

Garages off Lowther Court, Sandy Lane, Prestwich, Greater Manchester M25 9PS

**ECOLOGICAL SURVEY AND ASSESSMENT
(Including a Licensed Bat Survey)**

October 2024

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Document Control

Survey Type:	Surveyors ¹	Survey Date(s)
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Reporting	Personnel	Date
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Report issued to	Contact Construction	
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¹ Licence reference number Bats Brian Robinson Natural England Class Survey Licence (bats, Level 2) Registration Number 2015-13161-CLS-CLS		

SUMMARY

- i. This ecological survey and assessment presents the ecological, biodiversity and nature conservation status of garages off Lowther Court, Sandy Lane, Prestwich, Greater Manchester M25 9PS. The assessment was requested in connection with proposals to demolish the garages and redevelop the site to residential dwellings with associated gardens.
- ii. This report presents the results of a desktop study, data search, extended Phase 1 Habitat Survey and a licensed bat survey carried out in September 2024. The scope of survey undertaken is appropriate to identify potential ecological constraints, the remit of mitigation required and opportunities for biodiversity associated with the development proposals.
- iii. The site comprises hard standing and four disused garage buildings with locally abundant colonising herbs and areas of scrub.
- iv. The proposals will have no adverse direct or indirect effect on statutory or non-statutory designated sites for nature conservation.
- v. Only common and widespread plant species were found. None of the habitats present are representative of semi-natural habitat. The National Vegetation Classification communities present are typical of the geographical area and conditions present. No Priority Habitats or irreplaceable habitats are present within the site. None of the habitats within the site hold any value in terms of their geographical context.
- vi. Virginia-creeper, an invasive plant species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), is locally abundant at Building 1, at the north-western end of the site. It is an offence to cause the spread of this species in the wild. Guidance on the control and management of this species is described at **Section 5.2**.
- vii. The four buildings are assessed to be of 'negligible' suitability for use by roosting bats; no further surveys are required to inform this assessment. The buildings and scrub are suitable for use by nesting birds; all wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are nesting. The margins of the site support scrub habitat suitable for use by sheltering hedgehog, a Priority Species. Measures for the protection of nesting birds and hedgehog to be applied during the construction phase of the proposed development are presented at **Section 5.2**.
- viii. The recommendations in **Section 5.0** outline all the mandatory measures and additional actions to be applied to ensure compliance with wildlife legislation, the National Planning Policy Framework (NPPF) and best practice.
- ix. The proposals will secure an opportunity to implement beneficial measures such as and habitat creation that will safeguard habitats for wildlife such as birds and bats, with the aim of providing a net gain in biodiversity in accordance with the principles of the NPPF. Features to include within the site design to enhance habitats within the site for nesting birds and roosting bats are presented at **Section 5.3**. Landscape planting which could also be incorporated into the site design to compensate for the loss of habitat within the site are presented at **Section 5.3**.
- x. It is concluded that the proposals are feasible and acceptable in accordance with ecological considerations and relevant planning policy. Redevelopment at the site will provide an opportunity to secure ecological enhancement for wildlife associated with residential development.

1.0 INTRODUCTION

1.1 Background and Rationale

- 1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by Contact Construction to carry out an ecological assessment of Garages off Lowther Court, Sandy Lane, Prestwich, Greater Manchester M25 9PS (hereafter referred to as the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SD 80965 03007. An aerial image of the site and its surrounding habitats is appended at **Figure 1** (source image: ESRI World Imagery).
- 1.1.2 The assessment was requested in connection with a planning application proposing the demolition of the buildings and redevelopment the site to one pair of semi-detached houses with associated gardens.

1.2 Scope of Works

- 1.2.1 The scope of ecological works undertaken in September 2024 comprised:
- A desktop study and data search for known ecological information at the site and the local area;
 - An Extended Phase 1 Habitat Survey and assessment, and assessment of the habitats present at the site using the UK Habitats Classification;
 - Assessment of the ecological value of the habitats within the site with the use of the National Vegetation Classification (NVC) and the Ratcliffe criteria, as presented in *A Nature Conservation Review* (Ratcliffe, 1977);
 - Survey and assessment of all habitats for relevant statutorily protected species¹ and other wildlife including badger (*Meles meles*) bird species and reptiles;
 - A daytime bat walkover survey for bats, which has comprised a licensed preliminary roost assessment of the buildings and an assessment of the suitability of the habitats within the site and the surrounding area for use by foraging and commuting bats (no trees are present within the site);
 - The identification of any potential ecological constraints on the proposals and the specification of the scope of mitigation and ecological enhancement required in accordance with wildlife legislation, planning policy guidance and other relevant guidance; and
 - The identification of any further surveys or precautionary actions that may be required to inform the progression of the site through the planning process or prior to the commencement of any construction activities.

¹ In accordance with *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact on the Planning System* (Ministry of Housing, Communities & Local Government, 2005) developers should not be required to undertake surveys for protected species unless there is reasonable likelihood of the species being present and affected by the development. In this instance (for example) there are no ponds within an unobstructed radius of 500 metres from the site, and no water bodies or water courses within or adjacent to the site; there has been no requirement to consider great crested newt (*Triturus cristatus*), water vole (*Arvicola amphibius*) or otter (*Lutra lutra*) as part of this assessment

2.0 METHOD OF SURVEY

2.1 Desktop Study and Data Search

2.1.1 The following sources of information and ecological records were consulted:

- a. MAGiC Maps: A web-based interactive map which brings together geographic information on key environmental schemes and designations, including details of statutory nature conservation sites;
- b. Ancient Tree Inventory (Woodland Trust, 2024): An online database of ancient and veteran trees;
- c. Greater Manchester Local Record Centre (GMLRC); and
- d. Greater Manchester Biodiversity Action Plan (BAP).

2.2 Vegetation and Habitats

2.2.1 An Extended Phase 1 Habitat Survey of the site was carried out by Brian Robinson on 25th September 2024. The weather was dry and overcast, with a light air (Beaufort scale 1) and an air temperature of 14°C.

2.2.2 A habitat and vegetation map was produced for the site and the immediate surrounding area and is appended at **Figure 2**. The mapping is based on the Joint Nature Conservation Committee Phase 1 Habitat Survey methodology (JNCC, 2010) with minor adjustments to illustrate and examine the habitats with greater precision.

2.2.3 On site habitat mapping was assisted via use of GPS technology, using *1 Site Location 1250 A4 R-B.pdf* and ESRI World Imagery as base plans.

