and hedgerow understorey. These habitats may also offer suitable hibernation opportunities for the species.

A record of brown hare from 2021 was recorded within the 1 km search area, located 710 m south. Additionally, the open grassland, scrub, woodland and hedgerow mosaic on site comprises good quality habitat for the species. As such, brown hare may be present on site.

3.4.5. OTTER AND WATER VOLE

Consultation with GMEU did not identify any records of otter or water vole within 1 km of the site boundary.

One watercourse (WC1), approximately 30 m in length, was located adjacent to the site northwestern boundary. The watercourse was deemed unsuitable for otters due to its small size and shallow depth. It is anticipated that there is a lack of aquatic prey due to the shallow depth of the stream. In addition, the watercourse culverts for over 100 m at either end of the watercourse, as such it would be unsuitable as a commuting feature for otters.

The brook was also assessed to be unsuitable for water vole. The watercourse was polluted, shallow and lacked steep embankments for burrowing. In addition, the banks were shaded by adjacent trees and scrub further reducing the suitability for water vole.

Figure 12 **Showing WC1**





3.4.6. WHITE-CLAWED CRAYFISH

Consultation with GMEU did not identify any records of white-clawed crayfish within the search area.

One watercourse (WC1) was present adjacent to the site's eastern boundary. This watercourse has limited potential for white-clawed crayfish. This is due to the shallow depth and silt-dominated substrate providing limited shelter for the species. As such, white clawed crayfish can be discounted from being present on site.

3.4.7. BREEDING BIRDS

Consultation with GMEU identified numerous records of notable birds within the search area, including kingfisher (*Alcedo atthis*), peregrine (*Falco peregrinus*), grey partridge (*Perdix perdix*), curlew (*Numenius arquata*), tree sparrow (*Passer montanus*), lapwing (*Vanellus vanellus*), reed bunting (*Emberiza schoeniclus*), lesser redpoll (*Acanthis cabaret*), house sparrow (*Passer domesticus*), skylark (*Alauda arvensis*), hobby (*Falco subbuteo*), linnet (*Linaria cannabina*), barn owl (*Tyto alba*), little ringed plover (*Charadrius dubius*), and yellow wagtail (*Motacilla flava*).

Common and notable bird species are anticipated to be present within the scrub, woodland, individual trees, reedbed, log and brash piles, and hedgerow on site. The site is assessed as having value for ground nesting birds within the open grassland.

3.4.8. REPTILES

Consultation with GMEU did not identify any records of reptiles within the search area.

The site comprises suitable habitat structure for reptiles with the scrub, woodland, log and brash piles, grassland mosaic providing foraging, basking and sheltering opportunities for the species group. As such, they are anticipated to be present on site.

3.4.9. NOTABLE INVERTEBRATES

The data search identified records of notable invertebrate species within the search area, including cinnabar (*Tyria jacobaeae*), latticed heath (*Chiasmia clathrata*), and garden tiger (*Arctia caja*).

Notable invertebrates are unlikely to be present within the small area of woodland on site due to its immature trees and the lack of deadwood. The remaining habitats on site lacked the floristic diversity to support large numbers of notable invertebrates. However, the presence of ragwort within the grassland could support cinnabar.

3.5. INVASIVE PLANT SPECIES

Consultation with GMEU did not identify any records of invasive plant species within the search area.

During the survey, Himalayan balsam was identified on site within the mixed scrub in the west of the site and the other neutral grassland along the northern site boundary. Field horsetail was also present within the wet grassland.



4. ECOLOGICAL CONSTRAINTS AND MITIGATION

4.1. DEVELOPMENT PROPOSALS

Development proposals comprise the redevelopment of the site into an industrial unit with associated access roads and car parking.

4.2. HABITATS

The site comprised habitats that did contain value for wildlife such as bats, birds, badger, hedgehog, reptiles, common amphibians, great crested newts and brown hare.

4.2.1. REEDBED

The reedbed on site is a UK BAP Priority Habitat. As such, this habitat should be retained where possible.

To ensure the reedbed is not negatively impacted by the development, all best practice guidance relating to pollution will be adhered to. This will include best practice use of refuelling machinery to avoid fuel spills. Site drainage will need to be considered to ensure that no highly silted or polluted run-off from the site workings will enter the ground. Best practice protection measures as detailed within PPG5 Pollution Prevention Guidelines (2007) are to be put in place to protect the features.

