



PRELIMINARY ECOLOGICAL APPRAISAL

Former Car Showroom
Duddery Hill
Haverhill
Suffolk

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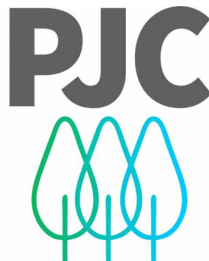
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1 EXECUTIVE SUMMARY

PJC Consultancy Ltd was commissioned by UK Storage Consultancy to provide a Preliminary Ecological Appraisal of the former car showroom at Duddery Hill, Haverhill, Suffolk. The purpose was to classify the habitats present, highlight the potential of the site to support protected species, and recommend suitable avoidance, mitigation, compensation and ecological enhancement measures where appropriate. When implemented successfully, these recommendations will ensure that the development proceeds in line with all relevant laws pertaining protected species and their habitats, as well as contributing to an increase in site biodiversity.

Based on current proposals, the results of the Preliminary Ecological Appraisal can be summarised in the following table:

Protected Species	Suitable Present	Habitat	Recommended Further Surveys	Ecological Mitigation
Nesting Birds	The hedgerow along the eastern Site boundary was identified as having potential to support nesting birds.		None required.	Hedgerow clearance/cutting works (if required) should be undertaken outside the main nesting bird season. Should this not be possible, the hedgerow must be inspected by an ecologist to determine the presence/absence of any nesting birds immediately prior to clearance.



2 INTRODUCTION

2.1 Instruction

2.1.1 PJC Consultancy Ltd was commissioned by UK Storage Consultancy to provide a preliminary ecological appraisal (PEA) which includes an extended phase 1 habitat survey and a preliminary bat roost assessment (PBRA) of the former car showroom at Duddery Hill, Haverhill, West Suffolk (hereafter referred to as the 'Site').

2.2 Survey Objectives

2.2.1 The aim of this PEA is to identify potential ecological constraints and opportunities associated with the Site by undertaking both an extended phase 1 habitat survey, ecological desk study and PBRA. The objectives were to:

Identify the habitat types present on the Site;

Identify the potential of the Site to support protected and notable habitats and/or species;

Identify the potential of any trees and buildings within the Site to support roosting bats;

Highlight known or potential legal or planning policy constraints in relation to ecology and recommend avoidance, mitigation and enhancement measures to satisfy legal and planning policy requirements where appropriate; and

Identify, where necessary, the requirement for further survey.

2.3 Documents and Information Provided

2.3.1 The following documents relating to the Site and development proposals were used to aid the preparation of this report:

Existing Site Plan (Drawing Code/No: PA 01) (Roger Mears Architects LLP, 2022); and

Proposed Site Plan (Drawing Code/No: PA 11) (Roger Mears Architects LLP, 2022).

2.4 Scope of Report

2.4.1 This PEA is only concerned with the habitats and features within the property boundaries of the Site, or in areas that have the potential to be affected by the proposed new development.

2.5 Proposal

2.5.1 The current proposal is for the demolition of the existing car showroom and construction of a large multi-storey commercial facility.

2.6 Site Description

2.6.1 The Site is located immediately south of Duddery Hill, centrally located within the town of Haverhill, West Suffolk (OS Grid Reference: TL 67137 45039). The Site is located within a relatively urban environment surrounded on all aspects by residential and commercial development. The location of the Site within its environs is presented in Appendix I.

2.7 Legislation and Planning Policy

2.7.1 This PEA has been compiled with reference to relevant wildlife and countryside legislation, planning policy and the UK Biodiversity Framework. Their context and applicability is explained as appropriate in the relevant sections of the report and additional details are presented in Appendix II.

2.7.2 The key articles of relevance are:

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



The Wildlife and Countryside Act 1981, as amended (WCA);

The Countryside and Rights of Way (CRoW) Act 2000;

The Natural Environment and Rural Communities (NERC) Act 2006;

National Planning Policy Framework (NPPF) 2021 (Ministry of Housing, Communities and Local Government, 2021);

The Protection of Badgers Act 1992; and

The UK Post-2010 Biodiversity Framework (2011-2020).



3 METHODOLOGY

3.1 Desk Study

- 3.1.1 Datasets from Natural England (MAGIC, 2022) were reviewed to identify the presence of UK statutory designated sites and notable habitats within the zone of influence, including woodlands listed on the ancient woodland inventory, habitats of principal importance (HPI) listed on the priority habitat inventory and statutory designated for their nature conservation value at the national scale such as sites of scientific interest (SSSI) and at the European and/or international scale namely: special areas of conservation (SACs), special protection areas (SPAs), and internationally designated wetland (Ramsar) sites. These sites collectively are hereafter referred to as 'European Sites'. Where measurements are included with the record, these provide the distance of the designated site from the closest point of the Site.
- 3.1.2 Data for sites within the zone of influence where European Protected Species Mitigation (EPSM) licences have been granted, were also reviewed. This information allows a greater understanding of the potential for European protected species to be present in the local area.
- 3.1.3 The zone of influence is the area over which ecological features, such as designated sites of nature conservation importance and protected and notable habitats and species, may be affected by the biophysical changes caused by the proposed development and associated activities. Due to the size of the Site and nature of the proposed development it is considered that a zone of 1km from the centre of the Site is appropriate for the gathering of information for the desk study.