2.2.4 The plant species within the site boundary were determined with estimates of the distribution, ground cover, abundance and constancy of individual species. The estimation of abundance was based on the DAFOR system, where D = Dominant, A = Abundant, F = Frequent, O = Occasional and R = Rare, this being a widely used and accepted system employed by ecological surveyors. The terms L = Locally and V = Very were additionally used to describe the plant species distributions with greater precision.

2.2.5 Stands of vegetation and habitats were described and evaluated using the National Vegetation Classification (NVC). The NVC provides a systematic and comprehensive analysis of British vegetation and is a reliable framework for nature conservation and land-use planning.

2.2.6 Habitats within the site were assessed in accordance with *The UK Habitat Classification Version 2.0* (UKHab Ltd, 2023). The UK Habitat Classification, or 'UKHab' has been designed to function at two scales of minimum mappable unit (MMU): fine scale (25m² or 5 metres length) and large scale (400m² or 20 metres length). It has been considered for the purposes of this survey that the fine scale of 25m² or 5 metres length MMU is appropriate.

2.2.7 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the *Wildlife and Countryside Act 1981* (as amended) and species which are indicators of important and uncommon plant communities. Plant nomenclature follows *New Flora of the British Isles 3rd Edition* (Stace, 2010).

2.2.8 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), including Japanese Knotweed (*Fallopia japonica*), Indian Balsam (*Impatiens glandulifera*) and Giant Hogweed (*Heracleum mantegazzianum*).

2.3 Animal Life

Badger

- 2.3.1 The survey area for badger covered the site (as annotated on **Figure 2**) and extended to accessible land within a radius of 50 metres from the site boundary. Private gardens / land were excluded from the survey.
- 2.3.2 The survey was conducted in accordance with guidance presented within *Badgers and Development* (Natural England, 2007) and *Badgers: advice for making planning decisions* (Natural England, 2022).
- 2.3.3 The following signs of badger activity were searched for:
- Sett entrances, e.g. entrances that are normally 25 to 35cm in diameter and shaped like a 'D' on its side;
 - Large spoil heaps outside sett entrances;
 - Bedding outside sett entrances;
 - Badger footprints;
 - Badger paths;
 - Latrines;
 - Badger hairs on fences or bushes;
 - Scratching posts; and
 - Signs of digging for food.
- 2.3.4 Habitats within and surrounding the site were assessed in terms of their suitability for use by foraging and sheltering badger in accordance with their known habitat preferences as detailed in current guidance and *Badger* (Roper, 2010).

Bat Species

Daytime Bat Walkover Survey

Survey Personnel

- 2.3.5 The site was assessed for its suitability to support roosting bats by Brian Robinson, Natural England Class Survey Licence WML CL18 (Bat Survey Level 2), Registration Number 2015-13161-CLS-CLS. The surveyor's qualifications and experience meet the criteria as defined in the *Technical Guidance Series Competencies for Species Survey: Bats* (CIEEM, 2013).

Preliminary Roost Assessment of the Buildings

- 2.3.6 The surveys were carried out in accordance with standard methodology including the *Bat Mitigation Guidelines* (Mitchell-Jones, 2004), the *Bat Workers' Manual 3rd Edition* (Mitchell-Jones & Mcleish, 2004) and *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023).
- 2.3.7 An inspection of the external surfaces, walls and roofs of the buildings was carried out to find potential bat roosting habitat or accesses into internal areas where roosts may be present. Searches for evidence

of bat presence in the form of droppings, urine stains, feeding signs, grease marks and other evidence were also carried out.

2.3.8 No internal inspection of the locked garage buildings was possible.

2.3.9 A list of equipment used is detailed in **Table 2.1**.

Table 2.1: Survey Equipment used during Daytime Bat Survey

Ladders
LED Lenser P14 torch
Olympus Tough TG-6 camera
8x20 binoculars
Ridgid Micro Inspection Camera Borescope CA-100

2.3.10 The suitability of each building has been assessed in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023), taking into account any presence of gaps suitable for access by bats, features suitable for use by roosting bats within the building (including crevice dwelling species and species which can roost in the open in roof voids), and the suitability of the surrounding habitats for use by foraging and commuting bats. The suitability of each building has been informed by the following categories as presented in **Table 2.2**.

Table 2.2: Suitability Categories for Roosting Habitats in Buildings

Suitability	Description
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).
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.
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).
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).
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.

^aNegligible 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).

^bFor example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

^cEvidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al.*, 2016 and Jansen *et al.*, 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland

Suitability	Description
	(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.

Habitat Assessment for Commuting / Foraging Bats

- 2.3.11 Habitats within and adjacent to the site were assessed for their value and suitability for commuting and foraging bats in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023). Reference has been made to the categories, descriptions and examples presented in **Table 2.3**.

Table 2.3: Consideration of Suitability of Foraging and Commuting Habitat for Bats

Suitability	Potential Flight Paths and Foraging Habitats
None	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 as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	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	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	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).	

Bird Species

- 2.3.12 Bird species observed and heard during the survey were recorded.
- 2.3.13 Habitats throughout the site and in the immediate surrounding area were assessed for their value to roosting, feeding and nesting birds, as indicated by the amount of shelter, feeding value, woody vegetation structure and species diversity of tree and shrub species in the site.

Reptile Species

- 2.3.14 The site and its surroundings were assessed in terms of their suitability for use by reptile species using the important characteristics for reptiles outlined in the draft document *Reptile Mitigation Guidelines* (Natural

England, 2011), and the *Reptile Habitat Management Handbook* (Edgar, et al., 2010). These habitat characteristics are outlined in **Table 2.4**.

Table 2.4: Important Habitat Characteristics for Reptiles

1. Location (in relation to species range)	7. Connectivity to nearby 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

Other Wildlife

- 2.3.15 Evidence of other wildlife observed whilst on site, but for which specific surveys were not made, was recorded and has been included in this report where it is considered of relevance to the planning application.
- 2.3.16 Habitats have been assessed for their suitability for Priority Species identified in the data search results where this is considered relevant to the application.

2.4 Survey and Reporting Limitations

- 2.4.1 No access was possible to the internal areas of the buildings, as these were all locked. It is considered that a reliable assessment of the suitability of each building for use by roosting bats was possible despite this access restriction. No significant survey limitations were experienced.
- 2.4.2 All measurements within this report are approximate only, and have been either measured (using QField) or estimated whilst on site or calculated using mapping software (QGIS) or internet-based mapping services such as MAGiC Maps and Google Earth.