The following control measures would be required during any ground works and during the construction phase to ensure there are no impacts on the designated sites or any wildlife utilising them:

- ✿ All operational plant will be kept well-maintained. Turning off plant when not in use.
- ✿ Dampening of the operational areas will be regularly undertaken during dry weather conditions to avoid dust. Dust management will be extended to cover the plant and all operational areas and will be complied with throughout the period of development.
- ✿ A toolbox talk should be completed by a qualified ecologist to ensure contractors are aware of the habitats and their ecological importance.
- ✿ During night hours, no lighting is to be located facing the reedbed to ensure no wildlife are deterred from using it.
- ✿ A 'Site Tidy' protocol is to be put in place on-site. All litter is to be appropriately controlled, whilst on-site materials are to be adequately stored overnight.
- ✿ Where possible, all excavations will be battened at a 45-degree angle, or a ramp installed, to allow escape should animals become trapped.
- ✿ All best practice pollution prevention measures will be implemented, including using and storing machinery at a safe distance from the watercourse and reedbed on site to avoid fuel spills.
- ✿ All machinery used will be stored within the construction zone and will not be left adjacent to the reedbed when not in use.
- ✿ Machinery will be turned off when not in use.
- ✿ Surface water run-off will be controlled to reduce water pollution



Measures will also be taken throughout the construction phase to avoid dust pollution. Pollution prevention and control strategies will be adhered to at all times. Any dust incidents within proximity to the site and/or adjacent habitats will be reported to the site manager and the ECoW. Dust control measures will include the following:

- ✳ Where possible use a vacuum rather than a sweeping brush.
- ✳ Select the appropriate means of extraction/ suppression.
- ✳ If anyone is asked to carry out dust-generating activities without suppression measures the site team will be consulted for advice.
- ✳ Dust-generating tasks will never be carried out without the required control measures in place. Sealing and sheeting of stockpiles.
- ✳ Sheeting of vehicles transporting materials to and from the site. Limiting the speed of construction vehicles within the site to 10 mph to reduce dust trails. Surfacing, where practicable, of the site haul roads.
- ✳ Damping down using hoses and mobile bowzers.
- ✳ Carrying out of visual monitoring at sensitive locations.
- ✳ Regular servicing of plant and equipment including cleaning/replacement of air filters
- ✳ Issue of COSHH reports to identify any substances likely to cause offensive odours.
- ✳ Issue of Risk Assessment and Method Statements (RAMS) setting out how effective control measures will prevent the release of odours.

4.2.2. WOODLAND, SCRUB, INDIVIDUAL TREES, LINE OF TREES AND HEDGEROWS

It is recommended that, where possible, the woodland, scrub, individual trees, line of trees and hedgerows are retained and protected through development. If any trees or shrubs require removal, they should be replaced as soon as practicable. Any replacement planting should endeavour to be on the same aspect as that to be lost.

If the hedgerow or line of trees requires removal, they should be replaced as soon as practicable using lengths of more valuable hedgerow. Any compensation hedgerow planting should equate to a minimum of 1.5 times the length of hedgerow to be lost. Any replacement planting should endeavour to be on the same aspect as that to be lost, in order to retain commuting features through the site.

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

- ✳ Hawthorn.
- ✳ Rowan (*Sorbus aucuparia*).
- ✳ Holly.
- ✳ Whitebeam (*Sorbus aria*).
- ✳ Spindle (*Euonymus europaea*).



-  Dog rose.
-  Guelder rose (*Viburnum opulus*).
-  Elder

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

Any trees or shrubs within the site or boundary, to be retained, are to be appropriately protected during the construction phase. Temporary protective demarcation fencing will be used to protect the trees and shrubs. The fencing must extend outside the canopy of the retained trees and must remain in position until the works have completed to ensure protection is provided throughout the construction phase.

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

4.3. PROTECTED AND NOTABLE SPECIES

4.3.1. AMPHIBIANS

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

The log and brash piles should be dismantled by hand to ensure no common amphibians are harmed during clearance works.

4.3.2. BATS

The habitats on site were found to provide High foraging and commuting value for local bat species. It is recommended that any lighting during construction is appropriately placed to avoid being directed at any retained habitats. It is anticipated that due to the large area of suitable habitat being lost, further surveys are rerecommended. These are detailed in Section 5.2

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

-  Lighting should be pre-fixed on any proposed buildings, to ensure impacts on sensitive areas such as the are diminished.
-  Warm white tones are preferable to blue toned lights (3000k).
-  LED lights are preferable as they produce minimal UV.
-  To avoid light spill skyward, ensure lights face downward.
-  Make use of vegetation to block light spill into dark areas

Lighting should follow the protocols outlined in The Institute for Lighting Engineers document “Guidance for the Reduction of Obtrusive Lighting” (2005) and The Institution of Lighting Professionals (ILP) (2023). “Bats and Artificial Lighting at Night. Guidance Note GN08/23”.

