



Preliminary Ecological Appraisal Report

Land off Fog Lane, Manchester

May 2025



Styles Ecology Ltd



Prepared for: Dalcour Maclaren

Survey date: 26th June 2024

Version	Purpose	Originator	Authorised	Date
00	For client comment	Jonathan Pescod & Daniel Burrows	Joshua Styles	22 nd July 2024
01	For client comment	Jonathan Pescod & Daniel Burrows	Joshua Styles	1 st May 2025
02	For client comment	Jonathan Pescod & Daniel Burrows	Joshua Styles	11 th May 2025
03	For issue	Jonathan Pescod & Daniel Burrows	Joshua Styles	26 th May 2025

Notice

This report has been prepared by Styles Ecology Ltd, with all reasonable care, skill and diligence within the terms of the contract with the client and with due regard to available best-practice guidance. The contents contained within this report must not be copied or reproduced without the express permission of Styles Ecology Ltd. This is with the exception for the collection of biological records data which may be gathered by the Local Records Centre and other recording groups as appropriate.

This document has been prepared by a botanical specialist and does not purport to provide legal advice.

Styles Ecology Ltd is registered in England and Wales under Company Number 15229405 and its registered office is situated at 47 Langshaw Lea, Liverpool, L27 4YE.



Table of Contents

Executive Summary	4
1.0 Introduction	5
2.0 Legislation and policy	8
3.0 Methods	15
4.0 Limitations	23
5.0 Desk study results	24
6.0 Field survey results	31
7.0 Conclusions & recommendations	37
8.0 Biodiversity statement	41
Appendix I – Site photographs	43
Appendix II – Condition assessment sheets	47
Appendix III – Site-specific botanical species list	48
Appendix IV – Biodiversity enhancement	49
Appendix V – UKHab habitats map	54



Executive Summary

As part of a proposed planning application with Manchester City Council concerning a plot of land at Fog Lane Park in Manchester, Styles Ecology Ltd were commissioned to carry out a Preliminary Ecological Appraisal (PEA) in June 2024.

The PEA was commissioned by Dalcour Maclaren; proposals are understood to involve the erection of a new gas governor kiosk with associated parking and fencing; existing access from Parkville Road to the north will be retained.

Extensive findings, conclusions and recommendations are presented throughout the report; however, the reader should be aware of the following further surveys and key recommendations.

Key recommendations:

Biodiversity Net Gain

Based on the information gathered during the diurnal assessment, Fog Lane Park is **not exempt** from the Biodiversity Gain Planning Condition.

No habitat degradation has is understood to have occurred at the site.

The site is host to the following biodiversity value:

- *Habitat: **0.05***
- *Hedgerow: **0.00***
- *Watercourse: **0.00***

Birds

Regarding general breeding bird species, the dense scrub could support breeding birds during the nesting bird season of March – August, inclusive.

Any works impacting upon these areas of potential suitability should therefore be carried out outside of the breeding bird season, typically March – August inclusive. For works within the breeding bird season, any areas that can support nesting birds should be checked by a professional Ecologist for nesting birds within 48 hours or less prior to works commencing.

Other terrestrial fauna

There is a low risk of impacts to hedgehogs and robust amphibians such as common frogs during the construction phase of the proposed development.

A programme of Reasonable Avoidance Measures (RAMs) is recommended in section 7.14 to be enacted on the site to prevent impacting upon terrestrial fauna, whilst section 7.17 details avoidance measures in relation to common amphibians.

Biodiversity Enhancement

*A range of appropriate enhancement options for fauna and flora which the applicant might consider implementing as part of the development are provided in **Appendix IV**, including native planting and wildlife boxes.*

1.0 Introduction

1.1 As part of a proposed planning application with Manchester City Council concerning a plot of land at Fog Lane Park in Manchester, Styles Ecology Ltd was commissioned to carry out a Preliminary Ecological Appraisal (PEA) in June 2024.

1.2 The PEA was commissioned by Dalcour Maclaren; proposals are understood to involve the erection of a new gas governor kiosk with associated parking and fencing; existing access from Parkville Road will be retained. See **Figures 1.1-1.2** below for a site plan with red line boundary and the location of the retained access track.

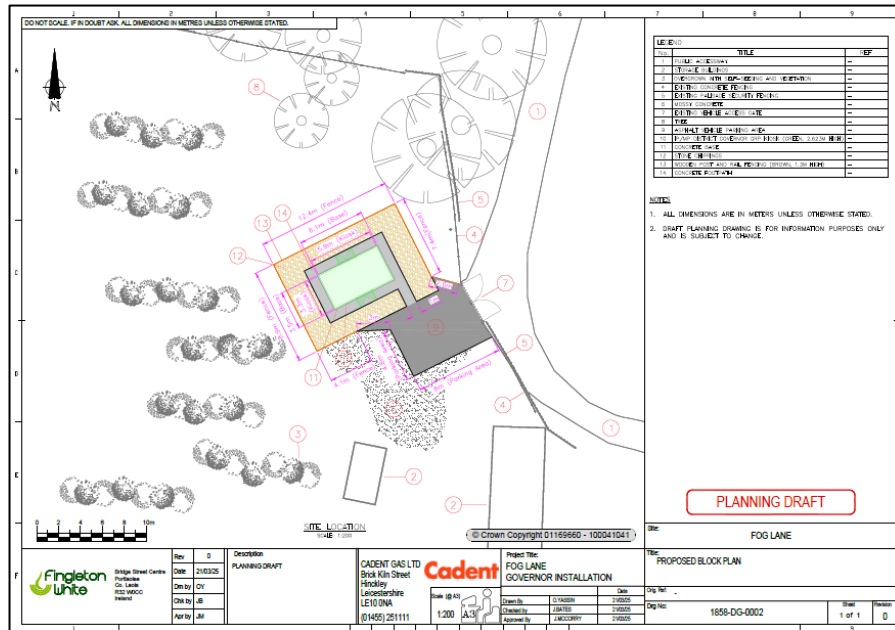


Figure 1.1: Proposed site plan with red line boundary ©Cadent

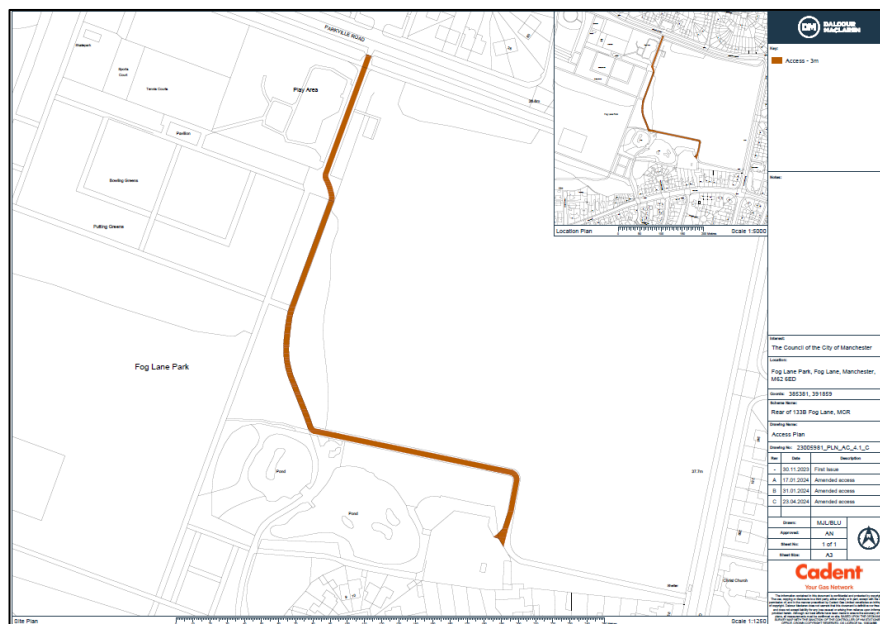


Figure 1.2: Existing access route to be retained ©Cadent

1.3 As part of the Local Planning Authorities (LPA) planning policies and obligations to the Planning Framework, ecological surveys are generally required prior to planning permission being granted, particularly where protected / priority habitats or species are, or may be, present, and where these species have the potential to be impacted by the proposals for which the applicant seeks consent.

1.4 The PEA was carried out in accordance with the 'Guidelines for Preliminary Ecological Appraisal, 2nd Edition' (CIEEM, 2017) and all associated 'CIEEM Competencies for Species Survey (CSS)', whilst this report has been presented in accordance with the British Standard 42020:2013 Biodiversity – Code of Practice for Planning and Development.

Aims & Objectives

1.5 The appraisal aims to ascertain the baseline nature of the site and, where possible, obtain information on any priority wildlife habitats, or species, that may be present and if so determine if they will be affected by the proposals. The survey, therefore, includes the following objectives:

- Gather and present baseline ecological information on site/off site (as necessary) within a suitable report,
- Identify, measure and map habitats using UK Habitat Classification – Habitat Definitions Version 2.0 (2023) habitats,
- Identify any likely ecological constraints associated with the proposals for the site (i.e. the presence of protected / priority habitats or species that exist within the confines of the application boundary, or zone of influence (ZOI),
- Identify measures likely to be required in line with the mitigation hierarchy (i.e. impact avoidance > minimisation > mitigation > compensation),
- Identify any additional survey requirements,
- Ascertain the baseline value of the habitats on site, to allow for the completion of a 'Biodiversity Statement',
- Identify general enhancement opportunities for biodiversity in line with national and local planning policy,
- Set out any requirements for post-development monitoring, management, or other commitments, and how they can be secured, where required.

1.6 As a functioning component of this specific ecological appraisal:

- Habitats on site were identified, measured and mapped using the UK Habitat Classification – Habitat Definitions Version 2.0 (2023),
- Trees and buildings, where present, were subject to preliminary roost assessment (PRA) for Bats and scored against the bat roost suitability parameters defined in the Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023),
- Ponds within 250m were assessed relative to their potential to host breeding populations of great crested newts (*Triturus cristatus*) (GCN).



1.7 This report therefore provides important baseline information as derived from the diurnal appraisal process outlined above and recommends any necessary additional surveys, or work, where applicable, to provide a conclusive ecological impact assessment.

1.8 The Applicant should be aware then that if during the appraisal:

- The application site/area was found to be suitable for any European Protected Species (EPS), otherwise protected, or priority habitats / communities / species, or,
- Signs of use by particular protected species were found, or suspected, or,
- Seasonal constraints significantly limit the gathering of ecological information to arrive at an accurate conclusion upon which the planning application can proceed.

Then more detailed surveys may be recommended where necessary, to allow the ecologist to arrive at a conclusive impact assessment.

1.9 If protected species were subsequently found either during appraisal or during detailed further surveys and / or may be affected by the development proposals, then a European Protected Species Mitigation Licence (EPSML) may be required to proceed with the development.