2.5 Evaluation Methods

- 2.5.1 The habitats, vegetation and animal life were evaluated with reference to standard nature conservation criteria as described in *A Nature Conservation Review* (Ratcliffe, 1977) and *Guidelines for the Selection of Biological SSSIs* (Bainbridge, et al., 2013). These are size (extent), diversity, naturalness, rarity, fragility, typicality, recorded history, position in an ecological or geographical unit, potential value and intrinsic appeal.
- 2.5.2 Habitats have been assessed to determine whether they meet those described in *UK Biodiversity Action Plan: Priority Habitat Descriptions* (Maddock, A (ed), 2008); these lists are used to help draw up the statutory lists of Priority Habitats, as required under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006*. Where suitable, the ecological value of the habitats present has been assessed using the terms outlined in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018). Each habitat and individual trees have been assessed to determine whether they are 'irreplaceable habitat', defined in *National Planning Policy Framework* (Department for Levelling Up, Housing and Communities, 2023)² as 'Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland,

²Hereafter the NPPF

ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen’. The further detail presented in *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024* (GOV.UK, 2023) document has also been referred to.

- 2.5.3 Government advice on wildlife, as set out in the NPPF and associated government circulars has been taken into consideration. Legislation relating to protected species, such as those listed under Schedules 1, 5, 6 and 8 of the *Wildlife and Countryside Act 1981* (as amended) and *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*, is referenced where applicable, and any impacts to protected species are evaluated in accordance with current guidance.
- 2.5.4 The presence of any Priority Species, as listed under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006* is noted, and habitats are assessed in terms of their suitability and value for these species. The presence of habitats and / or species listed by the Greater Manchester Biodiversity Action Plans has been taken into account in the evaluation of the site.

3.0 SURVEY RESULTS

3.1 Desktop Study and Data Search

Statutory Designated Sites for Nature Conservation and SSSI Impact Risk Zones

- 3.1.1 The site is not and does not form part of any statutory designated site for nature conservation.
- 3.1.2 The site lies within a Site of Special Scientific Interest (SSSI) Impact Risk Zone for the following statutory designated sites for nature conservation:
 - a. Nob End SSSI, located 6.66 kilometres to the north-west of the site and designated for its nationally rare species rich variant of the Tall Fescue – Colt’s-foot plant community and is of special interest because of its development on an unusual and scientifically interesting substrate; and
 - b. Rochdale Canal SSSI, located 8.05 kilometres to the north-east and designated for its importance to aquatic plants including Floating Water-plantain (*Luronium natans*).
- 3.1.3 The SSSI Impact Risk Zone requires the Local Planning Authority to consult with Natural England on likely risks from the following development categories (Natural England, 2024):
 - a. Air Pollution: Livestock and poultry units with a floorspace greater than 500m², slurry lagoons greater than 4000m².
 - b. Combustion: General combustion processes greater than 50MW energy input. Including: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis / gasification, anaerobic digestion, sewage treatment works, other incineration / combustion.
- 3.1.4 The proposals do not meet any of the development categories which would require further consultation with Natural England on likely risks from the proposed development to the statutory designated sites for nature conservation present in the wider area.

Non-statutory Designated Sites for Nature Conservation

- 3.1.5 The site is not and does not form part of any non-statutory designated site for nature conservation, called ‘Sites of Biological Importance’ or ‘SBIs’ in Greater Manchester.

- 3.1.6 Twelve SBIs are located within a 2 kilometres radius from the centre of the site, and are summarised in **Table 3.1**.

Table 3.1: SBIs Within a 2 Kilometres Radius from the Centre of the Site

SBI Name	Distance and Direction from the Site	Reasons for Designation
Grassland & Heath off Clively Avenue	1.82 kilometres to the west	Heathland (HB1); Bees & Wasps (GSG1)
Kersal Dale	1.43 kilometres to the south-east	Woodland (Wd1); Grassland (Gr2)
Kersal Moor	1 kilometres to the south-east	Heathland (HB1)
Manchester, Bolton & Bury Canal at Agecroft	1.51 kilometres to the south	Open Water (Fw2)
Marsh near Clifton Junction	1.69 kilometres to the west	Grassland (Gr2)
Philips Park & North Wood	1.09 kilometres to the north-west	Ancient Woodland (Wd1); Grassland (Gr2); Ponds and Lodges (Fw2)
Prestwich Clough	0.42 kilometres to the north-west	Ancient Woodland (Wd1)
Rhodes Farm Sewage Works	1.92 kilometres to the west	Open Water (Fw3); Swamp (Fw1); Birds
River Irwell	1.81 kilometres to the south	Birds (Br6)
Grassland & Heath off Clively Avenue	1.82 kilometres to the west	Heathland (HB1); Bees & Wasps (GSG1)
Kersal Dale	1.43 kilometres to the south-east	Woodland (Wd1); Grassland (Gr2)
Kersal Moor	1 kilometre to the south-east	Heathland (HB1)

- 3.1.7 The presence of the SBIs is considered further at **Section 4.2**.

Priority Habitats Inventory

- 3.1.8 The Priority Habitats Inventory³ was checked via MAGiC Maps. No Priority Habitats are identified at the site by the inventory.

Ancient Tree Inventory

- 3.1.9 No ancient or veteran trees are identified at the site by the inventory.

Protected and Notable Species

- 3.1.10 GMLRC hold no records of protected and notable species for the site.
- 3.1.11 Records of protected and notable species for a 2 kilometres radius from the centre of the site are summarised in **Table 3.3**

Table 3.2: Records of Protected Species Within a 2 Kilometres Radius from the Centre of the Site

Taxon Group	Species Name and Designations ¹ and Notes
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³ A spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance.