3.2 Extended Phase 1 Habitat Survey

- 3.2.1 An extended phase 1 habitat survey was undertaken on the 7th September 2022 by Thomas Knight BSc(Hons) MSc MCIEEM (Natural England class one bat and great crested newt licence holder) following the standard 'Phase 1 Habitat survey' auditing method developed by the Joint Nature Conservancy Council (JNCC, 2010) and extended to include consideration of protected species in accordance with good practice guidance for preliminary ecological appraisal (CIEEM, 2017). The Site was surveyed on foot and the existing habitats and land uses were recorded on an appropriately scaled map (Appendix III). In addition, the dominant plant species in each habitat were recorded, as were any evidence of protected and notable species. The potential for the Site to support protected and notable species was also assessed. Those ecological features not classified as a habitat are denoted using a target note.

3.3 Preliminary Bat Roost Assessment

- 3.3.1 All buildings and trees within the Site were also subject to a preliminary bat roost assessment (PBRA). The external inspection of the building and ground inspection of trees was to assess potential roosting features (PRFs) such as those presented in Tables 1 and 2. The PBRA was undertaken in accordance with best practice survey standards (BCT, 2016).

Table 1: Features of trees commonly used by bats.

Features of trees used as bat roosts	Signs indicating possible use by bats
Natural holes.	Tiny scratches around entry point.
Woodpecker holes.	Staining around entry point.
Cracks/splits in major limbs.	Bat droppings in, around or below entrance.
Loose bark.	Audible squeaking at dusk or in warm weather.



Hollows/cavities.	Flies around entry point.
Dense epicormic growth (bats may roost within it).	Distinctive smell of bats.
Bird and bat boxes.	Smoothing of surfaces around cavity.

Table 2: Features of buildings commonly used by bats.

Features of building or built structure	Signs indicating possible use by bats
Type of building.	Tiny scratches around entry point.
Age of building.	Staining around entry point.
Aspect of PRF.	Bat droppings in, around or below entry point.
Wall construction –cavity walls or rubble-filled walls.	Feeding remains below entry point.
Form of the roof –presence of gable ends, hipped roofs, nature and condition of the roof covering.	Cobweb free potential entry points.
Presence of hanging tiles, weather boarding or other forms of cladding.	Audible squeaking at dusk or in warm weather.
Nature of the eaves –sealed by a soffit or boxed eave and tightness of fit to exterior walls.	Flies around entry point.
Presence and condition of lead flashing.	Distinctive smell of bats.
Gaps under eaves, around windows, under tiles, lead flashing.	Smoothing of surfaces around entry point.
Presence and type of roof lining.	
Presence on roof insulation.	

3.3.2 The buildings and trees were assessed in accordance with the criteria listed above and assigned to one of five categories as listed in Table 3 below.

Table 3: Categorisation system for visual inspection of structures and trees.

Category	Description
Confirmed roost	Bats discovered roosting within structure or tree or recorded emerging from/entering structure or tree at dusk and/or dawn. Structure or tree found to contain conclusive evidence of occupation by bats, such as droppings. A confirmed record (as supplied by an established source such as the local bat group) would also apply to this category.
High potential	A structure or tree 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 and surrounding habitat.



Moderate potential	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
Low potential	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.</p> <p>A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.</p>
Negligible potential	A structure or tree with no features capable of supporting roosting bats.

3.4 Limitations of survey

- 3.4.1 The protected species assessment provides a preliminary view of the likelihood of protected species occurring on Site, based on the suitability of the habitat and any direct evidence on Site. It should not be taken as providing a full and definitive survey of any protected species group. Additional surveys may be recommended if, on the basis of this assessment it is considered reasonably likely that protected species may be present.
- 3.4.2 The habitats present, and their management are likely to change over time, thus the findings of the extended phase 1 habitat survey are only considered valid for a period of up to two years.
- 3.4.3 A full biological record centre desktop study was not undertaken as part of this assessment. This was not considered necessary given the limited scale of the proposed development, the nature of the on-site and surrounding habitats and limited potential for impacts to arise within or outside of the Site.
- 3.4.4 This report includes a preliminary assessment of likely impacts of a development project only. The primary audience for a PEA is the client or developer and relevant members of the project team, such as the architect, planning consultant, and landscape architect. It is normally produced to inform a developer (or other client), and their design team, about the key ecological constraints and opportunities associated with a project, possible mitigation requirements and any detailed further surveys required. Under normal circumstances, it is not considered appropriate to submit a PEA in support of a planning application because the scope of a PEA is unlikely to fully meet planning authority requirements in respect of biodiversity policy and implications for protected species. In most cases, particularly when further surveys have been recommended within the PEA, a more detailed and comprehensive Ecological Impact Assessment (EclA) should be submitted in support of a planning application instead.
- 3.4.5 This document has been prepared for the stated proposal (1.5.1) and should not be relied upon or used for any other project without an additional check being carried out by the author as to its suitability in relation to any updated proposals. PJC Consultancy accepts no responsibility or liability for the consequence of this document being used for a purpose other than the purposes for which it was commissioned. PJC Consultancy accepts no responsibility or liability for this document to any party other than the person by whom it was commissioned.



4 RESULTS

4.1 Desk Study

Statutory Designated Sites

- 4.1.1 A single statutory designated site of nature conservation importance, namely Haverhill Railway Walks Local Nature Reserve (LNR), was identified within the zone of influence as part of the desk study, located approximately 800m east of the Site.
- 4.1.2 Haverhill Railway Walks LNR comprises large areas of scrub and larger trees, the disused railway line of which is considered to function as a valuable wildlife corridor, providing foraging, commuting and shelter opportunities to a wide range of birds, animals, insects and plants.