1.10 Where more detailed surveys are recommended by the Ecologist, following ecological appraisal, then LPAs, on the advice of their ecological advisors, may not grant permission until such time that all relevant material information is gathered in accordance with their obligations to the legislature.

1.11 Protected / priority species omitted from this report have been discounted due to negating factors including obvious absence / isolation of suitable habitats, and / or distributional aspects negating the necessity to survey for them, and / or the proposed works were not considered to impact the species or encroach on areas where the species may be present.



2.0 Legislation and policy

2.1 The legislature considered for the purposes of this report includes the following:

- Biodiversity Net Gain: Good practice principles for development (2019),
- BS 42020:2013 Biodiversity – Code of Practice for Planning and Development (2013),
- Conservation of Habitats and Species Regulations (2017) (as amended),
- Countryside Rights of Way (CROW) Act (2000),
- Natural Environment and Rural Communities (NERC) Act (2006),
- National Planning Policy Framework (2023) (as last revised),
- Protection of Badgers Act (1992),
- The Environment Act (2021), including all six statutory instruments in relation to Biodiversity Net Gain (BNG),
- The Hedgerow Regulations (1997),
- The Invasive Alien Species (Enforcement and Permitting) Order 2019,
- Town and Country Planning Act (1990),
- Wild Mammals Protection Act (1996),
- Wildlife and Countryside Act (1981) (as amended).

2.2 These acts entail relevance to both protected and invasive species. The degree of protection offered to taxa provided within existing UK and EU legislature often varies depending on species / group, for example, some species may purely be protected during one of its life stages (e.g. common species of breeding bird whilst nesting / with eggs / young); some species may receive full protection within the EU, whereas others may be protected solely on a national basis (e.g. grass snake).

2.3 **Table 2.1** contains appropriate legislature to each species / group specifically respective to the site and provides the relevance of said legislation.



Table 2.1: Relevant legislation

Species Group / Species	Relevant Legislature	Level of Protection
Badger	Protection of Badgers Act (1992), Wildlife and Countryside Act (1981) (as amended)	Illegal to: Wilfully kill, injure or take a badger (or attempt to do so), cruelly ill-eradicate a badger, dig for a badger, Intentionally or recklessly damage or destroy a badger sett or obstruct access to it, cause a dog to enter a badger sett, disturb a badger when it is occupying a sett.
Bats	CRoW Act (2000) Conservation of Habitats and Species Regulations (2017) (as amended) Wildlife and Countryside Act (1981) (as amended)	All British bats and their roosts are afforded full protection from damage/destruction and bats may not be injured/killed/taken at any life stage. Once identified, roosts are protected whether the bat is in occupation or not.
Birds	CRoW Act (2000) Wildlife and Countryside Act (1981) (as amended)	All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected. Birds listed on Schedule 1 Wildlife & Countryside Act (1981) (as amended) are afforded a greater level of protection.
Great Crested Newt (GCN)	CRoW Act (2000)	Great Crested Newts (GCN's) are fully protected from disturbance, killing, injuring or possession at any life stage.



Species Group / Species	Relevant Legislature	Level of Protection
	Conservation of Habitats and Species Regulations (2017) (as amended) Wildlife and Countryside Act (1981) (as amended)	Confirmed breeding ponds and resting places are afforded the same protection.
Invasive Plant Species	Wildlife and Countryside Act (1981) (as amended) The Invasive Alien Species (Enforcement and Permitting) Order 2019	Species listed within Schedule 9/Schedule 2 as invasive, including Japanese knotweed (<i>Reynoutria japonica</i>) and Himalayan balsam (<i>Impatiens glandulifera</i>), for example, carry notoriety regarding development. The Acts make it an offence for any person to grow or cause to grow in the wild any plants listed as invasive.
Reptiles	Conservation of Habitats and Species Regulations (2017) (as amended) – SL/SS Wildlife and Countryside Act (1981) (as amended) CRoW Act (2000)	All native reptile species have some degree of protection in the UK, through section 8(1) and (5) (specified in Schedule 5) of the Wildlife and Countryside Act 1981 (as amended). Sand lizard and smooth snake are species of principal importance however with greater protection..

Relevant Policy

2.4 Guidance for Local Authorities: Extract from Office of the Deputy Prime Minister – Circular 06/2005:

“It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision”.

2.5 Paragraph 186 of the National Policy Planning Framework (as revised in December 2023) states:

“When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.”

2.6 Policy EN 15 ‘Biodiversity and Geological Conservation’ of the Manchester City Council Core Strategy (2012-2027) supports this, stating:

“The Council will seek to maintain or enhance sites of biodiversity and geological value throughout the City. Particular consideration will be given to:

- Sites with international or national designations for their biodiversity value. Manchester contains one Site of Special Scientific Interest (SSSI) (Cotteril Clough); there is a Special Area of Conservation (SAC) and an SSSI just over the border in Oldham (both on the Rochdale Canal within Oldham);*
- Other sites of biodiversity value, including Sites of Biological Importance (SBIs) and Local Nature Reserves (LNRs); Manchester currently has 35 SBIs (including the Rochdale and Ashton Canals) and 7 LNRs; priority habitats found within Manchester, as listed in the Manchester Biodiversity Strategy and included in the Greater Manchester Biodiversity Action Plan (GM BAP);*
- Sites that are recognised for their geological importance;*
- The Council’s objective to protect and conserve the City’s existing trees and woodlands and the aim for a net increase in trees across the City.*

*Developers will be expected to identify and implement reasonable opportunities to enhance, restore or create new biodiversity, **either on-site or adjacent to the site**, contributing to linkages between valuable or potentially valuable habitat areas where appropriate; with reference to:*

- *The Manchester Biodiversity Strategy, which provides further details of priority habitats within Manchester and opportunities for biodiversity enhancement including corridors such as the Mersey, Medlock and Irk river valleys, the canals and disused railway lines and areas of managed greenspace particularly in parks;*
- *The Green Infrastructure Framework for Greater Manchester, which encompasses an ecological framework that seeks to guide and inform habitat creation and repair, including identifying large 'biodiversity opportunity areas' including the Moston Brook Corridor and Nutsford Vale;*
- *The Open Space, Sport & Recreation Study, which identifies areas where there is a deficit of natural and semi-natural greenspace, opportunities for green corridors and other linkages;*
- *Manchester's Climate Change Action Plan;*
- *The Strategic Flood Risk Assessment (SFRA) for Manchester;*
- *The Habitats Regulations Assessment (HRA) for Manchester, which gives detailed consideration to Special Areas of Conservation (SACs), including the Rochdale Canal SAC just outside the district boundary;*
- *The River Basin Management Plan for the North West;*
- *The Manchester Tree Strategy.*

Any adverse impacts on biodiversity will need to be justified against the wider benefits of the proposal, assessed against other LDF policies. Where adverse impacts are unavoidable, developers will be required to provide appropriate mitigation and/or compensation.

Development should wherever possible seek to maintain, enhance or restore existing geology."

2.7 Sections of Policy EN 15 which have been presented in bold above have been superseded by the 'Places for Everyone Joint Development Plan Document for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan 2022 To 2039' (March 2024). The relevant Policy JP-G8: 'A Net Enhancement of Biodiversity and Geodiversity' states:

"Through local planning and associated activities a net enhancement of biodiversity resources will be sought, including, where relevant, by:

1. *Increasing the quality, quantity, extent and diversity of habitats, particularly priority habitats identified in national or local biodiversity action plans and those that support priority species;*
2. *Improving connections between habitats, to protect and enhance the provision of corridors, ecological networks (including Nature Recovery Networks) and steppingstones that enable the movement of species, especially as the climate changes;*
3. *Enhancing the management of existing habitats, including through habitat restoration, avoiding habitat fragmentation and combating invasive species;*

4. *Protecting sites designated for their nature conservation and/or geological importance, with the highest level of protection given to international and then national designations;*
5. *Facilitating greater access to nature, particularly within urban areas;*
6. *Supporting the development and implementation of the Great Manchester Wetlands Nature Recovery Network; and*
7. *Safeguarding, restoring and sustainably managing our most valuable soil resources, tackling soil degradation/erosion and recovering soil fertility, particularly to ensure protection of peat-based soils and safeguard 'best and most versatile' agricultural land.*

Development will be expected to:

- a. *Follow the mitigation hierarchy of:*
 - i. *Avoiding significant harm to biodiversity, particularly where it is irreplaceable, through consideration of alternative sites with less harmful impacts, then*
 - ii. *Adequately mitigating any harm to biodiversity, then*
 - iii. *Adequately compensating for any remaining harm to biodiversity*
- b. *Avoid fragmenting or severing connectivity between habitats;*
- c. *Achieve a measurable net gain in biodiversity of no less than 10%*
- d. *Make appropriate provision for long-term management of habitats and geological features connected to the development;*
- e. *Where appropriate, development should: mitigate air pollution impacts on Manchester Mosses SAC; mitigate urban edge, functionally linked land and recreation disturbance impacts on the South Pennine Moors SAC/SPAs, and assess and potentially mitigate boat movement, water pollution, and light spillage and shading impacts on the Rochdale Canal SAC; and*
- f. *Development proposals should be informed by the findings and recommendations of the appropriate biodiversity/ecological assessment(s) in the PfE evidence base and/or any updated or appropriate biodiversity/ecological assessments submitted as part of the planning applications process."*

Priority Habitats & Species

2.8 In the United Kingdom, legal protection and otherwise legislative recognition is afforded to particular habitats and species based on a variety of ecological factors. These are typically referred to as priority habitats and species, and can be identified under a variety of legislation and local policy, notably the UK Biodiversity Action Plan (UKBAP), Section 41 (s.41) of the NERC Act as well as under Local Biodiversity Action Plans (LBAPS).

Biodiversity Net Gain



2.9 The National Planning Policy Framework (NPPF), revised in December 2023, legislates net gain in biodiversity through paragraphs 180(d), 185(b) and 186(d). An effort should be made, therefore, through the development design to provide ecological enhancement in order to deliver an overall increase in biodiversity, and opportunities to incorporate biodiversity in and around developments should be encouraged.

2.10 The Environment Act 2021 ('The Act') came into force in November 2021. Aspects of the Act relating to BNG came into force on the 12th February 2024, whereby BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021).