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



4.3.3. BADGERS

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

If a badger sett is located, a stand-off distance may be required as well as precautionary working methods. If the sett requires closure, a Natural England Badger Licence would be required. Please note that badger licences can only be obtained between July and November each year to avoid potential impacts on pregnant females.

The following precautionary working methods will be adhered to during the construction phase to ensure that no badgers within the local area are impacted by the proposed development:

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

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

4.3.4. HEDGEHOGS

The site was assessed as providing suitable refuge, foraging and hibernation opportunities for hedgehogs within the individual trees, line of trees, hedgerow understorey, scrub habitats, log and brash piles, and broadleaved woodland. These habitats should be retained where possible. Where vegetation requires removal, it should be checked for the presence of hedgehog prior to removal. If any vegetation is too dense to be fully inspected, it should be strimmed to 50 cm and checked for hedgehog before being cleared to ground level. If trees are removed, their bases should be checked, prior to removal, for sheltering hedgehogs. It is recommended that any clearance takes place outside of December-March to avoid impacting hibernating hedgehogs.

The log and brash piles on site should be dismantled by hand to ensure no hedgehogs are harmed during clearance works.

Post-development, a series of hedgehog houses could be installed throughout the site to enhance the site's value for the species.



4.3.5. BROWN HARE

Brown hare, a UK BAP species, may be present on site. The habitats on-site are common within the wider landscape and as such impacts on the local brown hare population are anticipated to be low. However, it is recommended that a pre-commencement check for young hare, which may have been left in the arable fields by mothers after the breeding season (February to September), is undertaken.

4.3.6. BREEDING BIRDS

The site was assessed as having value for common and notable bird species within the other neutral grassland, reedbeds, scrub, woodland, line of trees, log and brash piles, individual trees and hedgerows. These habitats should be retained where possible.

If any vegetation requires removal or soil stripping, it should be carried out outside of nesting bird season. Breeding bird season occurs between March–September (inclusive). If this is not possible a suitably qualified ecologist should inspect the area no more than 48 hours prior to the removal. Should any nests, or nests in construction be located, a suitable stand-off distance should be maintained until the young have fledged. The ecologist will advise on suitable stand off and provide a toolbox talk to all site contractors regarding their working limits and legal implications.

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

4.3.7. REPTILES

The site was assessed as having potential for a large number of reptiles, throughout the site. As such, reptile surveys have been recommended to inform mitigation, as outlined in Section 5.3. However, if minor clearance works are required prior to the reptile surveys, it is recommended that the following Precautionary Working Methods are followed:

- ✿ All site contractors are to be inducted as to the potential presence of the species group, their legal responsibilities and working limits, by a suitably qualified experienced ecologist.
- ✿ Any scrub to be removed will be checked by an ecologist for the presence of reptiles, and once deemed free, the area will be turfed with a toothed bucket. If any scrub is too dense to be inspected, it will be strimmed to a length of approximately 150 mm under the supervision of the ecologist. It will be checked by an ecologist for the presence of reptiles, and once the area is deemed free, the area will be turfed with a toothed bucket.
- ✿ During works the site should be kept tidy of debris and material, and any vegetation within the working areas should be maintained below 50 mm in height to discourage amphibians or reptiles from re-entering these areas.
- ✿ If a reptile is identified, works should cease, and the project ecologist contacted immediately to capture the individual.

4.3.8. INVERTEBRATES

Cinnabar, a UK BAP species, may be present on site due to the presence of their host plant, ragwort, within the grassland. As such, ragwort should be planted in areas of green open space to ensure that the onsite populations are not affected post development.



4.4. INVASIVE PLANT SPECIES

Himalayan balsam was identified during the site walkover. As such, it is recommended, prior to the development, that the Himalayan balsam should be eradicated following the most current guidance set out by the Environment Agency by a qualified contractor.

Furthermore, field horsetail was identified throughout the wet grassland on site. While not a non-native species, field horsetail should also be managed on-site prior to the development due to the damage it can cause to hardstanding.



5. FURTHER SURVEYS

5.1. GREAT CRESTED NEWTS

The site was assessed as having value for great crested newts due to the presence of three waterbodies within 250 m of the site (WB1, WB2, WB3). Great crested newts are anticipated to be present in terrestrial habitats on-site, including the grassland, scrub, reedbeds, understorey of hedgerow, individual trees, log and brash piles, and line of trees.