Protected and Notable Habitats

- 4.1.3 No parcels of ancient woodland listed on the ancient woodland inventory were identified within the zone of influence as part of the desk study.
- 4.1.4 Multiple parcels of HPI listed on the priority habitat inventory were identified within the zone of influence as part of the desk study. These habitats included lowland calcareous grassland, broadly classified deciduous woodland and wood-pasture and parkland. The closest parcel of HPI was a parcel of broadly classified deciduous woodland located approximately 100m east of the Site.

Protected and Notable Species

- 4.1.5 No EPSM licences granted in relation to protected species were identified within the zone of influence as part of the desk study.

4.2 Extended Phase 1 Habitat Survey

- 4.2.1 Habitat descriptions are provided below in accordance with the relevant JNCC phase 1 habitat survey handbook code. The distribution of these are shown in Appendix III, together with Site photographs, which are presented in Appendix IV.

Poor semi-improved grassland (B6)

- 4.2.2 Narrow linear belts of poor semi-improved grassland were recorded along the eastern and western Site boundaries. The majority of grassland supported a tall sward (<30cm) indicating that the grassland had not been recently cut. However, the floral structure and species composition indicated that the grassland was until recently likely subject to a regular mowing regime. Plant species recorded included perennial ryegrass *Lolium perenne*, false oat grass *Arrhenatherum elatius*, meadow grass *Poa* spp., clover *Trifolium* sp., buttercup *Ranunculus* sp., thistle *Cirsium* sp., rough hawkbit *Leontodon hispidus*, dock *Rumex* spp., and common self-heal *Prunella vulgaris*.

Hedge with trees (J2.3)

- 4.2.3 A dense hedgerow indicating regular hedgerow management was recorded along the western Site boundary. Woody species recorded within the hedgerow included hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, dog rose *Rosa canina* and privet *Ligustrum vulgare* and the occasional standard sycamore *Acer pseudoplatanus* tree.

Buildings (J3.6)

- 4.2.4 The Site comprised a single commercial building, formerly a car showroom. A full description of the building can be found in Table 4 below.

Hardstanding (J5)

- 4.2.5 The Site comprised large areas of hardstanding comprising tarmac parking areas and access off of Duddery Hill.



4.3 Preliminary Bat Roost Assessment

4.3.1 A description of the buildings and trees and any potential roosting features (PRF) are detailed in Tables 4 and 5 below:

Table 4: PBRA results of buildings within the Site.

B1

Description

Unoccupied detached single storey commercial facility formerly functioning as a car showroom. The building supported a slightly pitched roof comprised of corrugated asbestos/cement roofing panels, deep metal soffits, and walls constructed of metal wall panels, large shutter doors and large open-fronted windows.

Evidence of Bats

None recorded at the time of the assessment.

Potential Roost Features

None recorded at the time of the assessment.

Suitability to Support Roosting Bats

Negligible.

Table 5: PBRA results of trees within or immediately adjacent the Site.

T1

Description

Mature sycamore tree along western Site boundary which appeared to be in good health and condition with no obvious structural defects recorded.

Evidence of Bats

None recorded at the time of the assessment.

Potential Roost Features

None recorded at the time of the assessment.

Suitability to Support Roosting Bats

Negligible.



5 DISCUSSION AND RECOMMENDATIONS

5.1 Statutory Designated Sites

- 5.1.1 A single statutory designated site of nature conservation importance, namely Haverhill Railway Walks LNR, was identified within the zone of influence as part of the desk study, located approximately 800m east of the Site.
- 5.1.2 Given the distance between the Site and the identified statutory designated sites, and the size of the Site and nature of the proposed development, adverse effects upon the statutory designated sites and their qualifying criteria for designation are not considered likely. Statutory designated sites are therefore not considered an ecological constraint and are not considered further in this report.

5.2 Protected and Notable Habitats

- 5.2.1 Multiple parcels of HPI were identified within the zone of influence as part of the desk study, the nearest being a parcel of broadly classified deciduous woodland located approximately 100m east of the Site..
- 5.2.2 Given the distance between the Site and the nearest parcel of HPI and given the size of the Site and nature of the proposed development, adverse effects upon these protected and notable habitats are not considered likely. Protected and notable habitats are therefore not considered an ecological constraint and are not considered further in this report.

5.3 Protected and Notable Species

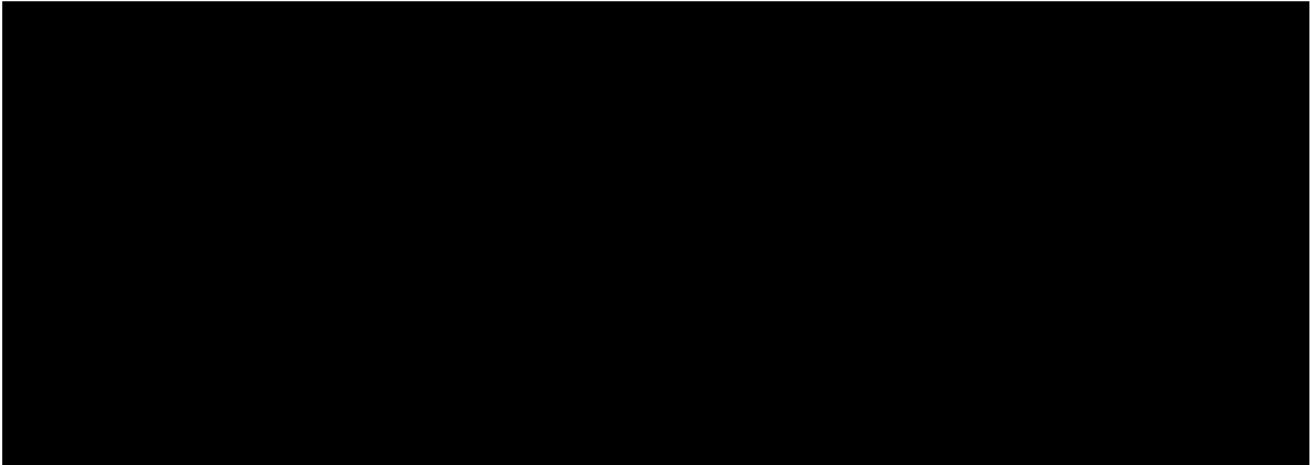
- 5.3.1 The Site was considered to provide opportunities for protected and notable species. The suitability of habitat on Site to support species is considered below.