2.11 The Act is supported by secondary legislation, consisting of six statutory instruments laid within law, of which the relevant legislation includes:

- The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024¹
- The Biodiversity Gain Site Register Regulations 2024²
- The Biodiversity Gain Site Register (Financial Penalties and Fees) Regulations 2024³
- The Biodiversity Gain Requirements (Exemptions) Regulations 2024⁴
- The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024⁵
- The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024⁶

¹ Available here: <https://www.legislation.gov.uk/uksi/2024/44/contents/made>

² Available here: <https://www.legislation.gov.uk/uksi/2024/45/contents/made>

³ Available here: <https://www.legislation.gov.uk/uksi/2024/45/contents/made>

⁴ Available here: <https://www.legislation.gov.uk/uksi/2024/47/contents/made>

⁵ Available here: <https://www.legislation.gov.uk/uksi/2024/48/contents/made>

⁶ Available here: <https://www.legislation.gov.uk/uksi/2024/50/contents/made>



3.0 Methods

3.1 As part of the ecological appraisal report, a desk-top and field-based study is conducted. Methods for both components of the appraisal are given below.

Desktop Study

3.2 Prior to a site visit, a desktop study was conducted using online resources to obtain information pertaining to any sites afforded statutory (e.g. SSSI) and non-statutory (e.g. LWS) designations for nature conservation within 2.0 kilometres of the site boundary. To do so, the Multi Agency Geographic Information for the Countryside (MAGiC – provided by DEFRA) was accessed to gather such information; this particular interactive mapping service was also used to locate any locally granted European Protected Species Mitigation Licenses (EPSML) and species records to further inform conclusions concerning such species in the context of the study site and its proposed development.

3.3 Historic satellite imagery was reviewed using sources such as Google Earth (© 2023/24) to help establish past use of the land and determine the nature of adjoining and extending habitats; such information aids in the understanding of how the site might interact with its surroundings ecologically and its value in that context, and how the development may impact at a wider scale.

3.4 In addition, the Manchester City Council 'Planning – Map Search' function was utilised to help inform the desktop study by analysis of existing publicly accessible ecological survey results that have been carried out locally within the previous five years.

3.5 A commercial data request to the Local Environment Records Centre serving the area has not been sourced at this time, with the combination of online EPSML data, extensive company records and the daytime survey data available to the ecologist considered to contain enough information in relation to the protected species likely to be present on site. **If, however, a data search is considered to be necessary by the Local Authority or advisory body to better inform the appraisal, a proportionate data search should be commissioned with results interpreted into the conclusions and recommendations of a re-issued / updated report.**

1) The Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK (CIEEM, 2020) states data searches in:

“Situations where the data search would be extremely unlikely to provide information needed to inform the assessment, due to the scale and location of the proposed development. The appropriateness of excluding a data search will need to be judged on a case-by-case basis as, in most situations, it will be essential to carry out such a search even if the development is very small or is likely to have a low impact.”

Field survey

3.6 A daytime preliminary ecological appraisal (PEA) was conducted on the 26th June 2024 in dry conditions (20°C), 1/12 (Beaufort scale), 0% cloud cover, by the following surveyor (see **Table 3.1** overleaf).

Table 3.1 – Site surveyor credentials

Name	Description of most relevant credentials
Mr. J. Pescod Qualifying CIEEM	• MRes Advanced Biological Sciences, BSc (Hons) Senior Ecologist, with 6 years extensive training and experience. • Holder of a Natural England Great Crested Newt: CL08 Class 1 licence 2022-10653-CL08-GCN. • Accredited agent on the Class 2 Natural England bat license of Mrs K Wilding (CLS-14227). • FISC 4 botanist.

Floristic assessment

Habitats

3.7 The survey followed the UK Habitat Classification Version 2.0 (UKHabs, 2023) methodology, which was introduced as the successor to the Joint Nature Conservation Committee (JNCC) Phase 1 Habitat Methodology standards (JNCC, 2010) in conjunction with the nationwide roll out of Biodiversity Net Gain. Survey techniques were also carried out with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Technical Guidance Series “Guidelines for Preliminary Ecological Appraisal, 2nd Edition” (CIEEM, 2017).

Vegetation

3.8 During the survey walkover, botanical assemblages were assessed, and the land was inspected for the presence of red-listed (Stroh et al., 2014; Hodgetts, 2011), s.41 and LBAP species alongside specially protected species as listed under Schedule 8 of the Wildlife and Countryside Act (WCA) (1981) (as amended) and / or Schedule 5 The Conservation of Habitats and Species Regulations (2017) (as amended). Species nomenclature follows Stace, C. (2019) – definitive English names.

3.9 In addition to attributing ecological value to red-listed / BAP species, in accordance with existing CIEEM guidance, a geographic frame of reference is also adopted. Plant species and habitats may be recognised for their ecological value on a geographical scale which is adopted on a site-to-site basis (*International – National – Regional – County/Vice-County – Local*). For botanical species list compiled in full, see **Appendix II**.

3.10 In combination with assessing the area in relation to flora and habitats of conservation importance, the land was also assessed in relation to the presence of invasive non-native species (INNS) as listed under Schedule 9 (Part II) of the Wildlife and Countryside Act (1981) (as amended) and Schedule 2 of The Invasive Alien Species (Enforcement and Permitting) Order 2019 (IASO).

Biodiversity Net Gain

3.11 Assessment of baseline Area Habitat / Hedgerow / Watercourse units have been carried out and assessed separately in accordance with the guidance, principles, and rules – where present on site.

3.12 Measurement of habitats was carried out using a combination of desktop software – QGIS, Google Earth and MAGiC Maps 2023/24, whilst physical habitat measurements were also taken in the field during ground truthing, where necessary.

Faunal assessment

3.13 During site walkover, direct presence and / or evidence of priority fauna encountered was documented, whilst in tandem the area was assessed for the potential to support the priority species discussed in **Section 6.0**. The walkover also aimed to identify any ephemeral pools or unmapped waterbodies.

Bats

3.14 Criteria for preliminary bat roost assessment are based upon the determinants given in the Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023) (see **Figures 3.1 – 3.3** overleaf).

3.15 The site was assessed for bats; a daytime bat walkover (DBW) was undertaken to observe, assess and record any habitats or features suitable for usage by bats, either as commuting, foraging or roosting provision. Wider connectivity to other habitats was also considered during the DBW.

3.16 Buildings and other permanent / semi-permanent structures (*where present*) would be subject to a preliminary roost assessment (PRA), to identify potential areas which may be of value to bats and to determine evidence of use. This typically involves a systematic search of the external aspects of any structure(s), comprising an investigation of features known to be used by bats (for example roofing material, soffits, fascia, lead flashing hanging tiles) using a high-powered torch and close-focus binoculars, where necessary. Where possible, an internal assessment of the structure was also carried out, with the aid of a high-powered torch and endoscope, where necessary, to identify any evidence of bat use of a structure. Field signs of bats typically comprise bat droppings, urine splashing, fur-oil staining, incidental animal presence, dead specimens and / or the presence of prey items, such as moth wings.

3.17 Trees (*where present*) would be subject to a ground level tree assessment (GLTA) using equipment such as close-focus binoculars and a high powered-torch. Potential roost features (PRFs) can include woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed lifted bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached climbing species with stem diameters in excess of 50mm or pre-existing bat / bird boxes. These PRFs can then be determined as PRF-I or PRF-M, dependent on their suitability for individual / low numbers of bats or their capability to host multiple bats.

3.18 Factors considered during the preliminary roost assessment include:

- Practical experience of the surveyor,



- Knowledge of bat species relevant to the site location and geographical range,
- Nature of the immediate / surrounding habitat in relation to foraging opportunities,
- Presence / absence of roost potential,
- Value and types of roost potential, if present (i.e. – maternity, hibernation, transitional).

Table 4.1. Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

Potential suitability	Description	
	Roosting habitats in structures	Potential flight-paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible ^a	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.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
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 ^b 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 ^c).	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^b 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).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
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 ^b and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
a Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute). b For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance. c 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 <i>et al.</i>, 2016 and Jansen <i>et al.</i>, 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.		

Figure 3.1: BCT guidelines extract

Table 4.2. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement.

Suitability	Description
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

Figure 3.2: BCT extract on tree roost suitability criteria

Table 6.2. Guidelines for categorising the potential suitability of PRFs on a proposed development site for bats, to be applied using professional judgement.

Suitability	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.

Figure 3.3: BCT extract on tree roost categorisation criteria

Birds

3.19 The site was inspected for evidence of nesting and suitability for relevant species. Bird species observed and heard were recorded on site, and a search was made for nest material, or areas suitable for nesting – this can take the form of searching structures, woody vegetation, semi-aquatic vegetation such as reeds and / or ground flora. Elevations of any buildings or structures on site were inspected for evidence of birds that show a high dependency upon built structures, many of which are in a state of decline. These might include the following species for example (list non-extensive):

- House martin (*Delichon urbica*): Birds of Conservation Concern (BoCC) red status,
- House sparrow (*Passer domesticus*): BoCC red status,
- Starling (*Sturnus vulgaris*): BoCC red status,
- Swift (*Apus apus*): BoCC red status.

3.20 Additional to the site's capacity to support generally common species for breeding, the area was also subject to an assessment for wider capacity to support species with extra protection under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended) and other priority species.

Other terrestrial mammals

3.21 The walkover included an assessment for the presence / suitability of badger (*Meles meles*), which includes signs of activity such as prints, hairs, digging, setts, 'runs' leading to and from a sett and the existence of latrines or 'snuffle' holes where badgers have foraged in the ground.

3.22 The site was also assessed for the presence / suitability of European hedgehog (*Erinaceus europaeus*) and other priority mammals.

Herpetofauna

3.23 During desktop assessment, a 250 metres radial search was undertaken from a site central grid reference in relation to the presence of ponds, ditches or other water bodies that may support great crested newt (GCN) (*Triturus cristatus*). The information gathered would then be used to aid in establishing if more detailed surveys are required.

NB: *English Nature's (now Natural England) Great Crested Newt Mitigation Guidelines (2001) states ponds within 500m of a proposed development site should be considered for their potential to support GCN, however, in some instances this distance may be reduced to 250m due to the presence of physical barriers and obstructions or based on the likely magnitude of impacts arising from the proposed development.*

3.24 Following current best practice considering the partial roll out of District Level Licencing (DLL) across England and based on likely effects, a proportionate assessment of the water bodies range within 250m from site has been applied. Where a development is anticipated to affect GCN the search can be extended up to 500m or more.

3.25 The GCN Habitat Suitability Index (HSI) is a quantitative measure of habitat quality evaluating the suitability of habitat for GCN. The HSI outputs a result of between 0 and 1, derived from an assessment of ten habitat variables known to influence the presence of newts, with a result of 1 being optimal habitat (high probability of occurrence), while an HSI of 0 is very poor habitat (minimal probability of occurrence). The HSI is calculated on a single pond basis but takes into account surrounding terrestrial habitat and local pond density. The tool is particularly useful in survey and mitigation; one benefit is that it can be undertaken in a single field visit (with supporting desk work) and at any time of the year (though some variables are more easily measured in spring and summer).