Amphibians	Great crested newt (<i>Triturus cristatus</i>): EPS, WCAs5, PS and GMBAP. 21 records, dated between 1980 and 2017. The closest record is 1030 metres to the west of the site, and from 2006.
	Common toad (<i>Bufo bufo</i>): PS. 16 records, dated between 2010 and 2022. The closest record is 700 metres to the west of the site, and from 2018.
Birds WCAs1	Kingfisher (<i>Alcedo atthis</i>): WCAs1. 38 records, dated between 2004 and 2022. The closest record is 810 metres to the south-west of the site, and from 2014.
	Little ringed plover (<i>Charadrius dubius</i>): WCAs1. 2 records, dated 2017 and 2021. The closest record is 1625 metres to the west of the site, and from 2021.
	Peregrine (<i>Falco peregrinus</i>): WCAs1. 5 records, dated between 1993 and 2014. The closest record is 710 metres to the north-east of the site, and from 2009.
	Scaup (<i>Aythya marila</i>): WCAs1. 2 records, both from 2007. The closest record is 1950 metres to the west of the site.
Birds PS	Bullfinch (<i>Pyrrhula pyrrhula</i>), cuckoo (<i>Cuculus canorus</i>), dunnock (<i>Prunella modularis</i>), grasshopper warbler (<i>Locustella naevia</i>), herring gull (<i>Larus argentatus</i>), house sparrow (<i>Passer domesticus</i>), lapwing (<i>Vanellus vanellus</i>), lesser redpoll (<i>Carduelis cabaret</i>), lesser spotted woodpecker (<i>Dendrocopos minor</i>), linnet (<i>Linaria cannabina</i>), marsh tit (<i>Poecile palustris</i>), reed bunting (<i>Emberiza schoeniclus</i>), skylark (<i>Alauda arvensis</i>), song thrush (<i>Turdus philomelos</i>) and starling (<i>Sturnus vulgaris</i>).
Invertebrates, PS & GMBAP:	Cinnabar (<i>Tyria jacobaeae</i>), shaded broad-bar (<i>Scotopteryx chenopodiata</i>), small phoenix (<i>Ecliptopera silaceata</i>), white ermine (<i>Spilosoma lubricipeda</i>) and white-letter hairstreak (<i>Satyrium w-album</i>).
Terrestrial Mammals	Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>): EPS, WCAs5, PS and GMBAP. 17 records, dated between 2004 and 2021. The closest record is 470 metres to the west of the site, and from 2021.
	Brown long-eared bat (<i>Plecotus auritus</i>): EPS, WCAs5, PS and GMBAP. 13 records, dated between 1995 and 2014. The closest record is 515 metres to the north-east of the site, and from 2000.
	Bat species (Order <i>Chiroptera</i>): EPS, WCAs5 and GMBAP. 19 records, dated between 2005 and 2021. The closest record is 570 metres to the north-east of the site, and from 2014.
	Common pipistrelle (<i>Pipistrellus pipistrellus</i>): EPS, WCAs5 and GMBAP. 130 records, dated between 1989 and 2023. The closest record is 105 metres to the south of the site, and from 2014.
	Whiskered bat (<i>Myotis mystacinus</i>): EPS, WCAs5 and GMBAP. 5 records, dated between 1998 and 2016. The closest record is 1220 metres to the north-west of the site, and from 2013.
	Myotis species (<i>Myotis</i> sp.): EPS, WCAs5 and GMBAP. 1 record from 2012, located 810 metres to the south-west of the site.
	Natterer's bat (<i>Myotis nattereri</i>): EPS, WCAs5 and GMBAP. 2 records, both from 2016. The closest record is 1440 metres to the north-west of the site.
	Pipistrelle species (<i>Pipistrellus</i> sp.): EPS, WCAs5 and GMBAP. 99 records, dated between 1989 and 2021. The closest record is to the east of the site; an accurate estimation of distance of the record to the site cannot be made due to the locational data being less than a six figure grid reference
	Whiskered/ Brandt's bat (<i>Myotis mystacinus/brandtii</i>): EPS, WCAs5 and GMBAP. 1 record from 2003, located 1385 metres to the north-west of the site.
	Otter (<i>Lutra lutra</i>): WCAs5 and PS. 4 records, dated between 2009 and 2022. The closest record is 1105 metres to the south-west of the site, and from 2020.
	Badger (<i>Meles meles</i>): PBA. 10 records, dated between 2004 and 2021. The closest record is over 0.5 kilometres from the site.
	Hedgehog (<i>Erinaceus europaeus</i>): PS. 36 records, dated between 2014 and 2021. The closest record is 250 metres to the west of the site, and from 2021.

¹Key to Designation Codes:

EPS = European Protected Species under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

WCAs1 = Species receives full protection under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).

WCAs5 = Species receives full protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

PBA = Protection of Badger Act 1992.

PS = Priority Species listed under Section 41 of the NERC Act 2006.

GMBAP = Species listed on the Greater Manchester Biodiversity Action Plan.

- 3.1.12 The presence of these protected and notable species within the wider area has been taken into account throughout this report.

3.2 Vegetation and Habitats

- 3.2.1 The appended **Figure 2** can be referred to for all habitat descriptions. Photographs are appended in **Section 8.1**.

- 3.2.2 The approximately 0.08 hectares site is located within an urban area characterised by housing, gardens and roads. The site supports hard standing and four disused garage buildings with locally abundant colonising herbs and areas of scrub.

- 3.2.3 The northern, southern and southern end of the eastern site boundaries are defined by buildings and fencing, beyond which lies gardens, and a shared yard to the south-east. The northern end of the eastern boundary is not defined by a landscape feature but lies across an asphalt yard associated with Lowther Court. The north-eastern corner of the site adjoins a shared driveway.

- 3.2.4 Refer to **Photos 1 and 2**. The site is chiefly composed of asphalt hard standing with very locally abundant Ivy (*Hedera helix*), occasional Yorkshire-fog (*Holcus lanatus*), locally frequent Dandelion (*Taraxacum officinale* agg.) and rare Creeping Bent (*Agrostis stolonifera*), Nipplewort (*Lapsana communis*) and Annual Meadow-grass (*Poa annua*). Note that the vegetation cover is less than 10%.

- 3.2.5 The hard standing and its associated vegetation is not typical of any NVC community, is classified as J4 Bare ground in Phase 1 Habitat Survey terminology, and is described by the UKHab as u1b6 other developed land with the secondary code 804 car park.

- 3.2.6 The buildings are described in detail in relation to their suitability for use by roosting bats at **Section 3.3**. Building 1 supports abundant Virginia-creeper (*Parthenocissus quinquefolia*) and Building 2 supports very locally frequent Ivy. The buildings are otherwise devoid of vegetation.

- 3.2.7 None of the buildings support a recognisable NVC plant community. The buildings are classified as J3.6 Buildings in Phase 1 Habitat Survey terminology, and are described by the UKHab as u1b5 buildings with the secondary codes 81 ruderal or ephemeral, 519 abandoned, and the secondary code 524 invasive non-native species used for Building 1.

- 3.2.8 Refer to **Photos 3 to 5**. Scattered scrub vegetation is located at the site margins, and is characterised by constant and abundant Bramble (*Rubus fruticosus* agg.) with frequent and locally abundant Sycamore (*Acer pseudoplatanus*), occasional and locally abundant Common Nettle (*Urtica dioica*) and Butterfly-bush (*Buddleja davidii*), occasional Dandelion, locally abundant Great Willowherb (*Epilobium hirsutum*), very locally frequent Hawthorn (*Crataegus monogyna*) and rare Wood Avens (*Geum urbanum*), Herb-Robert (*Geranium robertianum*) and Petty Spurge (*Euphorbia peplus*).