Bats

- 5.3.2 All bats are European protected species (EPS) and both individual animals and their roosts are afforded protection under the Conservation of Habitats and Species Regulations 2019 (as amended) and the Wildlife and Countryside Act, 1981 (as amended). Certain bat species are also listed as Species of Principal Importance (SPI) under the NERC Act 2006.
- 5.3.3 As part of the PBRA, all buildings and trees within the Site were identified as having negligible suitability to support roosting bats and therefore roosting bats are highly likely absent from the buildings and trees. Roosting bats are therefore not considered an ecological constraint and are not considered further in this report.

Hazel Dormice

- 5.3.4 Hazel dormice *Muscardinus avellanarius* are EPS and are afforded protection under the Conservation of Habitats and Species Regulations 2019 (as amended) and the Wildlife and Countryside Act, 1981 (as amended). Dormice are also listed as SPI under the NERC Act 2006.
- 5.3.5 The Site was considered to provide very limited suitable semi-natural habitat for dormice given the isolation of the Site within an urbanised environment and very limited habitat connectivity between the Site and other parcels of semi-natural habitat within the wider surroundings and given absence of preferred floral species (such as hazel *Corylus avellana* and honeysuckle *Lonicera periclymenum*).
- 5.3.6 On this basis, the Site was identified as having negligible potential to support dormice and are therefore not considered an ecological constraint and are not considered further in this report.

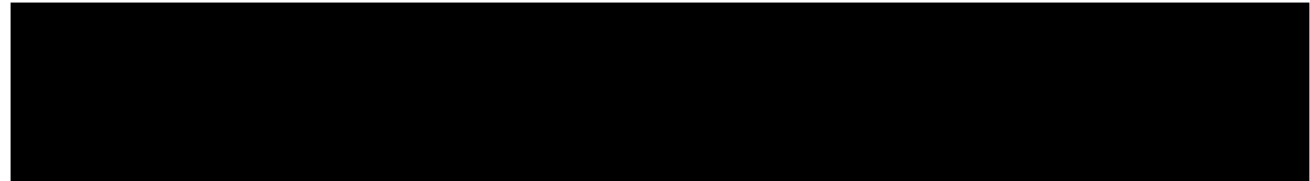


Reptiles

- 5.3.10 Native, widespread reptile species (common or viviparous lizard *Zootoca vivipara*, adder *Vipera berus*, grass snake *Natrix helvetica* and slow worm *Anguis fragilis*) are protected under Schedule 5 of The Wildlife and Countryside Act 1981 (as amended), making it an offence to kill or injure individual animals. All widespread reptile species are also listed as SPI under the NERC Act 2006.
- 5.3.11 Reptiles are considered highly likely absent from the Site given the very limited availability of semi-natural habitat and given the isolation of the Site within a highly urbanised environment.
- 5.3.12 The proposed development is therefore considered highly unlikely to result in the death or injury to reptiles. On this basis, reptiles are not considered an ecological constraint and are not considered further in this report.

Birds

- 5.3.13 All birds, their nests and eggs are protected from killing and injury of individuals, damage and destruction of nests and destruction of eggs under the Wildlife and Countryside Act 1981 (as amended). Species listed in Schedule 1 (Part 1) of the Act are also protected from disturbance whilst nesting or whilst with dependent young, by special penalties. Many bird species are also listed as SPI under the NERC Act 2006.
- 5.3.14 The Site supported a hedgerow which was considered to provide good nesting and foraging opportunities to a wide range of common bird species.
- 5.3.15 Works associated with any proposed development of the Site, for example habitat clearance, could therefore result in direct adverse impacts on nesting birds. On this basis, nesting birds are therefore considered a potential ecological constraint. In order to comply with legislation protecting nesting birds the mitigation measures detailed below should be adhered to.
- 5.3.16 It is recommended that clearance or cutting of the hedgerow be undertaken outside the main nesting bird season. The nesting bird season for most British bird species is between March and August (inclusive).
- 5.3.17 Should this not be possible, the hedgerow must be inspected by an ecologist to determine the presence/absence of any nesting birds prior to clearance. In the event of an active nest being identified, a temporary exclusion zone would need to be placed around the nest and development paused until the dependent young have fledged which may be several weeks. The ecologist will determine safe working distances and the distances will be dependent upon the bird species present.





