

Upper Brook Street Masterplan Williams / Alliance UBS Limited

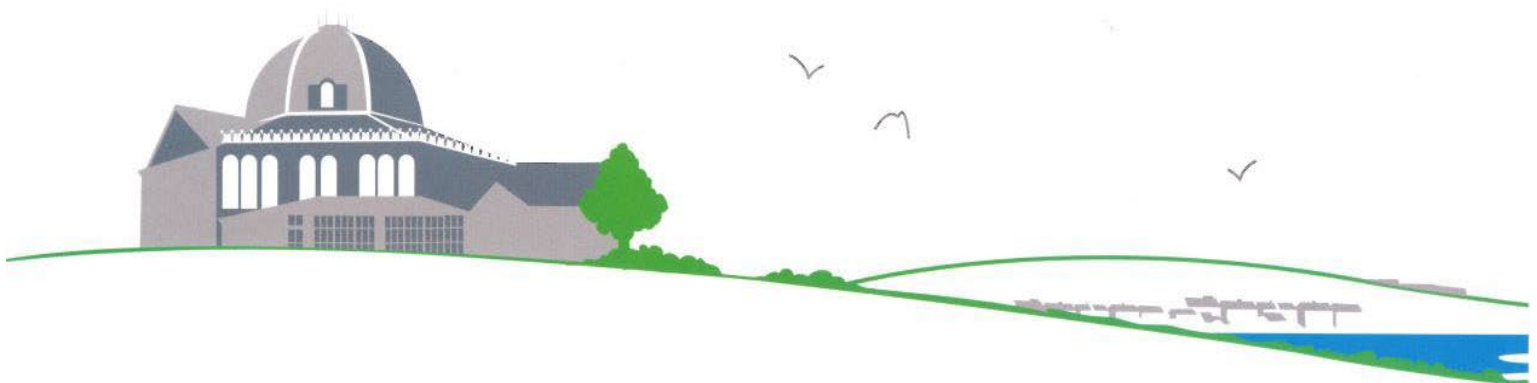
Extended Phase 1 Habitat Survey and Preliminary Roost Assessment



ALLIANCE UBS LIMITED

UPPER BROOK STREET, MANCHESTER

EXTENDED PHASE 1 HABITAT SURVEY AND
PRELIMINARY ROOST ASSESSMENT



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**EXTENDED PHASE 1 HABITAT SURVEY AND PRELIMINARY
ROOST ASSESSMENT**

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This project has been undertaken in accordance with PAA policies and procedures on quality assurance.

Signed: 

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1. INTRODUCTION

- 1.1 Penny Anderson Associates Ltd (PAA) was commissioned in May 2023 to undertake an extended Phase 1 habitat survey and Preliminary Roost Assessment (PRA) for bats on an area of land at Upper Brook Street, Manchester. The site is centred on grid reference SJ 84669708.
- 1.2 The report has been requested to accompany a planning application for re-development of the site.

Site Description

- 1.3 Upper Brook Street (hereafter referred to as the 'site') is an urban city centre site comprising concrete and hardstanding with small patches of poor semi-improved grass, introduced shrub, and scattered trees. Five disused buildings are also present on site. The wider surrounding land use is primarily urban development comprising roads and residential buildings..
- 1.4 The site is bound by Grosvenor Street to the north with the Mancunian Way also in close proximity. Kincardine Street follows the eastern site boundary, with a small public park, Gartside Gardens, also present. To the south and west is the busy Upper Brook Street, whilst a number of Manchester University Campus buildings are present to the west. The site predominantly consists of an area of hardstanding that has previously been used as a surface car park for the buildings on site.

Legislative Context

- 1.5 A range of international and national legislation has been established in the UK to protect important nature conservation sites and priority species. At the international level, European Union (EU) Directives require individual member states to implement their conservation provisions nationally for the benefit of Europe as a whole. These Directives have been transposed into UK law by the Conservation of Habitats and Species Regulations 2017 (amended).
- 1.6 Other international conventions include: the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979), which requires the maintenance of populations of wild flora and fauna, giving particular protection to endangered and vulnerable species; and the Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979), which requires the protection of migratory species throughout their entire range. The above conventions are implemented in England and Wales via the Wildlife and Countryside Act (WCA), 1981 (as amended) and Countryside and Rights of Way (CROW) Act 2000. This legislation also protects important habitats and sites such as Sites of Special Scientific Interest (SSSI).
- 1.7 At the national level, Biodiversity 2020 (Defra 2011) forms England's national biodiversity strategy. Building on the Natural Environment White Paper published in 2011, this provides a means of delivering the UK's commitments to maintaining and protecting biodiversity. Under Biodiversity 2020, the Priority Species and Habitats referred to are those of 'Principal Importance' for the conservation of biodiversity in England as listed on Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006 (amended).
- 1.8 More recently, the Environment Act 2021 further supports this commitment to, and strengthens the legislation in respect of, maintaining and also enhancing biodiversity in England, and Part 6 Nature and Biodiversity includes the following key areas:
 - Strengthened biodiversity duty for public authorities in England;
 - Biodiversity net gain to ensure developments deliver at least 10% increase in biodiversity;
 - Local Nature Recovery Strategies to support a Nature Recovery Network;

- Duty upon Local Authorities to consult on street tree felling;
- Strengthen woodland protection enforcement measures; and
- Protected Site Strategies and Species Conservation Strategies to support the design and delivery of strategic approaches to deliver better outcomes for nature.

1.9 Finally, the National Planning Policy Framework (NPPF 2021) provides guidance for local authorities on the content of Local Plans and is a material consideration in determining planning applications. Briefly, with an overall focus on sustainable development, the NPPF states that developments should aim to engender positive outcomes for habitats and biodiversity, with a particular focus on the maintenance and creation of ecological networks.

1.10 The NPPF identifies the following principals that should be applied by local planning authorities when determining planning applications:

- a. If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b. Development on land within or outside a SSSI, 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 SSSI;
- c. Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons, and a suitable compensation strategy exists; and
- d. Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

1.11 The NPPF states that the planning system should contribute to and enhance the natural environment through a range of actions, including:

- Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;
- Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services; and
- Minimising impacts on biodiversity and providing net gains for biodiversity including establishing coherent ecological networks that are more resilient to current and future pressures.

1.12 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.

Bats and the Law

- 1.13 A summary of the protected species legislation relevant to bats can be found in Appendix 1.