Its main uses are:

- *In surveys, to assess habitat quality in a repeatable, objective manner. In particular, the HSI allows individual factors that influence newt presence to be easily identified. These factors could help explain a very high or very low count. A high HSI can justify employing additional survey effort or methods if no newts are found initially.*
- *In impact assessments, to allow a measure of how damaging a development could be. HSI might also be used as a screening tool to select no impact or minimal impact options.*
- *In risk assessments, helping to decide whether an offence might be committed, and therefore whether a licence should be applied for. If a pond has a very low HSI score (say <0.5) then there would typically be a minimal chance of GCN presence. Hence, with due care and in limited circumstances the HSI might be used in the absence of newt surveys to help conclude that an offence is highly unlikely and therefore work could proceed in that area without a licence. This application of the HSI should only be used where the predicted impacts - were newts to be present - would be low (e.g. development at least 100m from pond, permanent habitat loss <0.5ha or temporary habitat loss <5ha). The developer should be aware that there would still be a risk of committing an offence, but it would typically be so low as to be negligible. Obviously, note that if HSI >0.5, this is not confirmation of newt presence; a newt presence/absence survey would be required to confirm this.*
- *In habitat enhancement, HSI could be used to identify the low-scoring factors in an existing pond that need addressing to improve its quality for newts.*
- *In post-development monitoring, to allow an assessment of habitat condition.*

3.26 GCN HSI Limitations:

The GCN HSI is not a substitute for undertaking newt surveys; it indicates but cannot confirm presence or absence of GCN. A licence application that infers GCN presence solely from HSI data (i.e. no newt survey data presented) will be rejected. Very low HSI scores may be used along with scheme details to infer a minimal chance of committing an offence in low impact situations. This is on a risk assessment basis and developers should be aware of the potential hazards of this approach. Care should be taken when interpreting low HSI scores; for example, a low scoring pond close to an occupied newt pond may still support newts.

3.27 The site and surrounding habitats were also assessed relative to their potential to offer suitability for wider, generalist amphibians, in addition to GCN, for example common toad (*Bufo bufo*) and common frog (*Rana temporaria*).

3.28 The site and its surroundings were assessed for suitability for use by reptiles, with particular attention paid to features that could be used as basking areas (e.g. south-facing slopes), hibernation sites (e.g. banks, walls, leaf litter, piles of hardcore) and opportunities for foraging (e.g. rough grassland and scrub). Beebee & Griffiths (2000) state specific habitat preferences of common UK reptiles:

- Common lizard (*Zootoca vivipara*) use a variety of habitats from woodland glades to heaths, walls and pastures, as well as brownfield sites,
- Grass snake (*Natrix helvetica*) have broadly similar habitat requirements to the above species, but with an increased reliance on wetland habitats where they prey on amphibian species.

3.29 In assessment of a site for reptiles several important habitat characteristics are considered, outlined in **Table 3.2** below, as derived from the Reptile Habitat Management Handbook (Edgar, 2010).

Table 3.2: Important habitat characteristics for reptiles

1. Location (in respect of species range)	7. Connectivity to good quality habitat
2. Vegetation structure	8. Prey abundance
3. Insolation	9. Refuge opportunity
4. Aspect	10. Hibernation habitat potential
5. Topography	11. Disturbance regime
6. Surface geology	12. Egg-laying site potential

Invertebrates

3.30 The site was assessed for the presence of features that should be considered of high value to invertebrates. Several important features were considered, based on the assemblage descriptions provided within the Research Report "Surveying terrestrial and freshwater invertebrates for conservation evaluation" (NERR005, 2007), including but not limited to:



- Wood decay:
- Early successional mosaic habitat:
- Shaded ground layer: and
- Still and flowing water.

Quality Assurance (QA)

3.31 The results, conclusions and recommendations of this report are based on a number of factors i.e.

- Skills and experience of the surveyor,
- Knowledge of flora and fauna relevant to the site location and geographical range,
- Nature of the immediate and surrounding habitat in relation to shelter, foraging and commuting opportunities.

3.32 The results, conclusions and recommendations of this report have been assessed by Joshua Styles, Director of Styles Ecology, and his assessment concurs with the findings and recommendations of the surveyor Jonathan Pescod.

4.0 Limitations

4.1 This report does not contain a comprehensive list entailing the totality of botanical taxa on site. Species listed within **Appendix II** are recorded from a combination of the seasonal timing that the survey took place and botanical identification skills of the surveyor. Many plant species are only evident at certain times of the year; consequently, it is possible that some plant species may have gone undetected.



4.2 The optimal time of the year to carry out a preliminary ecological appraisal / UK Habitats survey is April to October; the survey was therefore carried out within an optimal period.

4.3 The survey similarly occurred within the optimal time to undertake roost assessments in relation to bats (May-August) and to assess suitability for breeding birds (March-August); however, it is acknowledged that PRFs for bats can sometimes be obscured by dense foliage during summer.

4.4 No access limitations were experienced, and in considering all potential survey constraints, no significant limitations were experienced that might adversely influence the results, conclusions, and recommendations of this report.

5.0 Desk study results

5.1 The site is located in southern Manchester between Didsbury and Levenshulme, approximately 6.4km south of the city centre. The site comprises an area of disused brownfield at the south-east end of Fog Lane Park, though is separated from the wider, publicly accessible park by fencing. The site totals approximately 0.14 hectares (ha) and is primarily accessible from Fog Lane to the south (see **Figure 5.1** below for location of the site within the surrounding landscape).



Figure 5.1: Location of red line works boundary within surrounding landscape (adapted © Google Earth Pro 2024)

5.2 The immediate environment is largely urban and residential, with terraced or semi-detached housing with associated gardens located to the south, and to all aspects surrounding the wider park. Fog Lane Park itself extends to the north, east and west, and is host to open modified grasslands, scattered trees and stands of woodland, and two ponds. Native hedgerow also encircles much of the park.

Relevant Planning History

5.3 A search of the Manchester City Council planning portal revealed that no publicly visible planning applications have been undertaken at the site within the past five years.

5.4 The application occurring closest to the site which has been made on the portal (Application Reference: **129090/FH/2021**) is located 35m to the south-east and pertains to the erection of a single storey detached outbuilding following demolition of the existing garage. No ecological documentation has been submitted as a part of this approved application. None of the proposed or accepted developments within proximity to the site are likely to significantly impact upon the ecological features of the application site.

Designated Sites

5.5 Three statutory designated sites occur within 2.0km of the application site (see **Table 5.1** below and **Figure 5.2**):

Table 5.1: Statutory Designated Sites within 2.0 kilometres of application site and reasons for designation

Site name	Designation type	Interest features
Heaton Mersey Common (1.0km south-east)	Local Nature Reserve (LNR)	This 8.21ha reserve is host to woodland, grassland and a pond with streams.
Stenner Woods and Milgate Fields, Didsbury (1.7km south-west)	LNR	An area of wet woodland, totalling 36.57ha and dominated by crack willow (<i>Salix fragilis</i>).
Mersey Vale Nature Park (1.8km south-east)	LNR	A 19.24ha park bordering part of the Transpennine Trail, which has been sown with wildflowers and planted with trees.

5.6 The site falls within the Impact Risk Zones (IRZs) for several SSSIs including the Hollinwood Branch Canal and Rochdale Canal SSSIs. Based on the IRZ information available on MAGiC Maps, the application site does not meet any of the threshold criteria which would require further consultation with Natural England (NE) in relation to potential impacts on this SSSI; given the small-scale of the proposed development, impacts upon the SSSI are unlikely.

Biodiversity Net Gain

5.7 At the time of writing, no Local Nature Recovery Strategy has been produced for Greater Manchester. The Manchester City Council Local Development Framework Area Map Browser⁷ was therefore accessed and used, along with the GM BAP, to assess the strategic significance of the site and habitats present. The site falls within no map layers considered relevant to strategic significance.

Habitats

5.8 An online search of MAGiC Maps identified the following priority habitats within a 2.0km search radius (see **Table 5.2** and **Figure 5.2** below).

Table 5.2: Priority habitats located within 2.0km buffer

Habitat Type	Designation	Distance to site
--------------	-------------	------------------

⁷ See: <https://mcr-council.maps.arcgis.com/apps/webappviewer/index.html?id=565a33eaba904b2dabf4c3dd8685db80>

Deciduous woodland	Priority Habitat Inventory	<0.1km west
Traditional orchards	Priority Habitat Inventory	1.1km north

Vegetation

5.9 The site is positioned within a **Low** zone of the summarised botanical value map 2022⁸, indicating that the area is broadly absent of Rare, Scarce and Threatened (RST) botanical species or has a low proportion of species indicative of priority habitats.

Bats

5.10 An online search of MAGiC maps revealed that seven European Protected Species Mitigation Licences (EPSMLs) in relation to bats have been granted within a 2.0km radius of the site (see **Table 5.3** below for further information and **Figure 5.2** below for a visual aid).

Table 5.3: Bat EPSML data records from MAGiC Maps

Licence Number	Distance from site	Context (where relevant)
EPSM2010-2098	2.0km south-west	Common pipistrelle (<i>Pipistrellus pipistrellus</i>); destruction of a resting site
EPSM2010-2649	0.9km south-west	Common pipistrelle and soprano pipistrelle (<i>Pipistrellus pygmaeus</i>); destruction of a resting site
EPSF2011-2990	1.7km west	Common pipistrelle and soprano pipistrelle; destruction of a resting site
2015-13055-EPS-MIT	1.7km north-west	Common pipistrelle, destruction of a resting site
2015-18385-EPS-BDX	1.6km west	Soprano pipistrelle; destruction of a resting and breeding site
2018-38076-EPS-MIT	1.5km north-west	Common pipistrelle, destruction of a resting site
2020-50519-EPS-MIT	1.8km south	Common pipistrelle and brown long-eared (<i>Plecotus auritus</i>); destruction of a resting and breeding site

5.11 The application site and the majority of the wider park is unlikely to be subject to significant illumination at night, and the woodland, tree lines and hedgerows provide good quality foraging and commuting habitat likely to high value to local populations of bats. Additionally, whilst the site is located within an urbanised environment, the gardens of the residential developments are host to

⁸ Further information available [Summarised Botanical Value Map - data.gov.uk](https://data.gov.uk)

abundant tree lines, which provide connectivity between the site and known bat roosting including those identified in **Table 5.3** above.

Birds

5.12 Bird species in immediate proximity to the site are likely to be common garden and woodland bird species, along with waterfowl associated with nearby ponds.