Other Mammal Species

- 5.3.22 Water voles *Arvicola amphibious* and their places of shelter are protected under the Wildlife and Countryside Act, 1981 (as amended) which makes it an offence to kill, injure or take any water vole, damage, destroy or obstruct access to any place of shelter or protection that the animals are using, or disturb voles while they are using such a place.
- 5.3.23 Otters *Lutra lutra* are protected under the Conservation of Habitats and Species Regulations (2019) as amended and under the Wildlife and Countryside Act, 1981 (as amended) which makes it an offence to kill, injure or capture an otter, intentionally or recklessly disturb otters; or to damage, destroy or intentionally or recklessly obstruct access to a holt or other resting places. Both water voles and otters are also listed as SPI under the NERC Act 2006.
- 5.3.24 No aquatic and very limited suitable terrestrial habitat was recorded within the Site and immediate surroundings.
- 5.3.25 On this basis the Site was identified as having negligible potential to support otter and water vole and are therefore not considered an ecological constraint and are not considered further in this report.

Invertebrates

- 5.3.26 A number of invertebrate species such as stag beetles *Lucanus cervus* are afforded protection under the Conservation of Habitats and Species Regulations 2019 (as amended) and under Schedule 5 of the Wildlife and Countryside Act, 1981 (as amended). Many invertebrate species including the stag beetle are also listed as SPI under the NERC Act 2006.
- 5.3.27 Protected and notable invertebrate species are considered highly likely absent from the Site given the very limited availability of semi-natural habitat and given the isolation of the Site within a highly urbanised environment. Protected and notable invertebrate species are therefore not considered an ecological constraint and are not considered further in this report.

Plants

- 5.3.28 Wild plants are protected under the Wildlife and Countryside Act 1981 (as amended) which prohibits the unauthorised intentional uprooting of any wild plant species and forbids any picking, uprooting or destruction of plants listed on Schedule 8 of which there are over 150 species. In addition, nine plant species are afforded protection under the Conservation of Habitats and Species Regulations 2019 (as amended). Many plant species are also listed as SPI under the NERC Act 2006.
- 5.3.29 The habitats on Site were common and widespread and therefore provided limited potential to support protected and notable and rare plant species.
- 5.3.30 Section 14(1) of the Wildlife and Countryside Act 1981 (as amended) makes it illegal to plant or otherwise cause to grow in the wild any plant listed in Schedule 9 of the Act including Japanese knotweed *Fallopia japonica*.
- 5.3.31 No Schedule 9 non-native invasive plant species were recorded within the Site.
- 5.3.32 On this basis, protected and notable plants including non-native invasive plant species are not considered an ecological constraint and are not considered further in this report.

5.4 Ecological Enhancements



5.4.1 Under Section 40 of the NERC Act 2006 there is a duty to have regard to biodiversity conservation. In addition, the National Planning Policy Framework (2021) encourages ecological enhancement to be integrated into development projects in order to achieve an overall net-gain in biodiversity. Given the above, the following enhancement recommendations should be considered and incorporated into the final design proposals:

Installation and maintenance of artificial bat bricks or bat tubes (i.e. Schwegler 1FR and 2FR bat tubes and Schwegler 1GS bat brick or similar) into any new buildings and installation of bat boxes (i.e. Schwegler 2FN or similar) on to suitable retained trees to increase the roosting opportunities for bats within the Site. Any artificial roosting features should be placed between 3m and 6m above ground in a variety of locations at slightly different heights and preferably positioned facing a southerly or southeasterly direction.

Installation and maintenance of artificial bird nest boxes onto any retained trees and new buildings on Site to increase nesting opportunities for many bird species. Given their designation as SPI, particular consideration should be given to installing house sparrow (i.e. Schwegler 1SP or similar) and starling (i.e. Schwegler 3S or similar) nest boxes onto any retained trees and any new buildings within the Site.

Planting of native species rich hedgerows along the remaining Site boundaries. Approximately five woody plants should be planted per metre of hedgerow, in double staggered rows. The hedgerow should be managed on an annual rotation, whereby half of each hedgerow is cut in any one year. This will encourage a diverse structure to produce both a wide and dense hedgerow. Woody species planted could include the following species:

- o Oak *Quercus* sp;
- o Hazel *Corylus avellana*;
- o Hawthorn *Crataegus monogyna*;
- o Blackthorn *Prunus spinosa*;
- o Field maple *Acer campestre*;
- o Holly *Ilex aquifolium*;
- o Elder *Sambucus nigra*; and
- o Crab apple *Malus sylvestris*.

Creation of areas of species-rich meadow grassland within the Site, ideally within wide 'natural buffer strips' along the Site boundaries. These areas could provide additional foraging and shelter opportunities for a wide variety of invertebrates, reptiles, amphibians and bird and bat species. Plant species to be included within the wildflower seed mix should be appropriate for the Site and wider area. A wildflower seed mixture should be sown on the site in March, April or September. Once established, the grassland should be maintained via annual seed cutting in the autumn, following seed setting and use of pesticides, fertilizers or other chemicals, avoided.

5.5 Biodiversity Net Gain

5.5.1 Biodiversity Net Gain is an approach to development that leaves biodiversity in a better state than before. The UK government's 25-year environment plan is focused on achieving Biodiversity Net Gain through development and the new Environment Bill will mandate a measurable 10% Biodiversity Net Gain for most new developments in England.

5.5.2 The enhancement recommendations detailed above provide a qualitative opinion-based assessment of how the development can achieve an overall net gain in biodiversity.

5.5.3 Biodiversity Net Gain is a move away from an opinion-based assessment to a more quantitative, measurable and transparent based assessment using the DEFRA biodiversity metric tool to quantify



biodiversity losses and gains in terms of 'biodiversity units'. The DEFRA biodiversity metric tool can be used to calculate the ecological baseline value of a site pre-development and the predicted ecological value of a site post-development using detailed design proposals.