Invasive Species

- 1.14 Certain invasive non-native species (INNS) that have been introduced into the UK are regarded as being a threat to native biodiversity. Legislative measures have, therefore, been put in place to prevent the spread of these invasive species in the wild.
- 1.15 Under section 14 of the WCA, 1981 (as amended), it is illegal to introduce plants listed under Part II of Schedule 9 of the WCA into the wild or sell these species. Offences include causing the spread of viable plant material or neglecting to contain or appropriately manage non-native species.
- 1.16 Commonly introduced Schedule 9 species include non-native cotoneaster species, specifically, small-leaved cotoneaster¹ (*Cotoneaster microphylla*) and wall cotoneaster (*C. horizontalis*), Himalayan balsam (*Impatiens glandulifera*) and Japanese knotweed (*Reynoutria japonica*).

Aims of Report

- 1.17 The aim of this report is to provide an up-to-date assessment of the ecological features on the site, identify any ecological constraints relevant to the proposed development and make recommendations on further survey work and/or mitigation and compensation where considered necessary. The results of this survey will be used to inform a Biodiversity Net Gain assessment which will be reported separately.

¹ Botanical species names follow Stace (2019).

2. METHODS

Desk Study

- 2.1 A request for details of protected and notable species and locally designated sites within 2km of the centre of the site was made to Greater Manchester Ecology Unit (GMEU) with data returned in June 2023. Additionally, the Multi-Agency Geographic Information for the Countryside (MAGIC²) website was consulted for details of statutory designated sites and Priority Habitats within a 2km search area from the centre of the site, and protected species licences within a 1km³ search area.
- 2.2 It is important to note that the desk study results provide an indication of the species present in and around the site and do not confirm current presence or absence of any particular species. Protected species are often under-recorded in county wildlife databases.

Extended Phase 1 Habitat Survey

- 2.3 The survey was conducted on 5th June 2023 by Ecologist Stephen Griffith and Senior Ecologist Rob Lamb (ACIEEM⁴) under warm, dry conditions with good visibility.
- 2.4 The Phase 1 habitat survey was carried out by experienced surveyors and the survey methodology was based on guidance set out in the *Handbook for Phase 1 Habitat Survey* (Joint Nature Conservation Committee⁵ 2010). The broad habitat types were mapped, with each habitat type coded according to the standard JNCC Phase 1 habitat survey procedure.
- 2.5 In addition, plant species lists were collated for habitats across the area delineated for the survey. Each plant species was assigned abundance codes within each habitat. This was done using the 'DAFOR' scale (where: D = dominant; A = abundant; F = frequent; O = occasional; R = rare), which provides an indication of the relative abundance of each plant species present within a particular habitat. The plant species present within the site are listed in Appendix 2, which shows both common and scientific names according to Stace (2019). Common names only are referred to in the text.
- 2.6 The survey was 'extended' following the approach set out in the Institute of Environmental Assessment (1995) and CIEEM (2017) to include an assessment of the potential for/presence of protected species.

Preliminary Roost Assessment

- 2.7 Built structures and trees within the site were subject to detailed inspection to assess potential to support roosting bats. This was completed by Rob Lamb and included taking detailed notes and photographs (Appendix 3) following standard methodologies based on best practice survey guidance (Collins 2016).

² <https://magic.defra.gov.uk/MagicMap.aspx> (last accessed 20/06/2023)

³ Licence search radius limited to 1km due to large number of bat licence records in Manchester.

⁴ Associate member of the Chartered Institute of Ecology and Environmental Management

⁵ JNCC

- 2.8 Structures were inspected externally and internally where possible using close-focussing binoculars and a high-powered torch to search for potential roost features (PRF) that could be used by bats, such as small holes and crevices in soffits or beneath roof coverings, and also potential access points for bats to enter/exit internal areas, such as cavity walls. A search was also made for any evidence of bat presence, such as accumulations of droppings and feeding remains or sightings of the animals themselves.
- 2.9 Trees of sufficient age/size were inspected from ground level and the types and locations of any features that appeared to provide sufficient shelter for bats were recorded, for example woodpecker holes, knot holes, crevices in deadwood or beneath loose bark and other natural fissures and cavities. Any potential indication of bat presence that could be seen was also recorded, for example bat droppings beneath PRF or scratch marks at the entrance.
- 2.10 Each PRF was categorised either as Low, Moderate or High potential for roosting bats and, using this data, each tree/structure as a whole was assigned to one of the same categories based on its most suitable feature, or Negligible where no suitable features were present.
- 2.11 The habitats within the site and immediately adjacent areas were also considered for their general suitability for commuting and foraging bats in order to place the site in the context of its surroundings, as this can have a bearing on the likelihood of a roost being present.
- 2.12 The assessment of suitability was based on the broad criteria outlined in Tables 1 and 2 (Collins 2016), combined with the professional judgement and experience of the surveyor in recognising suitable habitat features and field signs of bats. The Bat Tree Habitat Key (Andrews and Gardener 2016) was also used for reference on features in trees. Interpretation of these data also included reference to government guidance⁶.

Table 1 Bat Roost Assessment Criteria

Suitability	Description of Roosting Habitats
Negligible	No features likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically, but does 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. A tree of sufficient size to contain PRF but none seen from the ground or only those with very limited suitability.
Moderate	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 type of high conservation significance (i.e. suitable for day roosting but unsuitable for maternity or hibernation roost.)
High	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. (i.e. suitable for maternity and/or hibernation roost.)

⁶ <https://www.gov.uk/guidance/bats-advice-for-making-planning-decisions>.

Suitability	Description of Roosting Habitats
Confirmed Roost	A structure or tree with evidence of bat presence, i.e. droppings, feeding remains, audible bat calls heard during daytime survey or sightings of the animals themselves, existing (reliable) record of bats roosting at the location.

Table 2 Bat Habitat Suitability Assessment Criteria

Suitability	Description of Commuting / Foraging Habitats
Negligible	No habitat features likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats 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 commuting 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 commuting bats 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 known roosts.

Limitations

- 2.13 The site was fully accessible at the time of the survey and carried out at an appropriate time of year for this type of survey, and there were no significant constraints. All parts of the buildings were fully accessible for the PRA.

3. RESULTS

Desk Study

- 3.1 The desk study utilised data obtained from GMEU in June 2023, searching within a 2km radius of the site centre. The MAGIC search engine was also used to obtain additional data on European Protected Species (EPS) licences, as well as designated and non-designated sites and notable habitats.