It is recommended that eDNA surveys are undertaken on WB1, WB2, and WB3, where access is possible. Great Crested Newt eDNA Surveys will be required between mid-April and June (inclusive) to determine whether the species is present or absent in the waterbodies. The survey comprises a water sample extraction and lab analysis for GCN eDNA following the protocol set out in Appendix 5 of the DEFRA WC1067 Technical Advice Note. If the eDNA survey returns a negative result, no further surveys or mitigation is required regarding great crested newts.

However, if the eDNA Surveys return positive results for great crested newts, further surveys will be required to determine the population size present in the waterbodies as detailed in English Nature (2001). Should population surveys be required, six surveys would need to be undertaken between mid-April and the end of June, with at least three of the surveys taking place between mid-April and mid-May. A European Protected Species Licence will then be required and would require up-to-date surveys from the survey season prior to the application submission.

Alternatively, as the site is located within Greater Manchester, it is recommended that Natural England District Level Licencing (DLL) is utilised on the site. The Natural England DLL process will allow for works to proceed without traditional mitigation. The licence is obtained by making a Conservation Payment to Natural England, a quote can be obtained in the absence of population assessment surveys. If the application is supported by eDNA surveys, the conservation payment may be cheaper.

5.2. BATS

The habitats, particularly the reedbed on site and the adjacent pond (WB1) were assessed as having High value for foraging and commuting bats. These habitats should therefore be retained as dark areas during and post-construction to retain their value for local bat species. As large areas of valuable habitat are to be removed, Bat Activity Surveys will be required, as per Collins (2023).

One Night-time Bat Walkover (NBW) survey visit per season (spring- April/May, summer- June/July/August, autumn- September/October) will be required, with automatic/static bat detector surveys also undertaken for a minimum of five consecutive nights per month (April-October) in appropriate (or best available) weather conditions for bats. Further surveys may be required if any activity of interest is revealed that requires further observation on site. The results of the activity surveys will inform any mitigation required.

5.3. REPTILES

The site was assessed as having suitability for common species of reptiles due to the habitat structure on-site. It is therefore recommended that further reptile surveys be undertaken to confirm the absence or presence of the species. If present, it will provide data on the species assemblage and numbers which will inform the relevant mitigation procedures.



Reptile surveys can be undertaken between March – October (inclusive) during suitable weather conditions and should follow the guidance as set out in Froglife (2015). A series of Artificial Cover Objects (ACOs) will be distributed throughout the site and then left to “bed in” for a minimum period of seven days. Following this, a minimum of seven survey visits will be undertaken to check the ACOs for the presence of the species. The results would inform any mitigation, or species enhancements required.

5.4. BIRDS

The site was assessed as providing suitable value for common and notable bird species within the other neutral grassland, reedbeds, scrub, woodland, line of trees, log and brash piles, individual trees and hedgerows on site. As large areas of these habitats require removal, it is recommended that Breeding Bird Surveys are undertaken.

Breeding Bird Surveys can be undertaken between March and June (inclusive) during suitable weather conditions and should follow guidance set out by the British Trust for Ornithology (BTO). Surveyors will walk a fixed transect of the site, recording and mapping signs of all bird species within and adjacent to the site. A minimum of six visits would need to be undertaken.

Should development proposals comprise construction works in close proximity to the barn owl box located in the centre of the site, it is recommended that the box be moved to another area of suitable habitat and reinstated on a suitable tree. Prior to removal, a check of the barn owl box and B2 should be undertaken by a licenced ecologist to determine whether barn owls are nesting. If nesting is confirmed, all works within a set buffer zone defined by the ecologist must stop until the birds have finished nesting.



5.5. TABLE OF FURTHER SURVEYS

Please refer to Table 3 for a summary of further surveys required to inform a planning application.

Table 3 Further Surveys Recommended

SURVEY TYPE	TIMESCALES
Great Crested Newts eDNA Survey on WB1 – WB3	Mid-April and June (inclusive)
Night-Time Bat Walkover Surveys and Static Detector Surveys	One night-time bat walkover per season (Spring - April/May, Summer – June/July/August and Autumn - September/October (inclusive)) if development proposals affect retained foraging and commuting habitats. Static detectors deployed at the same locations per month (April to October (inclusive)) for a minimum of five consecutive nights.
Reptile Surveys	March to October (inclusive).
Breeding Bird Surveys	Four surveys between March and June (inclusive)



6. BIODIVERSITY NET GAIN

The scheme should achieve a 10% in Biodiversity Net Gain. In line with The Environment Act 2021, this is a mandatory requirement. Full details of this and a calculation of net gain could be finalised after detailed landscape plans have been prepared. It is recommended that an ecologist is consulted during the design stage to ensure, where possible, that biodiversity net gain can be achieved.