- 5.5.4 The NPPF (2021) sets out the Government's planning policies for England and places a responsibility on local planning authorities to identify and pursue opportunities for securing measurable gains for biodiversity when determining planning applications, likely through planning policies and decisions.
- 5.5.5 Please note that a detailed Biodiversity Net Gain assessment is not included as part of this PEA report, and that some local planning authorities have already adopted internal policies requiring new developments to deliver Biodiversity Net Gain as part of the planning process. It is likely that Biodiversity Net Gain will soon be adopted by all local planning authorities in England over the coming months.



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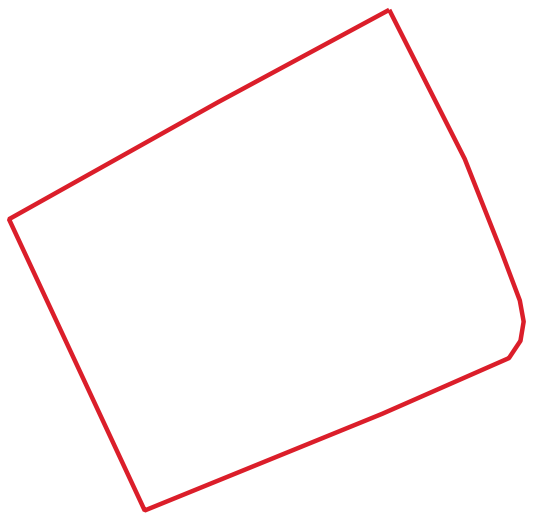


7 APPENDICES

Appendix I: Site Location Plan



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Appendix II: Legislation and Planning Policy

Legislation

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

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 is the UK transposition of the European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, or the 'Habitats Directive'. The directive provides protection of key habitats and species of European importance. Those key habitats and species are listed in Annexes II and IV of the directive.

Those species protected under the regulations and most likely encountered during development include:

All bat species

Hazel dormouse



Common otter

The Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended) is the primary legislation for the protection of wildlife in Great Britain. This legislation is the means by which the Convention on the Conservation of European Wildlife and Natural Habitats (the 'Bern Convention') and the European Union Directives on the Conservation of Wild Birds (79/409/EEC) and Natural Habitats and Wild Fauna and Flora (92/43/EEC) are implemented in Great Britain. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants respectively. The Countryside and Rights of Way (CROW) Act 2000 makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site

Those species protected under the act and most likely encountered during development include:

All bat species

All nesting birds

Hazel dormouse



Common otter

Water vole

All native reptile species

White-clawed crayfish

The Protection of Badgers Act 1992

The Protection of Badgers Act 1992 consolidates and strengthens previous legislation (including the Badgers (Further Protection) Act 1991). Under the act, it is an offence to:

Wilfully kill, injure or take a badger (or attempt to do so).

Cruelly ill-treat 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.

The Natural Environment and Rural Communities Act (NERC) 2006

Section 40 of the Act requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'. Section 41 of the Act provides a list of habitats and species, which are of 'principal importance for the conservation of biodiversity.' This list aids decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications.

Hedgerows Regulations 1997

These regulations were produced to protect important countryside hedges from removal. The regulations only cover hedgerows that are at least 20m long or, if shorter, connected to other hedgerows at both ends or part of a longer hedgerow. They must be in or adjacent to common land, village greens, site of special scientific interest, local nature reserves, or land used for agriculture, forestry or breeding or keeping of horses, ponies or donkeys.

Wild Mammals (Protection) Act 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

This legislation is of relevance when undertaking works with potential to affect wild mammals e.g. works near burrows, warrens or dens, regardless of other legislative protection.

Species and Habitat Specific Legislation

Plants

Wild plants are protected under Section 13 of the Wildlife and Countryside Act 1981 (as amended). It prohibits the unauthorised intentional uprooting of any wild plant species and forbids any picking, uprooting or destruction of plants listed on Schedule 8 of which there are over 150.

The Conservation of Habitats and Species Regulations 2019 (as amended) have nine plants listed within Annex IV these are; creeping marshwort *Apium repens*, early gentian *Gentianella anglica*, fen orchid *Liparis loeselii*, floating-leaved water plantain *Luronium natans*, killamey fern *Trichomanes speciosum*, lady's slipper *Cypripedium calceolus*, shore dock *Rumex rupestris*, slender naiad *Najas flexilis*, and yellow marsh saxifrage *Saxifraga hirculus*. It is an offence to deliberately pick, collect cut, uproot or destroy any protected plant, or keep, transport, sell, or exchange, any live or dead such plant species, this applies to all stages of its life cycle.

Invasive Species

Schedule 9, Section 14 of the Wildlife and Countryside Act (1981, as amended) prohibits the introduction into the wild of any species that is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state, or any species of the 69 plants listed on Schedule 9.

The frequently encountered invasive species within proposed development sites include floating pennywort *Hydrocotyle ranunculoides*, giant hogweed *Heracleum mantegazzianum*, Himalayan balsam *Impatiens glandulifera*, Japanese knotweed *Fallopia japonica*, New Zealand *pygmyweed*



Crassula helmsii, rhododendron *Rhododendron ponticum* and certain hybrids of the above, some species may be native yet are listed for conservation purposes.