- 3.2.9 The vegetation holds characteristics of a *W24 Rubus fruticosus agg. – Holcus lanatus* underscrub (Rodwell, 1991) of the NVC, but is not typical of this habitat classification due to the relative abundance of Sycamore and Butterfly-bush. The vegetation is classified as A2 Dense continuous scrub in Phase 1 Habitat Survey terminology, and is described by the UKHab as h3h mixed scrub with the secondary code 518 neglected.

Invasive Plant Species

- 3.2.10 As illustrated on **Figure 2**, Virginia-creeper is abundant at Building 1. Virginia-creeper species is listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended); it is an offence to spread or cause its spread in the wild. This is considered further at **Section 4.3**.

3.3 Animal Life

Badger

- 3.3.1 No badger or signs of badger were detected within the site or within the accessible 50 metres around the site. The presence of badger is reasonably discounted.

Bat Species

Daytime Survey: Buildings

- 3.3.2 Refer to **Photos 6 to 9**. Building 1 is a terrace of disused garages which support a single-pitch roof of corrugated metal sheeting, and Buildings 2 to 4 are detached disused garages which support pitched roofs of corrugated metal sheeting. The walls of the buildings are constructed from mortared blockwork and pre-fabricated panels supporting a rough-cast cladding. Plastic fascias are present at the gable ends of Buildings 2 to 4.
- 3.3.3 Gaps suitable for access by bats are present at each building around the metal garage doors and at raised sections of the corrugated metal sheeting. It is considered reasonably unlikely however that these access gaps will lead to any features suitable for use by either crevice dwelling species such as common pipistrelle (*Pipistrellus pipistrellus*) or species known to roost in the open in voids, such as brown long-eared bats (*Plecotus auritus*). The building's construction type is typical with buildings constructed from single-ply materials and are unlikely to support a thermally stable regime preferred by roosting bats. The building will have until recently been regularly disturbed internally, and buildings of this construction type are typically open to the underside of the roof covering.
- 3.3.4 No bats or signs of bats were detected at the external elevations of the buildings.
- 3.3.5 The lack of access to the internal areas of the building is recognised as a survey limitation. It is considered in this instance however that, due to the construction type of the buildings and their location within a wider landscape of low suitability habitat for use by foraging and commuting bats, the buildings are of 'negligible' suitability for use by roosting bats.
- 3.3.6 The presence of roosting bats is reasonably discounted at the site.

Habitat Assessment for Commuting and Foraging Bats

- 3.3.7 The hard standing with small areas of scrub within the site is unlikely to provide an abundance or diversity of invertebrate prey, and the site is considered to be of 'negligible' suitability for use by foraging bats. The

site does not support any habitat which links habitat of value to foraging or roosting bats; the site is of negligible value for commuting bats.

- 3.3.8 The site is located within a wider area characterised by housing, roads and gardens. The garden habitats in the wider area may be suitable for and contribute to the wider foraging area of low numbers of common species of edge-feeding foraging bats, such as common pipistrelle (*Pipistrellus pipistrellus*); the habitats in the wider area are considered to be of 'low' suitability for use by foraging and commuting bats.
- 3.3.9 A diverse range of species and / or a large number of bats are considered unlikely at the site and the surrounding area owing to the absence of habitats such as woodland or tree-lined watercourses within the site.

Bird Species

- 3.3.10 Birds detected in the site in September 2024 are listed in **Table 3.2**.

Table 3.3: Bird Species Detected on 25th September 2024

Scientific Name	Common Name	BOCC Status ¹
<i>Columba palumbus</i>	Wood pigeon	Amber
<i>Erithacus rubecula</i>	Robin	Green
<i>Parus caeruleus</i>	Blue tit	Green
<i>Pica pica</i>	Magpie	Green
<i>Turdus merula</i>	Blackbird	Green
¹ BOCC: Birds of Conservation Concern (Stanbury, et al., 2021). Priority Species are presented in bold.		

- 3.3.11 The scrub at the site margins and the buildings are suitable for use by nesting passerine (i.e. perching) species, including those detected within the site during the survey. This is considered further at **Section 4.4**, below.

Reptiles

- 3.3.12 The habitats within the site provide poor quality habitat for sheltering, basking and hibernating reptiles. The species-poor habitats within the site are reasonably unlikely to support a large population or a variety of invertebrate prey. The site is not adjacent or linked to any areas of favourable habitat for reptile species.
- 3.3.13 The presence of reptiles within the site is reasonably discounted.

Other Wildlife

- 3.3.14 The scrub habitat on the site margins and piles of debris may provide suitable habitat for sheltering hedgehog (*Erinaceus europaeus*), a Priority Species. The site is too small or provide core or important habitat for this species however. The suitability of areas of the site for hedgehog is considered further at **Section 4.4**.

4.0 EVALUATION AND ASSESSMENT

4.1 Introduction and Description of Proposals

- 4.1.1 In accordance with *3 Site Layout Location BA 1 500 A4.pdf* it is proposed to demolish the existing garages and redevelop the site to one pair of semi-detached houses with associated gardens.
- 4.1.2 **Section 4.2** provides an assessment of any impacts of the proposed development on the designated sites for nature conservation present in the wider area. The ecological value of habitats within the site is evaluated at **Section 4.3**, and protected and notable species are considered at **Section 4.4**.

4.2 Designated Sites for Nature Conservation

- 4.2.1 It is considered that the site is sufficiently small and distant from all designated sites for nature conservation that the proposed development will have no adverse direct or indirect effect upon them or their features of interest.

4.3 Vegetation and Habitats

- 4.3.1 Only common and widespread plant species were found. None of the habitats present are representative of semi-natural habitat. The NVC communities present are typical of the geographical area and conditions present. No Priority Habitat or irreplaceable habitat is present.
- 4.3.2 None of the habitats are considered to hold any value in terms of their importance in a geographical context⁴.
- 4.3.3 Recommendations relating to the protection of habitats at the site margins (but beyond the site boundary) during the proposed works are presented at **Section 5.2**. the creation of habitats and features for biodiversity as part of any landscape planting proposed at the site development are recommended at **Section 5.3**.
- 4.3.4 Virginia-creeper, an invasive species listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) has been detected within the site. It is considered that the proposals present an opportunity for the eradication of this species as part of the proposed development. Further guidance is presented at **Section 5.2**

4.4 Protected Species and Other Wildlife

- 4.4.1 The presence of roosting bats is reasonably discounted at the site. Habitats adjacent to the site are suitable for foraging and commuting bats, and the habitats within the site are suitable for use by sheltering and foraging hedgehog, a Priority Species. The scrub and buildings are suitable for use by nesting birds; all wild birds are protected while they are nesting under the *Wildlife and Countryside Act 1981* (as amended).