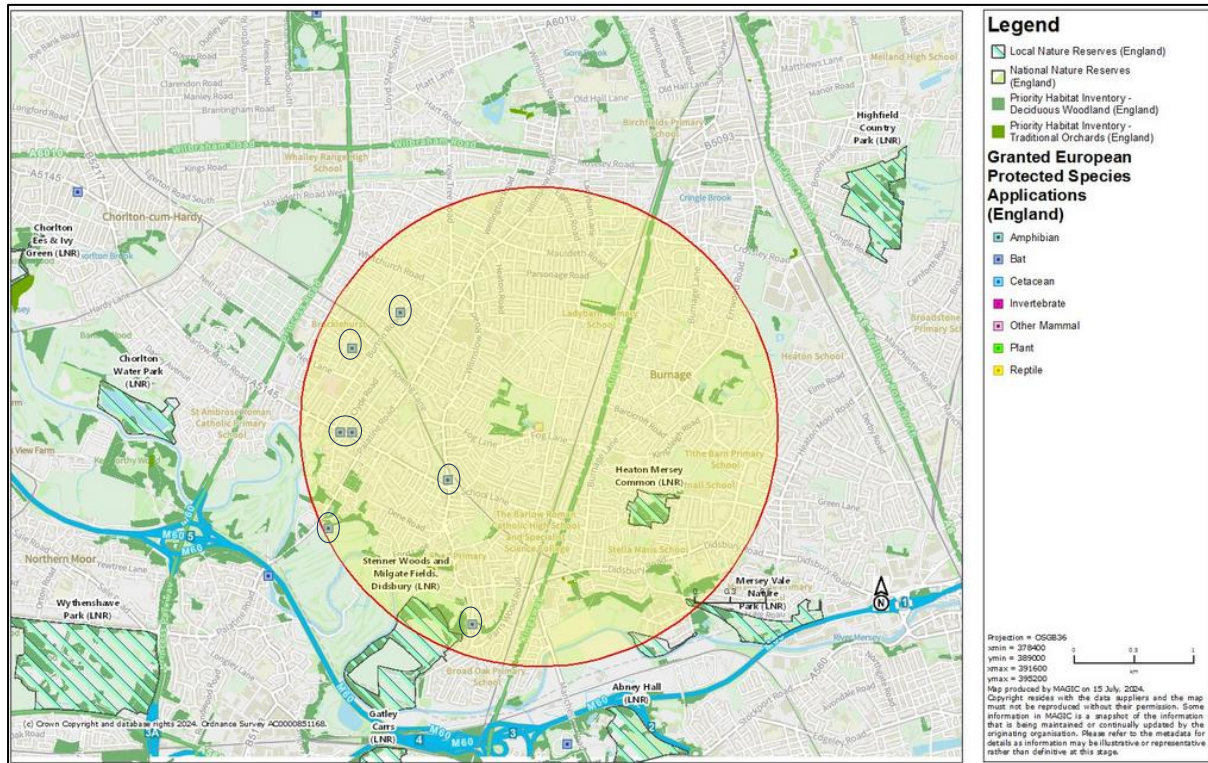


Figure 5.2: Location of granted EPSMLs (circled), priority habitats, and designated sites relative to the application site (© MAGiC Maps 2024)

Other Terrestrial Mammals

5.13 Given the location of the application site with the Manchester City region, and its encapsulation within urban development, habitat for terrestrial mammals such as badgers is absent in the area and connectivity for such species is similarly limited. However, species better suited for sub-urban habitat such as European hedgehogs could feasibly utilise the park and the gardens of the surrounding housing.

Herpetofauna

5.14 No EPSMLs in relation to GCN or Present 'GCN Class Survey Licence Returns' occur within a 2.0km search radius of the site.

5.15 Based on the desktop assessment, two standing waterbodies (**Ponds 1-2**) were identified within a 250m radius of the site at distances of approximately 25m and 110m to the west respectively (see **Figure 5.3** below).

5.16 Robust species such as the common frog (*Rana temporaria*) and common toad (*Bufo bufo*) may be present, though the aforementioned ponds are cut off from a wider pond network by the developed surroundings of the park.

5.17 Given the location of the site with a population centre, the presence of reptiles is unlikely.

Invertebrates

5.18 The developed areas to all aspects are unlikely to host a significant invertebrate assemblage, though priority woodlands in the wider park may support an array of species notable at a local level.

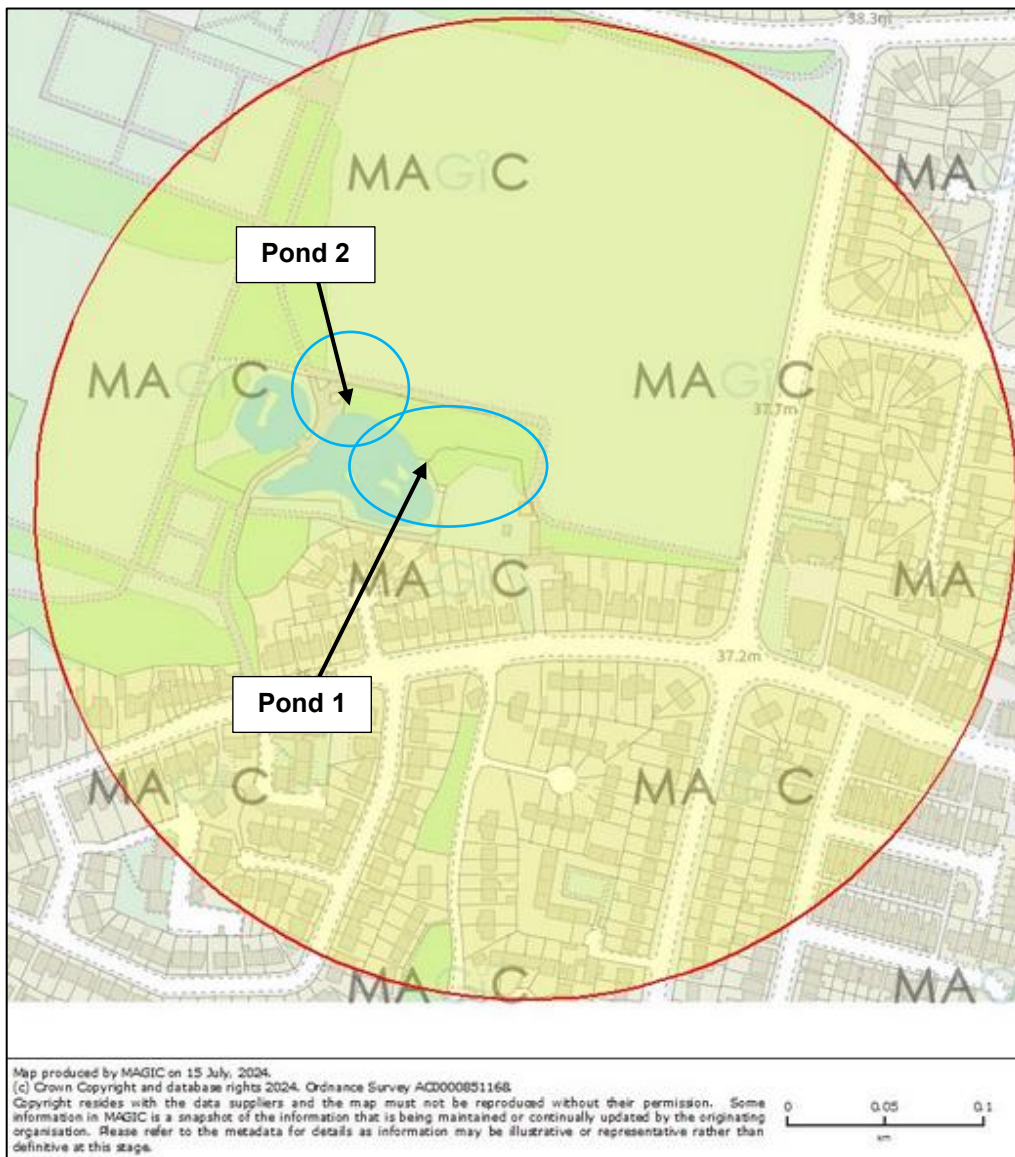


Figure 5.3: Location of Ponds 1-2 within a 250m buffer ©MAGiC Maps 2024



6.0 Field survey results

6.1 Habitat Survey & BNG Baseline Summary

6.1.1 See **Table 6.1.1** (below) for baseline information and habitat descriptions; refer to **Appendix I** for any supporting imagery; additional scientific names are given in **Appendix III**. Refer to **Appendix V** – UK Habitats Map for the location of described habitats & Target Notes (TN). **Appendix II** features full Condition Assessment Sheets.

Table 6.1.1 – UK Habitat types within the survey area

Area habitat	Sec. Codes	Description
h3h Mixed scrub	16	The majority of the survey area comprises mixed scrub, with scrubby species including bramble (<i>Rubus fruticosus</i> agg.), willows (<i>Salix</i> spp.), silver birch (<i>Betula pendula</i>), alder (<i>Alnus glutinosa</i>), and butterfly-bush (<i>Buddleja davidii</i>). Tall forbs including mugwort (<i>Artemisia vulgaris</i>), purple-loosestrife (<i>Lythrum salicaria</i>), and great willowherb (<i>Epilobium hirsutum</i>) grow at the borders and emerge from the scrub.
	Tall forbs	Condition: Poor Habitat Area: 0.0126ha Area Unit Value: 0.05 Strategic Significance: Area not in local strategy
u1b6 Other developed land	81 Ruderal or ephemeral	The easternmost part of the site is an area of partially vegetated hardstanding, with thin layers of springy turf-moss (<i>Rhytidiadelphus squarrosus</i>), scattered grasses including creeping bent (<i>Agrostis stolonifera</i>), Yorkshire-fog (<i>Holcus lanatus</i>), cock's-foot (<i>Dactylis glomeratus</i>), and perennial rye-grass (<i>Lolium perenne</i>), and forbs such as carrot (<i>Daucus carota</i>), common ragwort (<i>Jacobaea vulgaris</i>), white clover (<i>Trifolium repens</i>), herb-Robert (<i>Geranium robertianum</i>), and fox-and-cubs (<i>Pilosella aurantiaca</i>). The existing access track, which is entirely unvegetated, extends to the north and west connecting the site to Parkville Road.
	82 Vacant or derelict land	Condition: N/A Habitat Area: 0.1273ha Area Unit Value: 0.00 Strategic Significance: Area not in local strategy



6.1.2 No specially protected, priority, or otherwise notable habitats occur within the application site boundary.

6.2 Vegetation

Notable species

6.2.1 No specially protected or UKBAP LBAP listed priority species were identified within the survey area.

Invasive non-native species (INNS)

6.2.2 No INNS listed under Schedule 2 of the IASO or Schedule 9 of the WCA were recorded anywhere within the site.

6.3 Bats

Buildings

6.3.1 No buildings occur within the site boundary. Two dilapidated, corrugated steel buildings occur within the wider area; these were not assessed in relation to their potential to host roosting bats but were noted to be of corrugated steel construction and thus likely of limited value at most.