Desk Study

Statutory Protected Sites

European Sites

- 3.2 European protected sites include Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar wetland sites, possible SAC, potential SPA and proposed Ramsar sites.
- 3.3 No SAC, SPA, or Ramsar sites were identified within the 2km search area.

Sites of Special Scientific Interest

- 3.4 SSSI represent a selection of this country's best wildlife and geological sites and cover approximately 7% of the terrestrial area of the country (with over 4,000 separate sites in England).
- 3.5 No SSSI were returned from within the 2km search area for UK statutory sites.
- 3.6 The site does, however, fall within the Impact Risk Zones⁷ (IRZ) of:
- Hollinwood Branch Canal; and
 - Rochdale Canal.

National and Local Nature Reserves

- 3.7 No National or Local Nature Reserves were returned from within the 2km search area for UK statutory sites.

Non-Statutory Protected Sites

- 3.8 Two Sites of Biological Importance (SBI) were identified within the 2km search area:
- Ashton Canal (West) (1.0km NE of site boundary): The canal is an important wildlife corridor linking Ashton with Manchester via Openshaw and provides an important accessible natural greenspace in an otherwise urban landscape. Both floating water-plantain (*Luronium natans*) and grasswack pondweed (*Potamogeton compressus*) are UK Priority Biodiversity Species and have been recorded here; and
 - Rochdale Canal: Stott's Lane to Ducie Street Basin (1.1km NE of site boundary) Statutory designations such as the Rochdale Canal SAC and the Rochdale Canal SSSI apply to the

⁷ The Impact Risk Zones are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Oldham and Rochdale sections only. Floating, emergent and marginal flora occurs along the Manchester section of the canal. This includes occasional emergent stands of bulrush (*Typha latifolia*), common reed (*Phragmites australis*), yellow iris (*Iris pseudacorus*) and purple-loosestrife (*Lythrum salicaria*). Marginal species also include occasional hard rush (*Juncus inflexus*), great willowherb (*Epilobium hirsutum*), hoary willowherb (*Epilobium parviflorum*), gypsywort (*Lycopus europaeus*) and water forget-me-not (*Myosotis scorpioides*). A small harbour connecting the Ashton canal and Rochdale canal, named the New Islington Marina, supports large shoals of perch and roach of various age classes, indicating this is now an important nursery for coarse fish. Water vole (*Arvicola amphibius*) and white-clawed crayfish (*Austropotamobius pallipes*) are known to be present in other sections of the canal.

Priority Habitats

- 3.9 Priority Habitats are those of 'Principal Importance' for the conservation of biodiversity in England listed on Section 41 (England) of the NERC Act 2006.
- 3.10 Thirty-six records of deciduous woodland Priority Habitats were found within the 2km search area, in three patches located to the south and north-east of the site.
- 3.11 Nineteen records of open mosaic Priority Habitats were also found within the 2km search area, the closest of these records is located 670m north-west of the site.

Protected and Notable Species

Granted European Protected Species Licence Application

- 3.12 Eight granted EPS license applications for bats were returned from within the 1km search area. These are listed in Table 3.

Table 3 Bat Licence Records

Species on the license (common name)	Scientific Name	License to Allow	Date License Granted	Date License Expires/ Expired	Approximate distance and direction from site boundary
Common pipistrelle Soprano pipistrelle	<i>Pipistrellus pipistrellus</i> <i>Pipistrellus pygmaeus</i>	Destruction of a resting place	2014	2017	800m N
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Destruction of a resting place	2015	2016	515m S
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Destruction of a resting place	2016	2016	515m S

Species on the license (common name)	Scientific Name	License to Allow	Date License Granted	Date License Expires/ Expired	Approximate distance and direction from site boundary
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Damage and destruction of a resting place	2019	2021	500 NE
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Destruction of a resting place	2021	2022	495m NE
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Damage of a resting place	2014	2015	285m E
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Damage of a resting place	2015	2015	285m E
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Unknown	2013	2016	890m NW

Amphibians

- 3.13 No granted EPS applications were returned for great crested newt (*Triturus cristatus*, GCN) within the 1km search area.
- 3.14 No records of GCN were returned from the 2km data search.
- 3.15 An Ordnance Survey map search revealed no suitable ponds for amphibians within 500m of the site.

Badger

- 3.16 Seventeen badger (*Meles meles*) records were returned from the 2km data search, dating from 2011 to 2014. Due to the confidential nature of this information, exact locations cannot be disclosed. The closest record located approximately 640m from site.

Otter

- 3.17 One record for otter (*Lutra lutra*) was returned from the 2km data search. This record dates from 2022 and is located closely to Merchant's bridge in Castlefield, 1.5km west of the site.

Water Vole

- 3.18 No records of water vole were returned from the 2km data search.

Bats

- 3.19 Two hundred and twenty-six bat records were returned from the 2km data search, dating from 2000 to 2019, comprising roosts and sightings. These are summarised in Table 4. None of the records are located on site.

Table 4 Bat Records

Common Name	Scientific Name	No. of Records	Closest Record (approximate distance and direction from site boundary)
Brown long-eared bat	<i>Plecotus auritus</i>	2	1.5km S
Daubenton's bat	<i>Myotis daubentonii</i>	2	1.8km NW
Noctule	<i>Nyctalus noctula</i>	2	700m S
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	156	896m NW
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	8	1km NW
Unidentified pipistrelle species	<i>Pipistrellus sp.</i>	50	225m N
Unidentified bat species	<i>Chiroptera</i>	3	1.22km NW
Unidentified <i>Myotis</i> species	<i>Myotis sp.</i>	1	677m NE

Other Mammals

- 3.20 Thirty-five records of hedgehog (*Erinaceus europaeus*) were returned from the 2km data search, the closest of these records falls within the site boundary.

Birds

- 3.21 All nesting birds, their nests and eggs are protected from harm under the WCA, 1981 (as amended). In addition, species listed under Schedule 1 of the WCA are further protected against disturbance when breeding.
- 3.22 A number of bird species are listed under Section 41 in the NERC Act (2006, amended) as species 'of principal importance for the purpose of conserving biodiversity'. These species are often known as the 'S41 species'. There is a legal requirement for a public body to 'have regard

to' these species in relation to maintaining biodiversity. The S41 list overlaps somewhat with the UK Biodiversity Action Plan (BAP) species, with national or local targets to maintain and enhance populations.