⁴ Using the terms presented at Section 4.7 of *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018), i.e. International and European, National, Regional, Local Authority-wide area, River Basin District, Estuarine system / Coastal cell or Local. The term 'site' value is additionally used to highlight ecological features considered to be of importance in the context of the wider site habitats, but which are of negligible value in the context of the local area.

4.4.2 The proposals have the potential to disturb habitats for foraging and commuting bats during the construction and operational phases via the inappropriate use of artificial lighting, and have the potential to disturb and injure hedgehog and nesting birds during the site clearance and construction phases of the proposed development.

4.4.3 Measures for the suitable use of artificial lighting at the construction and operational phases of the proposals, and for the protection of nesting birds and other wildlife including hedgehog, are presented at **Section 5.2**. The proposals present an opportunity to create habitats suitable for use by foraging bats, nesting birds and foraging hedgehog (in the form of garden habitat). Recommendations relating to habitat creation for roosting bats and nesting birds, and to ensure the proposed habitats are accessible to hedgehog, are presented at **Section 5.3**.

4.5 Consideration of Statutory Biodiversity Net Gain (BNG)

4.5.1 The development, as proposed, will not impact a Priority Habitat or an irreplaceable habitat. The proposals will however impact a 148m² area of scrub, and the proposals are not a self-build development.

4.5.2 It is therefore considered that the *de minimis* and self-build exemptions to BNG to not apply at the site. A separate BNG assessment will be required as part of a planning application at the site.

5.0 RECOMMENDATIONS AND ECOLOGICAL ENHANCEMENT

5.1 Introduction

5.1.1 These recommendations aim to ensure that the development is implemented in accordance with relevant wildlife legislation, Natural England guidance, local planning policy and best practice.

5.1.2 The recommendations aim to ensure the proposals comply with Chapter 15, paragraph 186(d) of the NPPF which states:

'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'.

5.1.3 Where possible, opportunities to enhance the ecological interest and habitat connectivity and seek biodiversity gain through appropriate landscape planting and habitat creation have been identified.

5.1.4 All recommendations are appropriate to the geographical area, the habitats in the wider area, the wildlife present in the local area (and likely to use the site post-construction) and take into consideration the end use of the site as a residential development.

5.2 Protection of Existing Vegetation and Wildlife

Protection of Boundary Vegetation

5.2.1 During the construction phase, temporary protective demarcation fencing should be used to protect vegetation beyond the site boundary. The fencing must extend outside the canopy of the retained trees and must remain in position until all areas have been developed to ensure protection is provided throughout the construction phase.

- 5.2.2 The fencing will be in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations (BSI, 2012).

Invasive Plant Species

- 5.2.3 It is an offence under the *Wildlife and Countryside Act 1981* (as amended) to cause the spread of Virginia-creeper in the wild. It is recommended that the plants are grubbed out by the roots during site clearance and disposed of either by burying on site or removal to a suitable tip.

Lighting

- 5.2.4 Paragraph 191(c) in Chapter 15 (conserving and enhancing the natural environment) of the NPPF states that development should:

'limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.'

- 5.2.5 Any lighting to be used at the site during construction should be directional and screened where possible.
- 5.2.6 The lighting scheme to be implemented at the developed site must involve the use of appropriate products and screening, where necessary, to ensure no excessive artificial lighting shines over the bat and bird boxes and any landscape planting, as lighting overspill may deter use by wildlife such as foraging bats.
- 5.2.7 The lighting scheme will be designed with reference to current guidance, namely:
- Guidance Note 08/23: Bats and Artificial Lighting at Night* (Institution of Lighting Professionals & Bat Conservation Trust, 2023); and
 - Bats and lighting: Overview of current evidence and mitigation guidance* (Stone, 2014).

Protection of Nesting Birds

- 5.2.8 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are breeding. Any works such as vegetation clearance that will affect habitats suitable for use by nesting birds should be scheduled to commence outside the bird nesting season. Commencement of works in the nesting season must be informed by a pre-works nesting bird survey, carried out by a suitably experienced ecologist. The bird breeding season typically extends between March to August inclusive.
- 5.2.9 If breeding birds are detected the ecologist will issue guidance in relation to the protection of the nesting birds in conjunction with the scheduled works. This may involve cordoning off an area of the site until the young birds have fledged.

Protection of Hedgehog and Other Wildlife

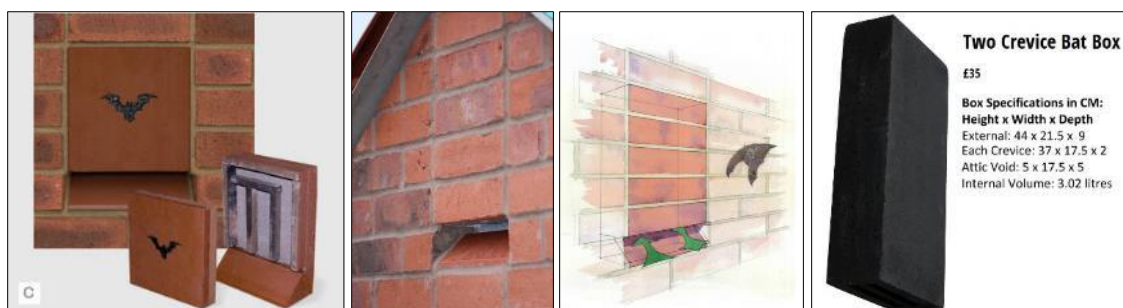
- 5.2.10 It is recommended that the following Reasonable Avoidance Measures (RAMs) are applied during the construction phase of the proposed development.
- All site personnel must be made aware of this RAMs, and the RAMs should be made part of the site induction for all personnel involved in soil strip, ground clearance, or other relevant activities;
 - Prior to any soil strip, vegetation will be strimmed to a height of no less than 0.15 metres and all arisings removed;

- c. Litter, debris and other fly tipped material will be carefully removed as they may be used by sheltering hedgehogs;
- d. During construction, any holes, trenches or other pits which hedgehog (or other wildlife) could fall into will be covered overnight, or have sloped banks or ramps to allow escape; and
- e. If any wildlife (such as hedgehog) is detected it must be carefully picked up by an operative wearing clean gloves, placed in a clean bucket, and moved to an area of suitable habitat beyond the construction area.