Trees

6.3.2 Whilst abundant mature trees are present throughout the wider Fog Lane Park ownership boundary, no mature trees occur within the site application site boundary with all woody species present less than 5m in height and with narrow trunks unsuitable to host typical potential roost features PRFs. All trees present within the site boundary are thus duly categorised as pertaining to a bat roost potential of **None** in line with current BCY guidance.

6.3.3 All trees and scrub within and adjacent to the site boundary, particularly the larger trees occurring in proximity to the site, should be considered of value to commuting and foraging bats. Individual trees and woodlands can act as landmarks aiding navigation for commuting bats, whilst also hosting invertebrate prey species and providing specialist foraging habitat utilised by certain bat species.

6.4 Birds

6.4.1 In relation to WCA Schedule 1 specially protected bird species such as barn owl (*Tyto alba*), no areas suitable for nesting were identified by the surveyor on the site, with an absence of built or natural features suitable for usage by this species.

6.4.2 Whilst no current evidence of breeding birds including active nests or breeding behaviour was observed during the survey, the dense scrub making up much of the application site and its immediate surroundings provides abundant potential nesting platforms for a wide variety of bird species associated with garden and woodland habitats. The presence of nesting birds during the breeding season (March-August inclusive) is highly likely.

6.5 Other Terrestrial Mammals

Badger & hedgehog

6.5.1 No field signs of badger, such as latrines, pathways, hairs, footprints, or feeding signs, for example snuffle holes and scratched trees / logs, were located within the site boundary. Taking into account the urban surroundings of the site the presence of this species can reasonably be ruled out.

6.5.2 Whilst no direct evidence of hedgehog was identified, the habitats present provide suitable refuge and hibernation opportunities within the scrub and adjacent woodlands, and the open amenity grasslands to the north and east provide foraging and commuting habitat. This species is frequently recorded in developed environments which occur in proximity to scrub, woodland or hedgerow, and their presence within the site is therefore considered likely at least occasionally.

6.6 Herpetofauna

Great crested newt (GCN)

6.6.1 Important elements to consider when assessing likely impacts against GCN includes:

- The scale, nature and magnitude of proposals,
- Site proximity to a potential breeding pond and to any additional ponds,
- Habitat linkage / barriers between potential breeding ponds and the site,
- Nature and extent of available terrestrial habitat around the pond,
- Area of site habitat loss,
- Nature of habitat to be lost and potential value to GCN,
- Most up to date Government guidance considering EPS.

6.6.2 As derived from the desktop assessment, no granted EPSMLs or 'GCN Class Survey Licence Returns' occur within 2.0km of the site boundary.

6.6.3 Two ponds (Ponds 1-2) are present within 250m of the site, located 25m (P1) and 110m (P2) to the west of the application site boundary. See **Table 6.6.1** for pond descriptions and **Tables 6.6.2 – 6.6.3** for detailed HSI results in line with current guidance. **Figure 6.6.1** showcases relative pond occupancy proportions.

Table 6.6.1: Pond descriptions within 250m radial buffer, with included HSI scores

Pond 1 (P1)	
P1 has an area of approximately 2700m² and likely never dries, even in drought years. The pond is a duck pond and is host to abundant mallards (<i>Anas platyrhynchos</i>), which would likely discourage amphibians from breeding, and may have contributed to the absence of any macrophytic vegetation. The pond is surrounded on all sides by trees with the exception of a small, fenced viewing area, though beyond this immediate ring of woodland and a region	

of scrub and woodland to the east, terrestrial habitat is generally of low suitability. The pond is entirely disconnected from a wider pond network, with P2 the only other waterbody within 1.0km. Based on the above, the HSI value of P1 has been calculated as 0.33 – Poor.	
Pond 2 (P2)	
P2 is a 1000m² duck pond of similar character to P1, with overhanging trees to all aspects and macrophytic vegetation absent. Based on this assessment, the HSI value of P2 has been calculated as 0.37 - Poor.	

Table 6.6.2: HSI quantitative assessment of the ponds

Pond Reference	P1	P2
SI1 – Location	1	1
SI2 – Pond area	-	0.95
SI3 – Pond drying	0.9	0.9
SI4 – Water quality	-	-
SI4 – Shade	0.6	0.6
SI6 – Fowl	0.01	0.01
SI7 – Fish	0.67	0.67
SI8 – Ponds	0.38	0.38
SI9 – Terr'l habitat	0.33	0.33
SI10 – Macrophytes	0.3	0.3

HSI	0.33	0.37
-----	------	------

Table 6.6.3: HSI scoring chart (a suitability scoring method for GCN developed by Mr. L. Brady)

Great Crested Newt (GCN) HSI Scoring					
HSI Score	<0.50	0.50 - 0.59	0.60 - 0.69	0.70 - 0.79	>0.80
Pond Suitability	Poor	Below Average	Average	Good	Excellent

NB: The HSI for great crested newts is a measure of habitat suitability. It is not a substitute for newt surveys. In general, ponds with high HSI scores are more likely to support great crested newts than those with low scores. However, the system is not sufficiently precise to allow the conclusion that any particular pond with a high score will support newts, or that any pond with a low score will not do so. There is a positive correlation between HSI scores and the numbers of great crested newts observed in ponds. So, in general, high HSI scores are likely to be associated with greater numbers of great crested newts. However, the relationship is not sufficiently strong to allow predictions to be made about the numbers of newts in any particular pond.

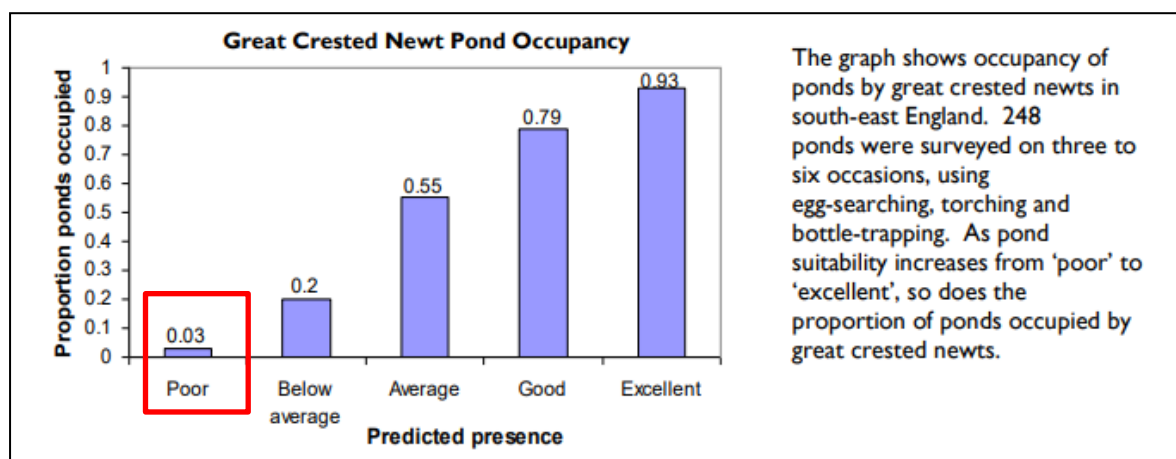


Figure 6.6.1 :GCN pond occupancy © ARC UK

6.6.4 Given the 'Poor' HSI scores, the relative isolation of the ponds in the wider landscape, and the abundance of mallards at the ponds, it is highly unlikely that a breeding population of GCN would be present in either Pond 1 or Pond 2.

6.6.5 The terrestrial habitat present at the application site does provide some suitability for GCN, with the dense scrub of potential value for refuge or hibernation purposes. The wider area in which the application site is located also hosts occasional piles of rubble and other debris, though all such material occurs outside of the site boundary.



6.6.6 Taking into account the absence of any ponds suitable for breeding GCN within 250m of the site boundary, the absence of GCN records and the relatively built-up nature of the parks surroundings, the presence of this species at the application site can be conclusively ruled out.

Wider amphibians

6.6.7 Though the site is of similarly low value for other, more common amphibian species, robust species such as common frog and common toad could feasibly be present in the park, though are unlikely to be present within the site boundary in more than an occasional capacity, if at all.

Reptiles

6.6.8 Fog Lane Park is subject to a frequent mowing regime and near-constant use by the public; whilst the application site itself is absent of such use, this high disturbance would discourage reptiles from using the site. The site is isolated from areas of semi-natural habitat in the wider area, and whilst the dense scrub would provide refuge and the hardstanding would provide basking opportunities, the presence of reptiles of any species is highly unlikely.

6.7 Invertebrates

6.7.1 The intersection of scrub with exposed ground and with woodland to the west provides ecotones which likely hosts a variety of invertebrate species, though given the small size of the plot and its urban location, the assemblage is unlikely to be notable. The site is absent of habitat suitable to host specially protected invertebrate species.

7.0 Conclusions & recommendations

Designated sites

7.1 The site occurs within the Impact Risk Zone (IRZ) for three designated sites in the wider landscape, namely the Heaton Mersey Common, Mersey Vale Nature Park, and Stenner Woods and Milgate Fields, Disbury LNRs. Given the small scale of the proposed development, impacts during the construction or operational phases are highly unlikely.

7.2 Consultation with the IRZ layer on MAGiC Maps reveals that the proposed development does not meet any of the criteria which would typically result in the requirement for consultation with NE to assess potential impacts to SSSIs in the wider area. No recommendations are therefore required in relation to designated sites.

Habitats

7.3 No UK BAP or Greater Manchester LBAP habitats occur within the application site boundary, nor do any other specially protected habitat types.

Vegetation

7.4 The site was identified as falling within a low zone of the summarised botanical value map 2022, and no species of conservation importance were identified anywhere within the site boundary.

7.5 No INNS listed under Schedule 9 of the WCA or Schedule 2 of the IASO were located within the site.

Bats

7.6 No buildings occur within the site boundary. Based upon the findings of the desktop and field survey, covered through sections 5.0 – 6.0 of the report and supported by **Appendix I**, the trees within the site boundary are duly categorised as pertaining to a roost suitability of '**None**' in line with current BCT guidance (see **Figure 7.1**). No further surveys in relation to bats are therefore recommended.

Table 4.2. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement.	
Suitability	Description
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

Figure 7.1: BCT extract on relevant tree suitability criteria

7.7 However, all taller, scrubby vegetation along with woodland at the site boundaries should be considered of value to commuting and foraging bats. Installation of overly harsh artificial lighting as part of any development that exceeds current levels may have a negative impact upon foraging / commuting bats in the landscape, subject to their presence, particularly if increased light spillage occurs in areas of that are currently free from illumination, particularly including the nearby



woodland. Should additional lighting be included as part of the proposed works, a bat-sensitive lighting plan is recommended in order to avoid potential impacts to bats that may use the surrounding habitat. This could be contained as a part of the lighting plan recommended previous. Several options to consider have been listed below, though the reader is referred to the Bat Conservation Trust's 'Bats and Artificial Lighting at Night' guidelines (August 2023) for further information.