- 3.23 Furthermore, the Birds of Conservation Concern (BoCC) report lists those bird species that are classed as being of High (Red listed) and Medium (Amber Listed) conservation concern based on population monitoring (Stanbury *et al.* 2021). This Red and Amber classification helps guide the assessment of bird species of conservation interest on or near to a site, alongside legislative and policy requirements.
- 3.24 A small number of Schedule 1 species, including black redstart (*Phoenicurus ochruros*), hobby (*Falco Subbuteo*), kingfisher (*Alcedo atthis*), little-ringed plover (*Charadrius dubius*), and peregrine (*Falco peregrinus*) were recorded within the 2km search area; these records are classed as confidential. All other protected and notable bird species records within the 2km search area are listed in Table 5 along with their conservation status. None of the records are from the site.

Table 5 Bird Species of Principal Importance

Common Name	Scientific Name	Amber ⁸ Listed	Red Listed	Section 41 Priority Species ⁹
Black-headed gull	<i>Chroicocephalus ridibundus</i>	x		
Bullfinch	<i>Pyrrhula pyrrhula</i>	x		x
Common gull	<i>Larus canus</i>	x		
Curlew	<i>Numenius arquata</i>		x	x
Dunnock	<i>Prunella modularis</i>	x		x
Goldeneye	<i>Bucephala clangula</i>		x	
Greenfinch	<i>Carduelis chloris</i>		x	
Grey Wagtail	<i>Motacilla cinerea</i>	x		

⁸ The UK's birds can be split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green.

⁹ Species of Principal Importance under Section 41 of the NERC Act 2006.

Common Name	Scientific Name	Amber ⁸ Listed	Red Listed	Section 41 Priority Species ⁹
Herring gull	<i>Larus argentatus</i>		x	x
House martin	<i>Delichon urbicum</i>		x	
House sparrow	<i>Passer domesticus</i>		x	x
Kestrel	<i>Falco tinnunculus</i>	x		
Lapwing	<i>Vanellus vanellus</i>		x	x
Lesser black-beaked gull	<i>Larus fuscus</i>	x		
Lesser redpoll	<i>Acanthis caberet</i>			x
Linnet	<i>Linaria cannabina</i>		x	x
Mallard	<i>Anas platyrhynchos</i>	x		
Meadow pipit	<i>Anthus pratensis</i>	x		
Mistle thrush	<i>Turdus viscivorus</i>		x	
Pink-footed goose	<i>Anser brachyrhynchus</i>	x		
Skylark	<i>Alauda arvensis</i>		x	x
Song thrush	<i>Turdus philomelos</i>	x		x
Sparrowhawk	<i>Accipiter nisus</i>	x		
Spotted flycatcher	<i>Muscicapa striata</i>		x	x

Common Name	Scientific Name	Amber ⁸ Listed	Red Listed	Section 41 Priority Species ⁹
Starling	<i>Sturnus vulgaris</i>		x	x
Swift	<i>Apus apus</i>		x	
Tree sparrow	<i>Passer montanus</i>		x	x
Whitethroat	<i>Sylvia communis</i>	x		
Willow warbler	<i>Phylloscopus trochilus</i>	x		
Woodcock	<i>Scolopax rusticola</i>		x	
Woodpigeon	<i>Columba palumbus</i>	x		
Wren	<i>Troglodytes troglodytes</i>	x		
Yellow wagtail	<i>Motacilla flava</i>		x	x

Reptiles

3.25 No records of reptiles were returned from the 2km data search.

Invertebrates

3.26 One record of white-letter hairstreak (*Satyrion w-album*) was returned from the 2km data search, located 1.8km north-east of the site at the grassland by Palmerston Street.

3.27 Thirty-four records of cinnabar (*Tyria jacobaeae*) were returned from the 2km data search, the closest record is located 471m north-east from the site.

White-clawed Crayfish and Notable Fish

3.28 No records of white-clawed crayfish or notable fish species were returned from the 2km data search.

Notable and Invasive Non-Native Plant Species

3.29 Five records of notable plant species were returned from the 2km data search:

- Four records of bee orchid (*Ophrys apifera*) were returned, the closest of which is located 120m south-east of the site boundary. This record dates from 2022.
- One record of floating water-plantain was returned, located 1.65km north-east of the site boundary and dating from 2001.

- 3.30 No records of botanical INNS were returned from the 2km data search.

Extended Phase 1 Habitat Survey

- 3.31 Figure 1 presents the habitat map of the site. A botanical species list for the habitats on site is presented in Appendix 2 with illustrative photographs in Appendix 3.

Main Habitats Present

- 3.32 The site is dominated by hardstanding and open areas of concrete. There are small patches of poor semi-improved grassland scattered across the site, with ephemeral/short perennial present at gaps in the concrete or kerbs. Introduced shrub is concentrated largely at the north-eastern and eastern site boundaries, whilst five disused buildings are also present on site. A small number of scattered trees can be found largely at the site boundaries.

Hardstanding and Bare Ground

- 3.33 The site is dominated by hardstanding (concrete), previously used for car parking (Photograph 1). These areas have very little vegetation either because of recent use (for example as a car park) or due to the relatively intact nature of the hardstanding.

Poor Semi-Improved Grassland and Ephemeral/Short Perennial

- 3.34 Patches of poor semi-improved grassland are scattered across the site. The grassland appears to have had no recent management, with a sward length of approximately 50cm. The site also has a number of ephemeral/short perennial species growing from the hardstanding (often from gaps in the kerbs and building edges) which is typical of urban city centre sites. Species present included abundant meadow-grass species. Frequent species include slender false-brome, rosebay willowherb, perennial rye-grass (locally abundant), cock's-foot, red fescue, common chickweed, dandelion, with locally frequent springy turf-moss. Occasionally occurring species were common ragwort, common nettle, broad-leaved willowherb, creeping buttercup, creeping thistle, herb-Robert, and ribwort plantain. Rarely occurring species present included creeping thistle, spear thistle, Oxford ragwort, willowherb species, Norway maple, wall barley, broad-leaved dock, daisy, lesser hawkbit, oxeye daisy (locally frequent), meadow foxtail, and yarrow.

Introduced Shrub

- 3.35 Sections of introduced shrub are concentrated around the site boundaries, largely towards Kincardine Road (Photograph 2). Species present included locally dominant cherry laurel, locally abundant snowberry, frequent bramble, occasional spindle, St John's-wort species, butterfly-bush (locally abundant), with rare cases of ash and wall cotoneaster (locally frequent) with an understorey of common nettle, elder, cleavers, willowherb species (locally rare).