5.3 Ecological Enhancements to Include within the Site Design

Enhancing Habitats for Roosting Bats

- 5.3.1 It is recommended that the development incorporates the installation of one bat access panel at the new building.
- 5.3.2 The bat access panel should be sited at least 4 metres above ground level, ideally facing or close to areas of landscape planting or existing linear features. The access panel should not be positioned over windows or doorways where bat droppings may become a nuisance. Once the development layout has been finalised, an ecologist should advise on appropriate positions for the bat access panel. Suitable bat access panels are available from NHBS Ecology (www.nhbs.com), Wild Care (www.wildcare.co.uk) and / or Greenwood's Ecohabitats (www.greenwoodsecohabitats.co.uk) and are presented at **Insert 1**.



Insert 1: Examples of integrated bat access panels and an externally mounted box⁵

Enhancing Habitats for Nesting Birds

- 5.3.3 House sparrows are associated with suburban areas. Monitoring suggests a severe decline in the UK house sparrow population, estimated as dropping by 71 per cent between 1977 and 2008 with large falls in both rural and urban populations (RSPB, 2023).
- 5.3.4 The installation of one house sparrow terrace nest box is recommended at the proposed new housing. The box will not be positioned over windows or doorways where droppings may become a nuisance. RSPB advice states that boxes should ideally be sited facing north to east, to avoid exposure to direct sunlight, which may cause overheating of chicks in the nest.

⁵ Left to right: IBstock Enclosed Bat Box 'c' (left); Habibat Bat Access Panels (centre left and centre right) and Greenwood's Ecohabitats' two crevice bat box (right). Products with a brick face are illustrated, however the Habibat bat access panels can be supplied unfaced to enable the addition of matching material.

5.3.5 Such bird boxes are available from the NHBS (www.nhbs.com) or Wild Care (www.wildcare.co.uk). ERAP (Consultant Ecologists) Ltd will advise on the siting of bird boxes.

5.3.6 An example of a suitable house sparrow bird box is given below at **Insert 2**.



Insert 2: Schwegler 1SP House Sparrow Nesting Terrace

Maintenance of Habitat Connectivity Throughout the Developed Site

5.3.7 To ensure habitat connectivity is maintained as part of the development proposals, gaps within the proposed fencing to allow access by other wildlife (including hedgehog) should be incorporated across the site; example accesses are presented at **Insert 3**, as reproduced from *Hedgehogs and Development* (British Hedgehog Preservation Society / PTES, 2019). It is recommended that appropriate wildlife gaps (at least 0.1 metre tall and 0.15 metre wide) are installed at suitable intervals around the base of the proposed fencing.



Insert 3: Showing wildlife access gap within fencing

Landscape Planting

5.3.8 It is recommended that, if landscape planting is proposed at the residential site, it is composed from native species and species known to be of value for the attraction of wildlife.

5.3.9 It is recommended that trees which support blossom and fruit which will attract insects are incorporated into the landscape planting. Suitable species are presented in **Table 5.1**.

Table 5.1: Suitable Native Species for Tree and Shrub Planting

Scientific Name	Common Name	Scientific Name	Common Name
<i>Acer campestre</i>	Field Maple	<i>Prunus spinosa</i>	Blackthorn
<i>Corylus avellana</i>	Hazel	<i>Rosa arvensis</i>	Field Rose
<i>Crataegus monogyna</i>	Hawthorn	<i>Rosa canina</i>	Dog-rose
<i>Ilex aquifolium</i>	Holly	<i>Sambucus nigra</i>	Elder
<i>Malus sylvestris</i>	Crab Apple	<i>Sorbus aucuparia</i>	Rowan
<i>Prunus avium</i>	Wild Cherry	<i>Ulmus glabra</i>	Wych Elm
<i>Prunus padus</i>	Bird Cherry	<i>Viburnum opulus</i>	Gelder Rose

- 5.3.10 The understorey and ground cover planting design should be prepared to optimise the attraction of invertebrates such as feeding bumblebees and butterflies. Where possible the use of native species should be maximised but where necessary non-native species known to be attractive to invertebrates should be used.
- 5.3.11 Planting schemes that include flowering species such as *Viburnum*, *Ceanothus*, *Hebe*, *Lavandula*, *Lonicera*, *Potentilla*, *Rosmarinus* and *Vinca* can maximise opportunities for feeding invertebrates and for the attraction of foraging bats and birds.
- 5.3.12 For further plants suitable for the attraction of pollinators please refer to the *Perfect for Pollinators Plant List* (Royal Horticultural Society, 2012). It is recommended that the selection of plant species at the site ensures that a variety of flowering species are available throughout the year.
- 5.3.13 Other appropriate plants to include within the landscaping scheme include night-scented flowers which will attract moth species and bats; a list of suggested species is presented at **Table 5.2**.

Table 5.2: Recommended Plants for Use in Gardens to Attract Bats⁶

Flowers for Borders	
Aubretia species (<i>Aubretia</i> sp.)	Michaelmas Daisy (<i>Aster</i> sp.)
Candytuft (<i>Iberis sempervirens</i>)	Night-scented Stock (<i>Matthiola longipetala</i>)
Cherry pie (<i>Heliotropium arborescens</i>)	Oxeye Daisy (<i>Leucanthemum vulgare</i>)
Corncockle (<i>Agrostemma githago</i>)	Fiddleneck (<i>Phacelia tanacetifolia</i>)
Cornflower (<i>Centaurea cyanus</i>)	Poached Egg Plant (<i>Limnanthes douglasii</i>)
Corn Marigold (<i>Glebionis segetum</i>)	Primrose sp. (<i>Primula</i> sp.)
Corn Poppy (<i>Papaver rhoeas</i>)	Red Campion (<i>Silene dioica</i>)
Coneflower species (<i>Echinacea</i> sp.)	Common Valerian (<i>Valeriana officinalis</i>)
Bluebell (<i>Hyacinthoides non-scripta</i>)	Scabious species (<i>Scabiosa</i> sp.)
Evening primrose (<i>Oenothera biennis</i>)	St John's Wort species (<i>Hypericum</i> sp.)
Honesty (<i>Lunaria annua</i>)	Sweet William (<i>Dianthus barbatus</i>)
Ice plant 'Pink lady' (<i>Delosperma cooperi</i>)	Tobacco Plant species (<i>Nicotiana</i> sp.)
Knapweed species (<i>Centaurea</i> sp.)	Vervain species (<i>Verbena</i> sp.)
Mallow species (<i>Malva</i> sp.)	Wallflower species (<i>Erysimum</i> sp.)
Mexican aster (<i>Cosmos bipinnatus</i>)	
Herbs	
Wild Angelica (<i>Angelica sylvestris</i>)	Hyssop (<i>Hyssopus officinalis</i>)
Bergamot (<i>Monarda didyma</i>)	Lavender species (<i>Lavandula</i> sp.)
Borage (<i>Borago officinalis</i>)	Lemon Balm (<i>Melissa officinalis</i>)
Coriander (<i>Coriandrum sativum</i>)	Marjoram (<i>Origanum majorana</i>)
English Marigold (<i>Calendula officinalis</i>)	Rosemary (<i>Rosmarinus officinalis</i>)
Fennel (<i>Foeniculum vulgare</i>)	Sweet Cicely (<i>Myrrhis odorata</i>)
Feverfew (<i>Tanacetum parthenium</i>)	Thyme species (<i>Thymus</i> sp.)