Appropriate luminaire specifications: Light sources, lamps, LEDs and their fittings come in a myriad of different specifications which a lighting professional can help to select. However, the following should be considered when choosing luminaires and their potential impact on Key Habitats and features:

- All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used.
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component.
- Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).
- Internal luminaires can be recessed (as opposed to using a pendant fitting) where installed in proximity to windows to reduce glare and light spill.
- Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges.
- Column heights should be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards.
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered - See ILP GN01.
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt.
- Where appropriate, external security lighting should be set on motion-sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate.
- Use of a Central Management System (CMS) with additional web-enabled devices to light on demand.
- Use of motion sensors for local authority street lighting may not be feasible unless the authority has the potential for smart metering through a CMS.



- The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues.
- Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely.

Birds

7.8 No impacts are applicable in relation to any Sch.1 (WCA) specially protected raptor species such as barn owl, and no further surveys or recommendations are necessary in relation to specially protected birds, with no viability of nesting or roosting within the site boundary.

7.9 Regarding general breeding bird species, the area of dense scrub is likely of high value for nesting birds, and any works undertaken within the breeding season are therefore at a high risk of disturbing them.

NB: *All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected from destruction, damage and disturbance under the Wildlife & Countryside Act 1981 (as amended). It is a punishable offence to interfere in any way with an active nest.*

7.10 Any works impacting upon these areas of potential suitability should therefore be carried out outside of the breeding bird season, typically March – August inclusive, extending into September for some species. For works within the breeding bird season, any areas that can support nesting birds should be checked by a professional Ecologist for nesting birds within 48 hours or less prior to works commencing.

Point 3.24 of the British Standards Publication 42020:2013 defines a professional ecologist as: “a person who has, through relevant education, training or experience, gained recognised qualifications and expertise in the field of ecology and environmental management.”

7.11 Where / if active nests are / have been located by the Ecologist, then any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally, this can be aided, for example, via implementation of appropriate buffer zone(s) around the nest site (typically 5 – 10 metres) in which no disturbance is permitted until the nest is no longer in use. This would have to be coordinated through the expert judgement of the professional ecologist and species pending.

Other terrestrial mammals

7.12 No evidence of badgers was identified anywhere within the site boundary, and the terrestrial habitat within the site boundary is of low value to this species. Given the urban location of the site,

the presence of badgers, and impacts to badgers as a result of the development proposals, can be ruled out and no further recommendations be made.

7.13 Similarly, no direct evidence of hedgehogs was observed at the site; however, this species typically leaves less conspicuous evidence than badgers and therefore its potential presence must often be determined based upon the suitability of habitats. Given the presence of dense scrub and the proximity of woodland that would provide abundant hibernation and refuge opportunities for hedgehogs, and of the open grassland to the north and east which would provide commuting and foraging opportunities for this species, the occasional presence of hedgehogs at the application site is likely.

7.14 It is therefore recommended that Reasonable Avoidance Measures (RAMs) are enacted at the site to avoid any impacts to this species during the construction phase of the development. RAMs to minimise construction impacts and prevent harm or injury to hedgehog and other small, terrestrial fauna should include, as a minimum:

- All working hours should be limited to daylight (dawn – sunset, or dawn – 6pm in winter) to avoid disturbing any hedgehog in the vicinity of the development area.
- A pre-commencement check of the site, any stored materials and the immediate vicinity of development footprint will be carried out prior to any works each morning in order to check for the presence of hedgehogs.
- Materials that may cause entrapment such as plastic / metal fencing, as well as those which could be potentially harmful to terrestrial mammals such as chemicals, should not be left around the site following the cessation of daytime work.
- No bulky equipment / general construction aggregates should be left around the development area, instead leave them on bare ground away from the risk zone.
- Fires must not be used as a means of the disposing of waste materials.
- Any trenches or excavations must either be covered at the end of each working day, or a low angle (no more than 45°) sloping board of approximately 300mm width should be provisioned within any uncovered excavations to provide a means of escape for any terrestrial mammals.
- Any temporarily exposed open pipe system MUST be capped in such a way as to prevent hedgehogs gaining access, as may happen when contractors are off site.

Herpetofauna

Great crested newt (GCN)

7.15 Based upon the absence of GCN records in the wider area, the absence of a pond network in the immediate area, and the 'Poor' suitability of the two ponds within 250m for breeding GCN, the presence of this species is unlikely and no further recommendations need apply.

Wider amphibians

7.16 The site is of low suitability for other more common, robust amphibians, though species such as the common frog and common toad may utilise the two nearby ponds occasionally. There is therefore a low risk of their presence within the site boundary during the proposed works.



7.17 Should any frogs or toads be encountered within the works area, they should be handled with wet gloves to prevent impact / injury and moved to an area of like for like habitat outside of the works area away from potential harm. The applicant and all contractors would be aware that if at any stage newts are encountered during works, or at any other stage of the programme of works, such works would be required to immediately cease and the Ecologist / ECoW would be made aware as to provide further guidance, if an Ecologist is not already present.

Reptiles

7.18 The application site is broadly unsuitable for reptiles, due to the high disturbance of the surrounding area and the lack of connectivity to semi-natural habitat in the wider area. No impacts are foreseen to reptiles and no further surveys or mitigation measures are recommended.

Invertebrates

7.19 The site is unlikely to be notable at a national or regional scale for invertebrates, and no further surveys nor specific mitigation measures need apply. However, the applicant might consider the implementation of enhancement measures at the site; suitable options have been suggested in

Appendix III.

8.0 Biodiversity statement

8.1 Based on the information gathered during the diurnal assessment, Fog Lane Park is **not exempt** from the Biodiversity Gain Planning Condition.

8.2 The site is host to the following biodiversity value:

- Habitat: **0.05**



- Hedgerow: **0.00**
- Watercourse: **0.00**

8.3 No habitat degradation is understood to have occurred at the site.

8.4 This Section should be read in conjunction with the hard copy of the Statutory Biodiversity Metric tool – see external Appendix.

Appendix I – Site photographs



Plate 1 – *Character of the site as viewed from the east, showing the sparsely vegetated land and scrub*



Plate 2 – *North-eastern end of the site, with butterfly-bush present*



Plate 3 – *Corrugated metal building occurring to the south of the site boundary*



Plate 4 – *Characteristic rubble pile occurring within the wider site*



Plate 5 – *Character of willow woodland occurring to the west of the site*



Plate 6 – *Character of P1*



Plate 7 – Character of P2



Plate 8 – View of the existing access track connecting the site to Parkville Road



Appendix II – Condition assessment sheets

Condition Assessment Score – Mixed scrub

Condition Assessment Criteria		Criterion passed (Yes or No)
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). - At least 80% of scrub is native, - There are at least three native woody species, - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> (only in its restricted native range), or box <i>Buxus sempervirens</i> , which can be up to 100% cover).	Y
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	N
C	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA) and species indicative of suboptimal condition make up less than 5% of ground cover.	N
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	N
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	N
Total Score		1
Condition Assessment Result		Condition Assessment Score
Passes 5 criteria		Good
Passes 3 or 4 criteria		Moderate
Passes 2 or fewer criteria		Poor

Appendix III – Site-specific botanical species list

Taxon	Common Name	Scientific Name
Bryophyta (Mosses, liverworts and hornworts)	Springy turf-moss	<i>Rhytidiadelphus squarrosus</i>
Anthophyta (Flowering plants)	Black medick	<i>Medicago lupulina</i>
	Bramble	<i>Rubus fruticosus</i> agg.
	Butterfly-bush	<i>Buddleja davidii</i>
	Carrot	<i>Daucus carota</i>
	Cleavers	<i>Galium aparine</i>
	Cock's-foot	<i>Dactylis glomerata</i>
	Common ragwort	<i>Jacobaea vulgaris</i>
	Creeping bent	<i>Agrostis stolonifera</i>
	Dandelion	<i>Taraxacum</i> agg.
	Dog rose	<i>Rosa canina</i> agg.
	Dove's-foot crane's-bill	<i>Geranium molle</i>
	Elder	<i>Sambucus nigra</i>
	Fox-and-cubs	<i>Pilosella aurantiaca</i>
	Great willowherb	<i>Epilobium hirsutum</i>
	Greater plantain	<i>Plantago major</i>
	Herb-Robert	<i>Geranium robertianum</i>
	Hornbeam	<i>Carpinus betulus</i>
	Oxeye daisy	<i>Leucanthemum vulgare</i>
	Perennial rye-grass	<i>Lolium perenne</i>
	Purple-loosestrife	<i>Lythrum salicaria</i>
	Red clover	<i>Trifolium pratense</i>
	Ribwort plantain	<i>Plantago lanceolata</i>
	Rough meadow-grass	<i>Poa trivialis</i>
	Selfheal	<i>Prunella vulgaris</i>
	Silver birch	<i>Betula pendula</i>
	Smooth sow-thistle	<i>Sonchus oleraceus</i>
	White clover	<i>Trifolium repens</i>
	Wild teasel	<i>Dipsacus fullonum</i>
	Willow	<i>Salix</i> <i>spp.</i>
	Wood avens	<i>Geum urbanum</i>
	Yorkshire-fog	<i>Holcus lanatus</i>

Appendix IV – Biodiversity enhancement

Bats

Externally fitted boxes

A large number of externally fitted box models for bats exist for buildings and trees. Suitable models for both buildings and trees may include the Eco Kent Bat Box.



Breeding Birds

House Sparrow

The sparrow terrace has been designed to help redress the balance of falling house sparrow numbers. The current UK population is now half of what it previously was in 1980 and this is widely attributed to habitat destruction and lack of suitable nesting spaces. House sparrows are social birds and like to nest in company, therefore, this terrace provides ideal nesting opportunities for three families. The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of buildings.



Other

This traditional design has proved to be highly effective in attracting robins, as well as other small species such as black redstart, spotted flycatcher and wren. It is designed to be installed on the walls of houses, barns, garden sheds or other buildings and should be hung so that the entrance is to one side (at an angle of 90° to the wall). The front panel can be easily removed for cleaning.

This type of box should not be made conspicuous on a tree or bush because small predators can enter through the unprotected opening. By hanging on a wall, predators won't be able to reach the box. Alternatively hide the box in Ivy, Honeysuckle or other climbing plants.



Hedgehog Home

Exterior quality 12mm resin bonded ply. The box remains untreated on the inside. Best situated in a quiet corner of the garden, and covered with leaves and other garden debris. Removable lid for cleaning purposes and reinforced corners, manufactured with surface sunk nails to resist rusting.