Scattered Trees

- 3.36 A small number of scattered broadleaved trees are present across the site. The ages of the trees range from semi-mature to mature, with species present including occasional common lime, with rare rowan, sycamore, poplar species, and elder.

Invasive Non-Native Species

- 3.37 One INNS Schedule 9 plant was present within the site. A stand of wall cotoneaster was present in a small section at the south-eastern site boundary (Target Note 1, Figure 1).

Protected Species

- 3.38 The site is isolated from any larger areas of natural or semi-natural habitat. Due to the lack of shelter or suitable habitat for protected species, it was concluded that the only species relevant to this assessment are foraging bats, nesting birds, and hedgehog. The site lies outside of the Greater Manchester Black Redstart Priority Area (Greater Manchester Biodiversity Partnership 2008).

Breeding Birds

- 3.39 The suitability of the site for foraging birds is considered to be fairly limited due to the dominance of intact hardstanding and the lack of any larger areas of semi-natural habitat.
- 3.40 The scattered trees and introduced shrub on site may offer suitable nesting habitat for birds, however, particularly the mature poplar tree to the northwest of the site (T1).

Hedgehog

- 3.41 Whilst the hardstanding present on site does not offer optimal foraging habitat for hedgehog, the introduced shrub may offer some suitable refuge for the species. This is supported by the desk study records of hedgehog on site. The proximity of the site to Gartside Gardens would also suggest there is some suitable habitat available in the locality for the species.

Preliminary Bat Roost Inspection of Built Structures

- 3.42 The findings of the building inspections are presented in Table 6, below, indicating their assessed roost potential and whether further survey is recommended. Photographs of the structures are provided in Appendix 3 and a map of building locations in Figure 2.
- 3.43 The hardstanding provides no significant foraging habitat for bats. Street lighting, together with the lack of vegetation and connectivity to other semi-natural habitats, significantly diminishes its potential for bat foraging.

Table 6 Summary of Assessed Roost Status Following Preliminary Roost Assessments of Buildings

Building Ref.	Building Description	Potential Roost Features and Assessment	Bat Roost Potential Assessment	Further Survey recommended
B1	Single storey outbuilding of breezeblock pebbledash construction (Photograph 3)	Disused. Boarding present around the structure is closely fixed and appears temporary. Fascia board and roof tiles all closely fixed. Streetlighting directly above structure noted.	Negligible	No
B2	Large building of red brick construction. Varies between single and two-storey. Flat roofed.	Unoccupied/disused, previously a car showroom. Much of the structure is covered in a corrugated metal housing (Photograph 4).	Negligible	No

Building Ref.	Building Description	Potential Roost Features and Assessment	Bat Roost Potential Assessment	Further Survey recommended
		Brickwork around the structure was in good condition. No PRF recorded around the structure externally. Boarding present on some windows but appears recent and was closely fixed. Internally, the building comprised various sections, with a large warehouse housed by corrugated metal in the south (Photograph 5) and a showroom and office in the north with false ceiling (Photograph 6) Evidence of nesting feral pigeon (<i>Columba livia domestica</i>) was recorded in the warehouse area in the south.		
B3	Single storey wooden outbuilding with garage doors (Photograph 7). Corrugated pitched roof, possibly asbestos.	No PRF present.	Negligible	No
B4	Single storey wooden outbuilding with garage door (Photograph 8). Corrugated pitched roof, possibly asbestos.	No PRF present.	Negligible	No
B5a	Single-storey open garage structure (Photograph 9)	Disused and almost entirely boarded up, open garage structure. Corrugated metal pitched roofing. No PRF visible.	Negligible	No
B5b	Open frontage to the south of the main B5 structure.	Access points present on the underside of roof (Photograph 10).	Low	Yes
B6	Red brick, built structure with corrugated sheet metal roof (Photograph 11).	Previously used as a car show room, now disused. Gaps underneath wooden soffit present in numerous locations, providing a moderate PRF (Photograph 12).	Moderate	Yes

Bat Roost Suitability Assessment of Trees

- 3.44 A single tree of sufficient age/size to support roosting bats was present within the survey boundary. The tree was a poplar species (Photograph 13) at the far northern boundary of the site (T1, Figure 1). The tree was able to be inspected fully from ground level at all angles. No PRF were present on the tree, and it was, therefore, assessed to have Negligible potential to support roosting bats.

4. DISCUSSION AND RECOMMENDATIONS

Designated Sites

- 4.1 The site contains no statutory or non-statutory nature conservation sites, none are within 2km of the site and those situated further afield are considered unlikely to be impacted by the proposed development due to their distance from the site.

Habitats

- 4.2 The habitats and plant species recorded within the site are widespread and common throughout Greater Manchester and the UK. None of the plant species recorded within the site are either Nationally Scarce or Nationally Rare (Hill *et al.* 2004) or of any other conservation significance (Cheffings and Farrell 2005, as amended; Stroh *et al.* 2014).

Invasive Non-Native Species

- 4.3 Wall cotoneaster is a listed INNS (as per Schedule 9 of the WCA, 1981). Therefore, it is recommended to avoid the spreading of this species.
- 4.4 Specific measures will be required where works pass through, or close to, stands of the species as identified at Target Note 1 (Figure 1). This may require professional removal and disposal (see Environment Agency guidance notes^{10/11}). If stands of the species are not to be impacted by development, good practice measures during site clearance (e.g. wheel-washing and/or soil management protocols) plus appropriate waste disposal mechanisms are recommended as a precaution.

Protected Species

Breeding Birds

- 4.5 Scattered trees and introduced shrub on site may hold some suitable habitat for nesting birds. These habitats should be inspected by an Ecologist prior to removal if they face being impacted during the nesting season (March to August inclusive).
- 4.6 The site is considered to provide a relatively limited foraging resource for local populations of birds.

Bats

- 4.7 The site provides no significant area of foraging habitat and is unlikely to be used by foraging bats.
- 4.8 Overall, Building 6 was assessed to have Moderate potential to support roosting bats, whilst Building 5b was assessed to have Low potential to support roosting bats. Further bat activity surveys of these structures are recommended. This should comprise two dusk surveys for Building 6 (Moderate potential) and a single dusk survey for Building 5b (Low potential).