Plant or soil material contaminated by Japanese knotweed that is to be discarded is considered to be a 'controlled waste' under the Environmental Protection Act 1990 (EPA 1990). It is an offence to deposit, treat, keep, or dispose of controlled waste without a licence. Furthermore, knotweed that has been cut down and removed must be received by an authorised person to be disposed of correctly. A licence can be obtained from the Environment Agency (EA). The release or planting of a listed species in the wild can be permitted under a licence granted by the relevant statutory body.

Invertebrates

A number of invertebrates such as silver studded blue butterfly *Plebejus argus*, stag beetles *Lucanus cervus* and white letter hairstreak *Stymondia w-album* are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981, as amended). This legislation makes it illegal to intentionally kill, injure, or take a protected invertebrate, or to damage, destroy, or obstruct access to any structure or place used for shelter or protection by such a species; and disturb any protected species occupying such a structure or place.

Three invertebrates are listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2019, fisher's estuarine moth *Gortyna borelii lunata*, the large blue butterfly *Maculinea arion* and lesser whirlpool ram's-horn snail *Anisus vorticulus*. It is an offence deliberately to kill, capture, or disturb a listed species, or to damage or destroy the breeding site or resting place of such an animal.

Amphibians

There are four widespread amphibian species, common frog *Rana temporaria*, common toad *Bufo bufo*, palmate newt *Lissotriton helveticus* and smooth newt *Lissotriton vulgaris*. All of the four widespread species receive partial protection under Schedule 5 of the Wildlife and Countryside Act (1981, as amended) making it an offence to offer them for sale or trade.

Great crested newts *Triturus cristatus* and natterjack toads *Epidalea calamita* are fully protected under Schedule 5 (in respect of section 9(4)(b) and (c) and (5) only) of the Wildlife and Countryside Act (1981, as amended) and the Conservation of Habitats and Species Regulations 2019. Reintroduced populations of 'native' pool frogs *Pelophylax lessonae* also receive the same protection. It is illegal to possess a protected species (alive or dead), deliberately capture, injure or kill, to intentionally or recklessly disturb, or to deliberately take or destroy the eggs of these protected species. It is also illegal to damage, destroy or intentionally or recklessly obstruct access to breeding or resting place used by these protected species'. All life stages of each species' are afforded the same level of protection.

In order to undertake any activity, which would, otherwise result in any of the above offences being committed, it may be necessary to obtain a European Protected Species (EPS) licence from the relevant statutory body (Natural England (NE), Countryside Council for Wales (CCW) or Scottish Natural Heritage (SNH)). It is possible to undertake surveys which would otherwise involve unlawful acts, such as disturbance, by obtaining a survey licence which provides authorisation for scientific and educational purposes

Reptiles

The four common reptile species, adder *Vipera berus*, grass snake *Natrix helvetica*, common lizard *Zootoca vivipara* and slow worm *Anguis fragilis* are protected under Schedule 5 of the Wildlife and Countryside Act (1981, as amended) against deliberate and/or intentional killing, injuring and trade.



If common reptile species are found to be present or considered potentially present within a proposed development site. To ensure that no subsequent offence will be committed a precautionary method of working (written by a suitably qualified ecologist) and submitted to the relevant authority may be required to enable works to proceed with limited risks of offences being caused.

Birds

All birds, their nests and eggs are protected by the Wildlife and Countryside Act (1981, as amended). It is an offence to intentionally kill, injure, or take any wild bird, or take or destroy an egg of any wild bird. It is also an offence to damage or destroy the nest of any wild bird (whilst being built, or in use). Therefore, clearance of vegetation within the site boundary, or immediately adjacent to the site during the nesting season could result in an offence occurring under the Act. The bird breeding season can be taken to run between the 1 February and 31 August and is subject to geographical and seasonal factors. There are 79 species of birds listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Barn owls *Tyto alba* are given the highest level of legal protection possible under Schedule 1 of the Wildlife and Countryside Act 1981. It is therefore illegal to kill, injure or take a barn owl, or to take or destroy its eggs. It is also illegal to intentionally or recklessly take, damage, or destroy the nest of any wild bird while it is in use or being built, release or allow the escape of a barn owl into the wild or possess any bird (dead or alive) or part of bird without a licence which is obtainable through the country agencies (EN, SNH, and CCW).

Badgers

Badgers *Meles meles* are protected under the Protection of Badgers Act (1992) and the Wildlife and Countryside Act (1981, as amended). As such it is an offence to wilfully take, kill, injure or ill-treat a badger, or possess a dead badger or any part of a badger. Under the Act their setts are also protected against obstruction, destruction, or damage in any part.

Sett interference includes damaging or destroying a sett, obstructing access to a sett, and disturbing a badger whilst it is occupying a sett. The Act defines a badger sett as 'any structure or place, which displays signs indicating the current use by a badger' and Natural England takes this definition to include seasonally used setts.

Work that may disturb badgers or their setts is illegal without a development licence from the relevant statutory body (NE, CCW, SNH). As a precautionary principle, a buffer distance between a badger sett and the works will be determined, based upon guidance from an appropriately experienced ecologist. This buffer distance should be based upon the size and activity levels at the sett, the topography between the sett and the works and the nature of the works.

Bats

All native UK bat species are fully protected by UK law under Schedule 5 (in respect of section 9(4)(b) and (c) and (5) only) and Schedule 6 of the Wildlife and Countryside Act (1981, as amended), and under Schedule 2 of the Conservation of Habitats and Species Regulations 2019. It is illegal to deliberately capture, injure or kill a bat or to intentionally or recklessly disturb bats. It is also illegal to damage, destroy or intentionally or recklessly obstruct access to a breeding or resting place used by a bat.