Nest box size: Height 22cm x Width 38cms x Length 47cm



Environmentally positive: Direct action to help hedgehog survival rates, encouraging biodiversity; FSC timber; Zero carbon footprint in use.

Amphibians – Hibernacula

Hibernacula are underground chambers that amphibians and reptiles use throughout the winter to protect themselves from the cold. Creating a hibernaculum will provide a safe space for amphibians and reptiles to hibernate over winter, as well as a spot for solitary bees to soak up the sun and for birds to relax. These habitats can be integrated into a wide variety newly created or enhanced habitats and attract herps to new areas.

You will need:

- A spade
- Logs and branches
- Rocks and bricks
- 2-3 drainpipe cut-offs or cement pipes (if using plastic drainpipes, roughen the insides with sandpaper, so that they are not too slippery for animals to climb)
- Turf or meadow flower seeds (optional)

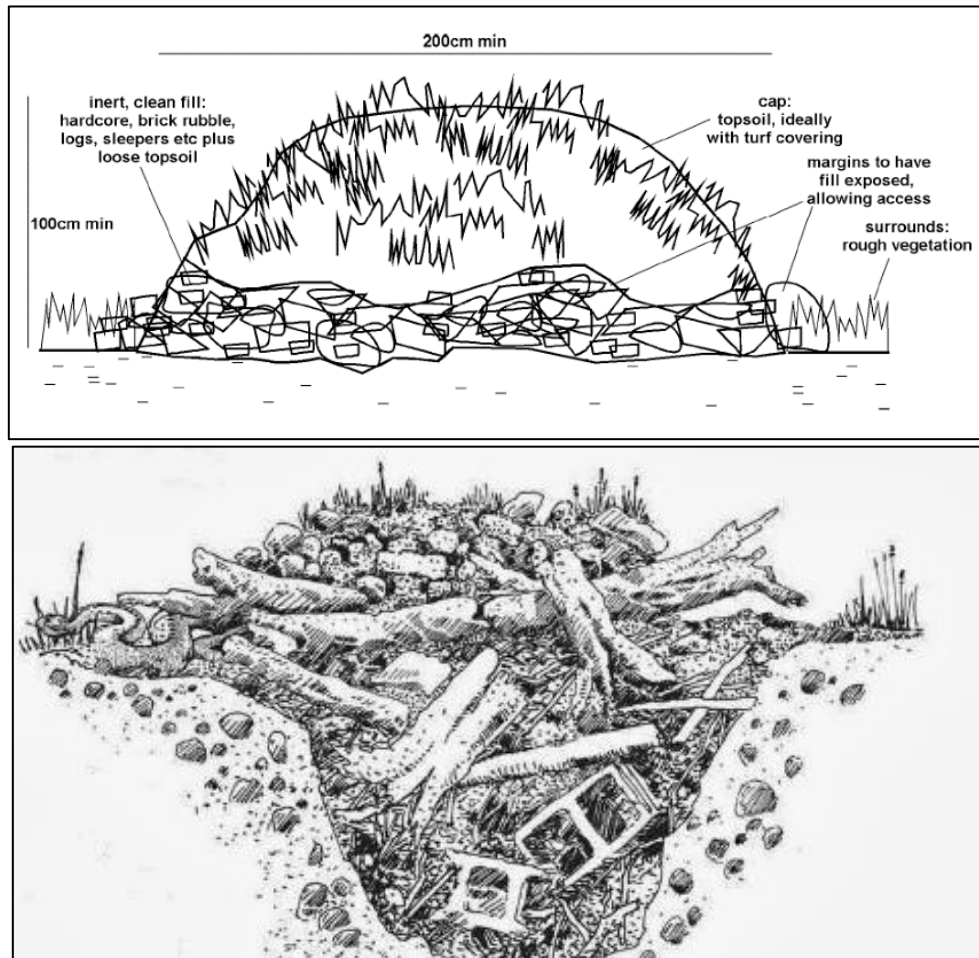
How to make your hibernaculum yourself:

- In a sunny spot, dig a hole about 50cm deep and 1.5 metres across.
- Fill with logs, branches, bricks and rocks, leaving plenty of gaps in between.
- Insert entrance tubes (drainpipes) at ground level into the hole.
- Cover the pile with soil (to about 50cm high).
- Plant meadow seeds or long grasses over the mound to create a feast for summer pollinators.

To construct a hibernaculum to Natural England standard:

- In desired areas, remove the turf from the footprint of the hibernaculum and set aside.
- On well-drained soil excavate to a depth of approximately 500 mm and set aside spoil (this is unnecessary on poorly drained soils).
- Fill the footprint or pit with core material. Materials likely to retain moisture are preferable, such as cut timber, brash and grubbed up tree roots. Other material such as inert hardcore, bricks, rocks, and building rubble may also be used. Materials that will decompose should not be placed beneath heavy components such as bricks or rocks, to reduce the risk of collapse.
- Pack the larger spaces within the core materials with wood chippings, loose topsoil or spoil.
- Cover the hibernaculum with the turves removed from the footprint.
- Take care not to create structures that might attract rodents, such as piles of rubble with many entrance holes. There has been no rigorous investigation of the optimum size of hibernacula, but larger hibernacula are probably more useful than small constructions because they contain a variety of different microhabitats and are more likely to maintain stable conditions.
- A suggested minimum size is 4.0 m long by 2.0 m wide by 1.0 m deep. 2.0 x 2.0 x 1.0 metres (length x width x height) as a minimum.

Illustrative aid for hibernaculum:



Invertebrates – Insect Hotels

Insect hotels provide a habitat for a variety of insects. Designs can be small or large enough to create a focal point in a wildlife garden and sturdy enough to last for years. Ensure hotels are made from untreated wood, which is important as insects need natural materials to thrive, and split into sections that each contain a different nesting material. There should be pine cones for ladybirds, wood slits for butterflies and moths, bamboo canes for solitary bees, and loose pieces of wood for beetles. Placement: Size against walls or fences and fix to prevent toppling. The feet keep the main body off the damp ground. You could push bricks against them to keep the bug hotel upright, which would also encourage woodlice and even frogs that enjoy cool stone conditions.



Invertebrates – Bee bricks

The Bee Brick can be used in place of a standard brick or block in construction to create habitat for solitary bees. Alternatively, it can be used as a standalone bee house in your garden or wild patch. It will provide much needed nesting space for solitary bee species such as red mason bees and leafcutter bees, both of which are non-aggressive.

Each Bee Brick contains cavities in which solitary bees can lay their eggs before sealing the entrance with mud and chewed-up vegetation. The offspring will emerge the following spring and the cycle will begin again. Each cavity goes part way into the brick, which is solid at the back. Bee Bricks should be placed in a warm sunny spot on a south-facing wall at a minimum height of 1m, with no vegetation obstructing the holes. It is highly recommended that bee-friendly plants should be located nearby so that the bees using the bricks have food, otherwise it is unlikely that the brick will be used. Available in a choice of four colours: white grey, dark grey, yellow and red.



Specification

- * Material: Concrete
- * Dimensions: W 215mm x D 105mm x H 65mm
- * Weight: 2.9kg
- * Colours: White grey, yellow, dark grey and red

Native Planting and/or Landscaping

The below species have been assessed against the local soil and habitat types and are deemed suitable for the site. All plant material should comply with the minimum requirements in BS 3936-1: 1992 Specification for trees and shrubs and BS 3936-4: 2007 Specification for forest trees and BS 8545: 2014 Trees from Nursery to Independence in the Landscape. Any plant material, which in the opinion of the appointed Landscape Architect, does not meet the requirements of the Specification, or is unsuitable, or defective in any other way, will be rejected. The minimum specified sizes in the plant schedule will be strictly enforced. The contractor should replace all plants rejected at own cost. New hedgerows should be primarily comprised of blackthorn, hawthorn, hazel, and holly, whilst climbers/creepers such as hops and honeysuckle can be planted at the base of boundary features such as fences and walls, and new tree planting should include species such as pedunculate oak, wild cherry, and alder buckthorn.

	Common Name	Scientific Name	Planting Preference
Ferns	Male Fern	<i>Dryopteris filix-mas</i>	Semi-shade or shaded
	Soft Shield-fern	<i>Polystichum setiferum</i>	Semi-shade or shaded
	Maidenhair Fern	<i>Adiantum capillus-veneris</i>	Suitable for rockeries / walled gardens
	Royal Fern	<i>Osmunda regalis</i>	Full sun in moist-damp areas
Herbaceous plants	Bloody Crane's-bill	<i>Geranium sanguineum</i>	Dry soils - suitable for rockeries
	Columbine	<i>Aquilegia vulgaris</i>	Semi-shade or open areas
	English Bluebell	<i>Hyacinthoides non-scripta</i>	Moist soils in semi-shade or open areas
	Giant Bellflower	<i>Campanula latifolia</i>	Semi-shade or open areas
	Greater Knapweed	<i>Centaurea scabiosa</i>	Dry-moist soils. Suitable for borders
	Greater Woodrush	<i>Luzula sylvatica</i>	Moist soils in semi-shade or open areas
	Meadow Crane's-bill	<i>Geranium pratense</i>	Humid-moist soils. Suitable for borders
	Musk Mallow	<i>Malva moschata</i>	Dry-moist soils. Suitable for borders and rockeries
	Sea Campion	<i>Silene uniflora</i>	Dry soils - suitable for rockeries
	Stinking Hellebore	<i>Helleborus foetidus</i>	Semi-shade or open areas
Climbers	Honeysuckle	<i>Lonicera periclymenum</i>	Dry-moist soils
	Hops	<i>Humulus lupulus</i>	Dry-moist soils
	Ivy	<i>Hedera helix</i>	Dry-moist soils
	Sweet-briar	<i>Rosa rubiginosa</i>	Dry-moist soils
Woody Shrubs	Dogwood	<i>Cornus sanguinea</i>	-
	Guelder Rose	<i>Viburnum opulus</i>	-
	Hawthorn	<i>Crataegus monogyna</i>	-
	Hazel	<i>Corylus avellana</i>	-
	Holly	<i>Ilex aquifolium</i>	-
Trees	Alder Buckthorn	<i>Frangula alnus</i>	-
	Osier	<i>Salix viminalis</i>	-
	Pedunculate Oak	<i>Quercus robur</i>	-
	Purple Willow	<i>Salix purpurea</i>	-
	Rowan	<i>Sorbus aucuparia</i>	-
	Silver Birch	<i>Betula pendula</i>	-
	Wild Cherry	<i>Prunus avium</i>	-
	Wych Elm	<i>Ulmus glabra</i>	-

Appendix V – UKHab habitats map