¹⁰ <https://www.gov.uk/government/publications/treatment-and-disposal-of-invasive-non-native-plants-rps-178/>

¹¹ <https://www.gov.uk/guidance/prevent-the-spread-of-harmful-invasive-and-non-native-plants>

- 4.9 All other buildings and a single tree on site were assessed as Negligible potential for roosting bats and, as such, no further dusk/dawn surveys recommended for these features.

Hedgehog

- 4.10 Whilst the site provides no significant area of foraging habitat for hedgehog, the introduced shrub habitat on site may provide some refuge for the species. This habitat should be inspected by an Ecologist prior to removal.

Biodiversity Enhancement Opportunities

- 4.11 The site is currently of limited ecological value and development presents an opportunity to increase biodiversity. A separate Biodiversity Net Gain assessment will be completed and will include recommendations for ecological enhancements. Potential enhancement measures comprise:
- Use of British native or pollinator-friendly tree, shrub and herbaceous species in any landscape planting, for example, inclusion of species that provide nectar for invertebrates or berries to provide a food source for birds; and
 - Inclusion of integrated bat roost features such as bat bricks or bat tubes to increase opportunities for roosting bats, coupled with a suitable lighting strategy to avoid unnecessary lighting of roost features.

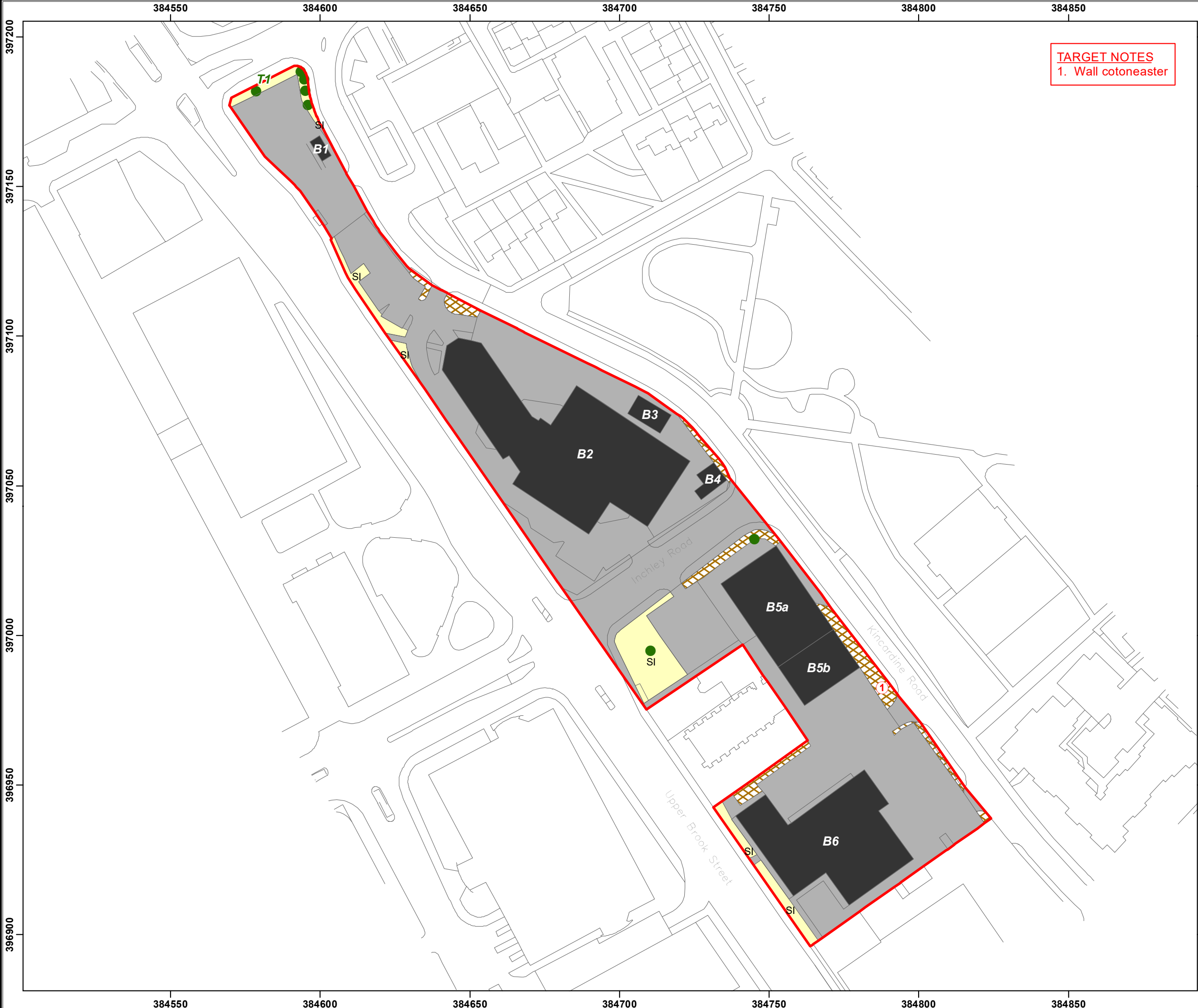
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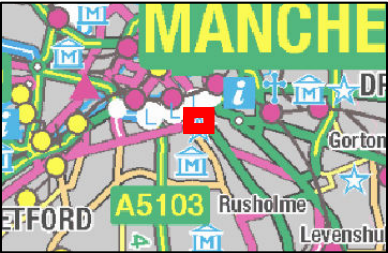
6. ABBREVIATIONS

BAP	Biodiversity Action Plan
BoCC	Birds of Conservation Concern
CIEEM	Chartered Institute of Ecology and Environmental Management
CRoW	Countryside Rights of Way
EPS	European Protected Species
EU	European Union
GCN	Great Crested Newt
GMEU	Greater Manchester Ecology Unit
INNS	Invasive Non-native Species
IRZ	Impact Risk Zone(s)
JNCC	Joint Nature Conservation Committee
MAGIC	Multi-Agency Geographic Information for the Countryside
NERC	Natural Environment and Rural Communities
NPPF	National Planning Policy Framework
PAA	Penny Anderson Associates Ltd
PRA	Preliminary Roost Assessment
PRF	Potential Roost Feature(s)
SAC	Special Area(s) of Conservation
SBI	Site(s) of Biological Importance
SPA	Special Protection Area
SSSI	Sites of Special Scientific Interest
WCA	Wildlife and Countryside Act