Any activity that would result in a contravention of the above legislation would likely require an EPS licence from the relevant statutory body (NE, CCW or SNH). Works or mitigation activities involving interference with bats or bat shelters must be carried out by a licensed bat worker.

Dormice



Dormice *Muscardinus avellanarius* are protected under Schedule 5 (in respect of section 9(4)(b) and (c) and (5) only) of the Wildlife and Countryside Act (1981, as amended) and are listed in Schedule 2 of the Conservation of Habitats and Species Regulations 2019. Under the current legislation it is illegal to intentionally or deliberately kill, injure or capture dormice, deliberately disturb dormice (whether in a nest or not); or to damage, or destroy dormouse breeding sites or resting places.

Any activity that would result in a contravention of the above legislation would likely require an EPS licence from the relevant statutory body (NE, CCW or SNH).

Otters

The otter *Lutra lutra* is fully protected under Schedule 5 (in respect of section 9(4)(b) and (c) and (5) only) of the Wildlife and Countryside Act (1981, as amended) and are listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2019. It is therefore illegal to deliberately capture, injure or kill an otter, possess an otter (dead or alive), or any other part of an otter, or intentionally or recklessly disturb otters. It is also illegal to damage, destroy or intentionally or recklessly obstruct access to a holt or other resting place used by an otter.

Any activity that would result in a contravention of the above legislation would likely require an EPS licence from the relevant statutory body (NE, CCW or SNH).

Water voles

Water voles *Arvicola amphibious* are protected under Schedule 5 of the Wildlife and Countryside Act (1981, as amended). It is an offence to possess, control or sell water voles or to intentionally kill, injure or take water voles. It is also an offence to intentionally or recklessly damage, destroy or obstruct access to a place that water voles use for shelter or protection or disturb water voles whilst using such a place.

A licence is required for catching/handling water voles, or for field surveys that are intrusive or disturbing where the surveyor suspects' water voles are present. A licence can be obtained by applying to the relevant statutory body (NE, SNH, and CCW,). Please note that the legislation does not permit licences to be issued in relation to development of land.

Biodiversity Policies

National Planning Policy Framework (NPPF) 2021

Published in 2021 the NPPF sets out the Government's planning policies for England and how these are expected to be applied by local authorities. It replaces all the Planning Policy Statements and Guidance (PPSs and PPGs). The NPPF emphasises the need for sustainable development, whilst specifying the need for protection of designated sites and priority habitats and priority species (as listed in section 41 of the Natural Environment and Rural Communities (NERC) Act 2006). Paragraph 174 of The National Planning Policy Framework (NPPF) states:

“Planning policies and decisions should contribute to and enhance the natural and local environment by:

protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

maintaining the character of the undeveloped coast, while improving public access to it where



appropriate;

minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.”

Paragraph 179 states that “to protect and enhance biodiversity and geodiversity, plans should:

Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and

promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.”

Furthermore, paragraph 185 states that when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

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;

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;

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

development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

Paragraph 181 states:

“The following should be given the same protection as habitats sites:

potential Special Protection Areas and possible Special Areas of Conservation;

listed or proposed Ramsar sites; and

sites identified, or required, as compensatory measures for adverse effects on habitats sites,



potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.”

Paragraph 182 states:

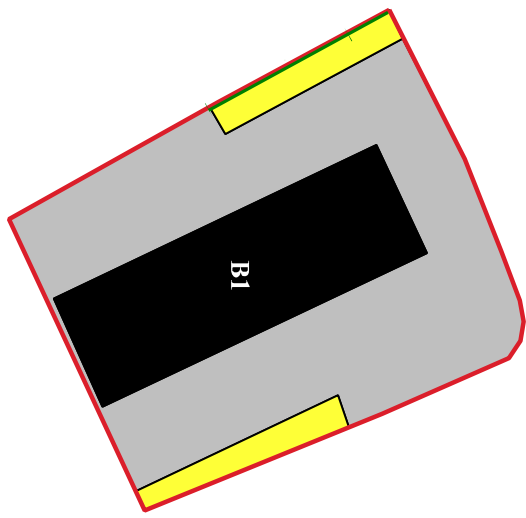
“The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.”

The UK Biodiversity Framework (2011-2020).

The UK Biodiversity Framework is an important framework that is owned, governed and implemented by the four UK countries, assisted by Defra and JNCC in their UK co-ordination capacities. Although differing in details and approach, the four UK countries have published strategies which promote the same principles and address the same global targets: joining-up our approach to biodiversity across sectors; and identifying, valuing and protecting our ‘Natural Capital’ to protect national well-being now and in the future. This new framework has been developed to enhance the recovery of priority habitats and species in England (published under section 41 of the NERC Act 2006), thereby contributing to the delivery of the England Biodiversity Strategy. The framework has been developed and endorsed by the England Biodiversity Group and wider partnership. It is the starting point for a more integrated approach to biodiversity conservation in England, building on the strengths of the former UK Biodiversity Action Plan (BAP) process and improving those areas where insufficient progress was being made.

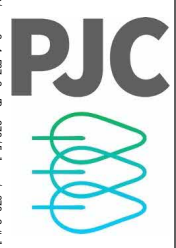


Appendix III: Phase 1 Habitat Map



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Appendix IV: Site Photographs

All photographs taken on 7th September 2022 by Thomas Knight BSc(Hons) MSc MCIEEM.



Photograph 1: Looking south from site entrance along northern Site boundary adjacent Duddery Hill.



Photograph 2: Western elevation of building B1.

PJC



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