The following habitat measures will increase the on-site biodiversity:

-  Retaining the reedbed habitat.
-  Retaining and enhancing the scrub and woodland habitats.
-  Retaining the hedgerows
-  Native hedgerow planting
-  Native scrub planting
-  Native tree planting
-  Other neutral grassland creation

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



7. REFERENCES

- ✿ Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal.
- ✿ CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine.
- ✿ Collins, J. (ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edition. The Bat Conservation Trust, London.
- ✿ Environment Alliance (2007). PPG5: Pollution Prevention Guidelines; Works and Maintenance In or Near Water; PPG5.
- ✿ Froglife (2001). Great Crested Newt Conservation Handbook.
- ✿ Institute of Lighting Engineers (2005). Guidance Notes for the Reduction of Obtrusive Light.
- ✿ The Institution of Lighting Professionals (ILP) (2023). Bats and Artificial Lighting at Night. Guidance Note GN08/23.
- ✿ Natural England Joint Publication JP029 (2019). The Biodiversity Metric 2.0. Auditing and Accounting for Biodiversity, User Guide, Beta Version.
- ✿ Oldham, R. S., Keeble J., Swan, M. J. S. & Jeffcote, M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10 (4), 143–155.
- ✿ Stace, C. A. (2019). New Flora of the British Isles. Fourth Edition. Cambridge University Press.
- ✿ UKHab (2023) UK Habitat Classification Version 2.0
- ✿ Wildlife and Countryside Act (2010) Schedule 9 of the Wildlife and Countryside Act 1981.

END OF REPORT

APPENDIX I

UKHAB HABITAT PLAN



APPENDIX II

WATERBODY PLAN





Key:

-  Red Line Boundary
-  250 m Buffer
-  Waterbodies

Notes

Issue: 1	Revision: 1	Date: 21/02/2025	Drawn: PP	Authorised: CK
Client: Yeargate			Job No. 82-299	Date: 21/02/2025
			Drawing No. 82-299-001	Scale: 1:4200
Job title: Birch Business Park			Drawing title: Waterbody Plan	



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APPENDIX III

HSI ASSESSMENT





DISTANCE FROM SITE	DESCRIPTION	HSI CALCULATION											PHOTOGRAPH
		SI1	SI2	SI3	SI4	SI5	SI6	SI7	SI8	SI9	SI10	S	
Waterbody 1													
Located adjacent to the northeastern site boundary.	WB1 was located adjacent to the site in the northwest corner. The waterbody was partially surrounded by scrub and individual trees. Aquatic marginal vegetation was abundant around the water margins. The water was turbid which may be as a result of recent heavy rainfall causing runoff from the adjacent agricultural fields.	0.5	1	0.9	0.33	1	0.67	1	0.95	1	0.3	0.70	
	SCORE = GOOD												
Waterbody 2													
Located approximately 210 m northwest of the site.	WB2 was located within arable land. The majority of the vegetation surrounding the waterbody comprised scrub and scattered trees, shading much of the pond edge. Parts of the northern water margins did comprise emergent vegetation.	0.5	0.93	1	0.33	0.9	1	1	0.95	0.67	0.3	0.70	
	SCORE = GOOD												



DISTANCE FROM SITE	DESCRIPTION	HSI CALCULATION											PHOTOGRAPH
		SI1	SI2	SI3	SI4	SI5	SI6	SI7	SI8	SI9	SI10	S	
Waterbody 3													
Located approximately 230 m south of the site.	WB3 was located in the southeast corner of Birch Business Park. Modified grassland surrounded banks of the waterbody. Some marginal vegetation was present at the water's edge. The banks of the waterbody were tall and steep, while the eastern bank comprised a vertical wall. Several outfalls were noted in the waterbody and had a foul smell.	0.5	0.92	0.9	0.01	1	1	1	0.95	0.33	0.3	0.46	
	SCORE = POOR												

NOTES:

HSI calculation components are detailed below:

SI1	Location
SI2	Pond area
SI3	Pond drying
SI4	Water quality
SI5	Shade
SI6	Fowl
SI7	Fish
SI8	Pond
SI9	Terrestrial habitat
SI10	Macrophytes
S	Score