FIGURES



TARGET NOTES
1. Wall cotoneaster



Legend

- Survey area
- Phase 1 Habitats
 - SI B6, Poor semi-improved grassland
 - J1.4, Introduced shrub
 - J3.6, Building
 - J5, Hardstanding
 - A3.1, Scattered trees
 - Target note

British National Grid
Projection: Transverse Mercator
False Easting: 400000.000000
False Northing: -100000.000000
Central Meridian: -2.000000
Scale Factor: 0.999601
Latitude Of Origin: 49.000000

ISO A3

Metres

0 5 10 20 30 40

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Project Name
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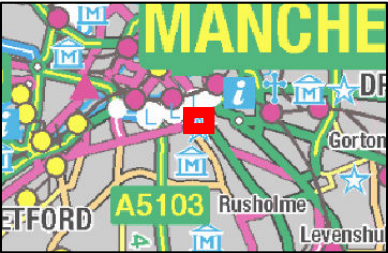
Discipline
Ecology

Title:
Preliminary Ecological Appraisal Map

Scale 1:1,200 Drawing No. Figure 1

Drawn By CC Originator SG Date 19/06/2023

Grid Ref. 384,697 397,043 Revision 1.0



Legend

Survey area

Bat Roosting Potential - Buildings

- Negligible
- Low
- Moderate

Tree with negligible bat roosting potential



British National Grid
Projection: Transverse Mercator
False Easting: 400000.000000
False Northing: -100000.000000
Central Meridian: -2.000000
Scale Factor: 0.999601
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Project Name
Upper Brook Street, Manchester

Discipline
Ecology

Title:

Bat Roosting Potential Map

Scale 1:1,200	Drawing No. Figure 2	
Drawn By CC	Originator SG	Date 21/06/2023
Grid Ref. 384,697 397,043	Revision 1.0	

APPENDICES

APPENDIX 1

Summary of Protected Species Legislation

SUMMARY OF THE LEGISLATION RELATING TO BATS

All wild species of bat are protected under the Wildlife and Countryside Act (WCA) 1981, which has also been amended by later legislation, including the Countryside and Rights of Way (CROW) Act 2000. Bats are listed on Schedule 5 of the WCA and are therefore subject to some the provisions of Section 9 which, with the amendments, make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection (S9:4b).
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat (S9:4c).

There are additional offences in relation to buying and selling (S9:5) any live or dead animal of this species or anything derived from them.

Bat species are also listed under Annexes IIa and IVa of the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, also known as the 'Habitats Directive'. Inclusion on Annex IVa means they are consequently identified as European Protected Species (EPS) and protected under the Conservation of Habitats and Species Regulations 2017 (amended).

The Conservation of Habitats and Species Regulations 2017 (amended) state that a person commits an offence if they:

- (a) deliberately capture, injure or kill any wild animal of a European protected species,
- (b) deliberately disturb wild animals of any such species, in such a way as –
 - (i) to impair their ability to survive, to breed or reproduce, or to rear their young, or
 - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate, or
 - (iii) to affect significantly the local distribution or abundance of the species to which they belong;
- (c) deliberately take or destroy the eggs of such an animal, or
- (d) damage or destroy a breeding site or resting place of such an animal.

Under these Regulations it is an offence to damage or destroy a breeding site or resting place whether the animal is in occupation or not, and protection extends to all life stages of the animal in question. There are additional offences relating to possession, control and sale of a live or dead bat or part of such an animal.

In addition, seven native British bat species, including the soprano pipistrelle (*Pipistrellus pygmaeus*) and the brown long-eared bat (*Plecotus auritus*), are listed as 'species of principal importance' for the conservation of biodiversity in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (amended). In Wales, Section 7 of the Environment (Wales) Act 2016 provide a list of organisms of 'principal importance for maintaining and enhancing biodiversity' and lists several species of bat including the common pipistrelle (*Pipistrellus pipistrellus*) which is absent from England's S41 list.

Please note: the above text provides a brief summary of the legislation in relation to bats and their roosts and the original Acts, Regulations and any amendments should be referred to for the precise wording.

SUMMARY OF THE LEGISLATION RELATING TO BREEDING BIRDS

All wild species of breeding birds and their nests and eggs are protected under Part 1 of the Wildlife and Countryside Act (WCA) 1981, as amended by later legislation including the Countryside and Rights of Way (CROW) Act 2000. This legislation applies in England and Wales.

Part 1 (Section 1:1) of the WCA states that:

'If any person intentionally,

- (a) kills, injures or takes any wild bird;
- (b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- (c) takes or destroys an egg of any wild bird,

he shall be guilty of an offence.'

Part 1 (Section 1:5) of the WCA (amended by the CROW Act 2000) refers to specific birds listed on Schedule 1 of the WCA, and states that:

'If any person intentionally or recklessly,

- (a) disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
- (b) disturbs dependent young of such a bird,

he shall be guilty of an offence and liable to a special penalty.'

Schedule 1 includes birds such as Western barn owl (*Tyto alba*), black redstart (*Phoenicurus ochrurus*), woodlark (*Lullula arborea*) and Cetti's warbler (*Cettia cetti*). Please refer to the WCA for a complete list of Schedule 1 species¹.

Some provisions are made to allow the killing and taking of certain species under certain circumstances, as follows:

- Birds listed on Schedule 2 (Part 1) of the Act may be taken or killed outside of the 'close season' for each individual species (the 'close season' is defined by the Act). This includes various wild duck and geese species.
- Birds listed on Schedule 2 (Part 2) of the Act may be killed or taken by authorised persons at all times. This includes species such as carrion crow (*Corvus corone*), Eurasian magpie (*Pica pica*), feral pigeon² (*Columba livia*) and greater Canada goose (*Branta canadensis*). An 'authorised person' is defined as a person who has written authorisation to undertake the act from the relevant statutory authority. The written authority is in the form of a licence, either a general licence which covers a number of the more typical 'pest' species, or an individual licence for other individual species. In England these licences are issued by Natural England and in Wales by the Welsh Assembly Government.

Please note: the above text provides a brief summary of the legislation in relation to breeding birds in England and Wales and the original Act and any amendments should be referred to for the precise wording.