6.0 CONCLUSION

- 6.1 This ecological assessment has demonstrated that the proposed redevelopment at the site is feasible and acceptable in accordance with ecological considerations and the NPPF.
- 6.2 It is possible to implement reasonable actions for the protection and long-term conservation of fauna such as nesting birds and commuting / foraging bats associated with the site. Measures to conserve the habitat connectivity through the site are entirely feasible.
- 6.3 Redevelopment at the site will provide an opportunity to secure ecological enhancement for fauna typically associated with residential areas such as breeding birds and roosting bats.

⁶ Extracted from *Encouraging bats, A guide for bat-friendly gardening and living* (Bat Conservation Trust, 2016).

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8.0 APPENDIX: PHOTOGRAPHS AND FIGURES

8.1 Photographs



Photo 1: Hard standing



Photo 2: Vegetation colonising hard standing



Photo 3: Scrub at site margins



Photo 4: Scrub at site margins



Photo 5: Scrub at site margins



Photo 6: Building 1



Photo 7: Building 2



Photo 8: Building 3

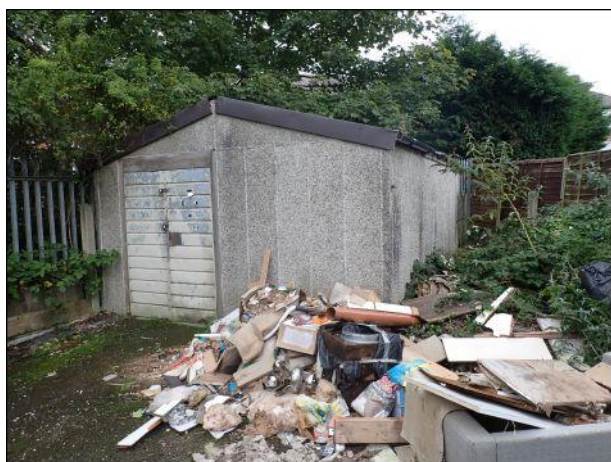


Photo 9: Building 4

8.2 Figures

Figure 1: Aerial Image of the Site and its Surroundings

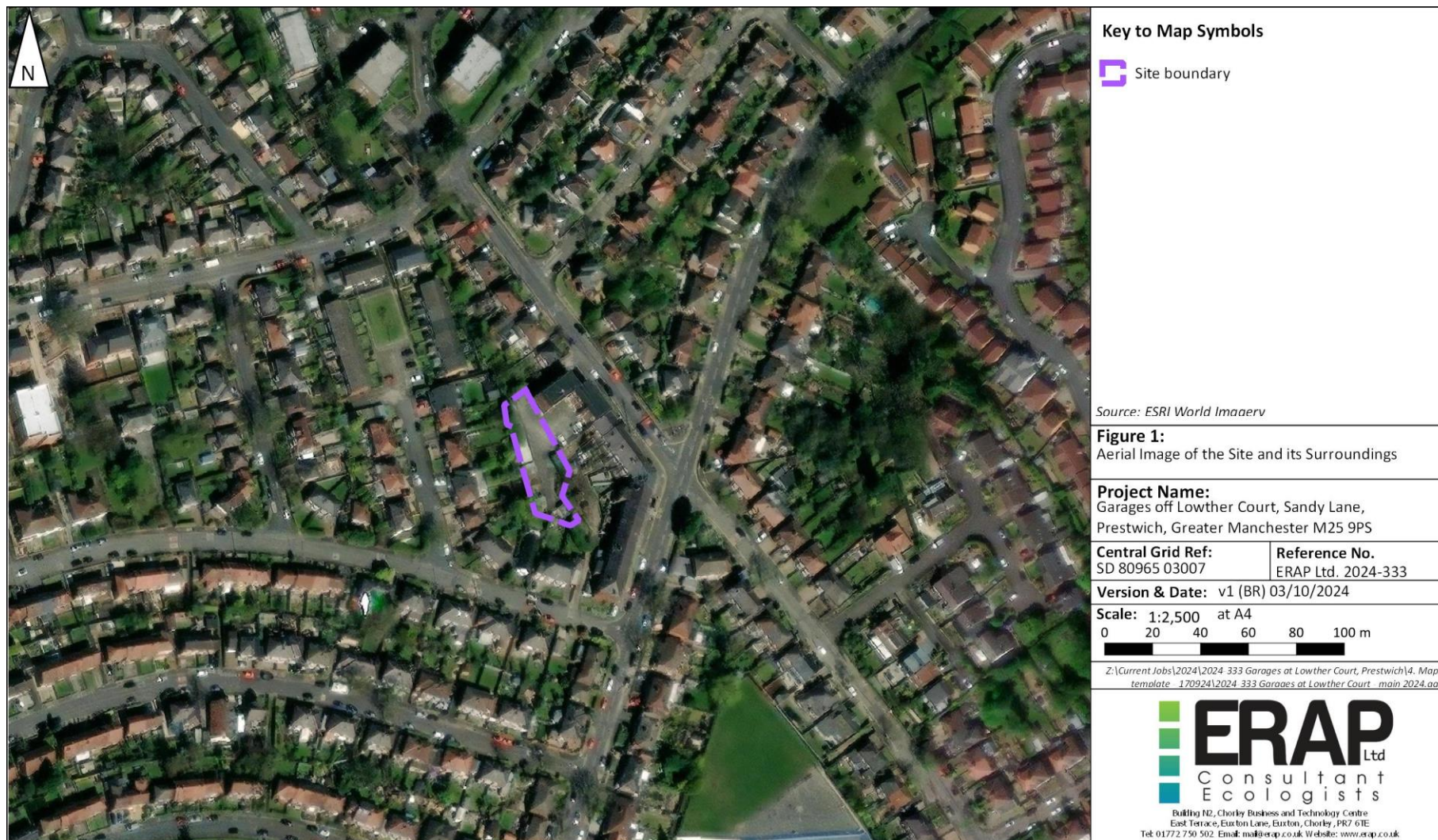


Figure 2: Phase 1 Habitat and Vegetation Map