¹ <https://www.legislation.gov.uk/ukpga/1981/69/schedule/1>

² Also known as rock dove

APPENDIX 2

Botanical Species List

Appendix 2 Botanical Species List

Common Name	Scientific Name	DAFOR
Woody Species		
Ash	<i>Fraxinus excelsior</i>	R
Bramble	<i>Rubus fruticosus</i> agg.	O
Butterfly-bush	<i>Buddleja davidii</i>	O-LA
Cherry laurel	<i>Prunus laurocerasus</i>	LD
Common lime	<i>Tilia europaea</i>	O
Elder	<i>Sambucus nigra</i>	R
Norway maple	<i>Acer platanoides</i>	R
Poplar species	<i>Populus</i> sp.	R
Rowan	<i>Sorbus aucuparia</i>	R
Snowberry	<i>Symphoricarpos albus</i>	LA
Spindle	<i>Euonymus europaeus</i>	O
Sycamore	<i>Acer pseudoplatanus</i>	R
Wall cotoneaster**	<i>Cotoneaster horizontalis</i>	R-LF
Herbs, Grasses and Ferns		
Broad-leaved dock	<i>Rumex obtusifolius</i>	R
Broad-leaved willowherb	<i>Epilobium montanum</i>	O
Cleavers	<i>Galium aparine</i>	R
Cock's-foot	<i>Dactylis glomerata</i>	F
Common chickweed	<i>Stellaria media</i>	F
Common nettle	<i>Urtica dioica</i>	O-R
Common ragwort	<i>Jacobaea vulgaris</i>	O
Creeping buttercup	<i>Ranunculus repens</i>	O
Creeping thistle	<i>Cirsium arvense</i>	R
Daisy	<i>Bellis perennis</i>	R
Dandelion	<i>Taraxacum officinale</i> agg.	F
Herb-Robert	<i>Geranium robertianum</i>	O
Lesser hawkbit	<i>Leontodon saxatilis</i>	R
Meadow foxtail	<i>Alopecurus pratensis</i>	R
Meadow-grass species	<i>Poa</i> sp.	A
Oxeye daisy	<i>Leucanthemum vulgare</i>	R-LF
Oxford ragwort	<i>Senecio squalidus</i>	R
Perennial rye-grass	<i>Lolium perenne</i>	F-LA
Red fescue	<i>Festuca rubra</i>	F
Ribwort plantain	<i>Plantago lanceolata</i>	O
Rosebay willowherb	<i>Chamaenerion angustifolium</i>	F
Slender false-brome	<i>Brachypodium sylvaticum</i>	F
Sow-thistle species	<i>Sonchus</i> sp.	LA
Spear thistle	<i>Cirsium vulgare</i>	R
St John's-wort species	<i>Hypericum</i> sp.	O
Wall barley	<i>Hordeum murinum</i>	R
Willowherb species	<i>Epilobium</i> sp.(annual)	R
Yarrow	<i>Achillea millefolium</i>	R
Yorkshire-fog	<i>Holcus lanatus</i>	F
Mosses		
Springy turf-moss	<i>Rhytidiadelphus squarrosus</i>	LF

KEY

D-Dominant, A-Abundant, F-Frequent, O-Occasional, R-Rare, L-Locally

** - Schedule 9 Invasive Non-Native Species

APPENDIX 3

Photographs



Photograph 1
Hardstanding



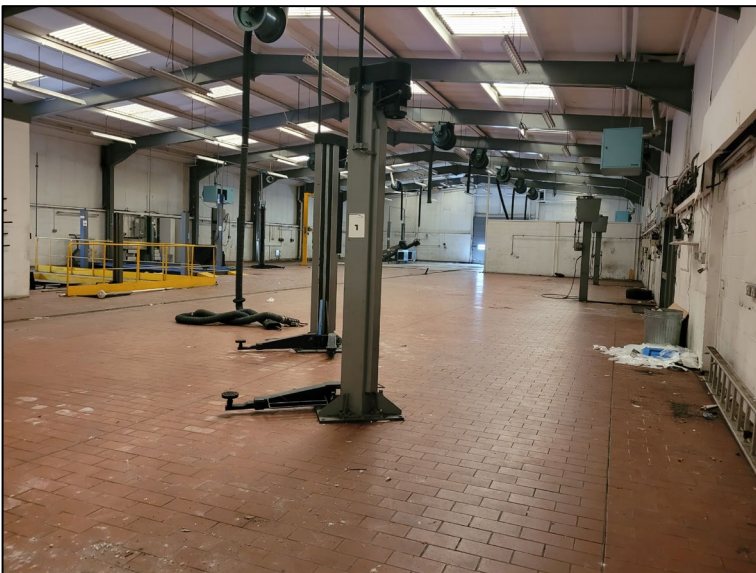
Photograph 2
Introduced shrub



Photograph 3
Building 1



Photograph 4
Building 2 metal housing



Photograph 5
Building 2 warehouse garage



Photograph 6
Building 2 showroom and offices



Photograph 7
Building 3



Photograph 8
Building 4



Photograph 9
Building 5a



Photograph 10
Building 5b



Photograph 11
Building 6

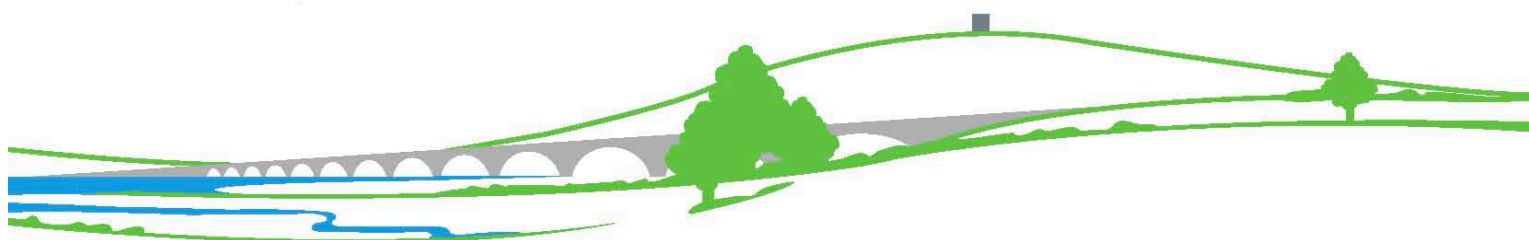


Photograph 12
Building 6 – example of roost feature



Photograph 13
Tree 1 (poplar species)

Penny Anderson
Associates Ltd
CONSULTANT ECOLOGISTS



Park Lea, 60 Park Road, Buxton, Derbyshire SK17 6SN