

Sites A and B of Proposed Apex Tower, Albion Street, Manchester M1 5LE

ECOLOGICAL SURVEY AND ASSESSMENT
(including a Daylight Licensed Bat Survey and Assessment)

December 2021

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Document Control

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SUMMARY

Introduction and Scope

- i. This ecological survey and assessment presents the ecological, biodiversity and nature conservation status of Sites A and B at the proposed Apex Tower, Albion Street, Manchester M1 5LE. The assessment was requested in connection with proposals to construct two apartment blocks with commercial units either side of The Britons Protection public house.
- ii. This report presents the results of a desktop study and data search, an extended Phase 1 Habitat Survey and a daylight licensed bat survey and assessment carried out in October 2021. The scope of survey undertaken is appropriate to identify potential ecological constraints, the remit of any mitigation required and opportunities for biodiversity associated with the development proposals.

Results of Survey and Assessment

- iii. Sites A and B comprise two areas of hard-standing positioned either side of The Britons Protection public house in Manchester city centre. The sites are used for car parking and are largely devoid of vegetation with margins of colonising ruderal herbs. The sites are enclosed by Trumpet Street to the south, Albion Street to the west and Great Bridgewater Street to the north. The Jury's Inn hotel is present to the east.
- iv. The proposals will have no direct or indirect adverse effect on statutory or non-statutory designated sites for nature conservation.
- v. No trees, irreplaceable habitat, Priority Habitat, semi-natural habitat or rare plant species were detected. No invasive plant species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) were detected.
- vi. Other vegetation that will be affected (removed and / or shaded) by the works are rupestral (wall-growing) herbs such as Ivy-leaved Toadflax, Wall-rue and Maidenhair Spleenwort that have colonised the lime-mortar of the brick walls bordering the public house yard. As described in **Section 4.3**, the habitat and substrate (lime-mortar) suitable for colonisation by these species will not be entirely lost from the local area as a result of the proposals, and **Section 5.2** recommends protection of this habitat in the interests of the conservation of biodiversity in the city centre environment.
- vii. No buildings will be demolished to facilitate the proposals. As the proposals will cause obstruction to the western and eastern elevations of The Britons Protection public house and the western elevation of the adjacent Jury's Inn hotel, a licensed daylight bat survey and assessment of these buildings and the brick walls bordering the site was carried out. No evidence of current or previous use of the brick walls, the public house and the western elevation of the Jury's Inn hotel by roosting bats was detected. The walls and the western elevation of the Jury's Inn hotel are of negligible suitability for use by roosting bats and The Britons Protection public house is of negligible to low suitability. In accordance with *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn) (Collins, J. (ed), 2016), no further surveys are required to inform the planning application.
- viii. Habitats at the site are suitable for use by nesting birds. Guidance in relation to the protection of nesting birds during works and provision of enhancement features for nesting birds as part of the development proposals are described at **Section 5.3**.
- ix. Appropriate survey effort and assessment has been carried out to discount the presence of other relevant protected species. No further surveys for other species are necessary to inform the planning application.

Recommendations and Conclusion

- x. **Section 5.0** outlines the mandatory measures and additional actions to be applied to ensure compliance with relevant wildlife legislation, the National Planning Policy Framework, local planning policy and best practice. The report describes the appropriate and proportionate measures and recommendations that aim to enhance the value of the site for wildlife such as nesting birds and biodiversity to achieve measurable gains for biodiversity.

1.0 INTRODUCTION

1.1 Background and Rationale

- 1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by Arrowsmith Management Ltd. to carry out an ecological survey and assessment of Sites A and B off Albion Street, Manchester, M1 5LE (hereafter referred to as the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SJ 8368 9760. An aerial image of the site and its surrounds is appended at **Figure 1** (source image: ESRI World Imagery).
- 1.1.2 The assessment was requested in connection with a planning application to construct two apartment blocks (i.e. Apex Tower) with commercial units on either side of The Britons Protection public house.

1.2 Scope of Works

- 1.2.1 The scope of ecological works undertaken 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;
 - The search for invasive plant species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended);
 - 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 bird species;
 - A licensed daylight bat survey and assessment of The Britons Protection public house which is to be enveloped by the proposed towers, the adjacent Jury's Inn building and the brick walls at the site boundaries;
 - 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 planning application and prior to the commencement of construction activities.

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:
- MAGiC: A web-based interactive map which brings together geographic information on key environmental schemes and designations, including details of statutory nature conservation sites;
 - Greater Manchester Local Records Centre (GMLRC); and

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, the site is sufficiently isolated within urban surrounds from any watercourses or waterbodies that survey and assessment for riparian fauna (such as water vole (*Arvicola amphibius*) or otter (*Lutra lutra*)) or amphibians (including great crested newt (*Triturus cristatus*)) can be reasonably scoped out. The site comprises hard-standing and lies within urban surrounds of hard-standing and existing buildings; survey and assessment for species such as badger, barn owl and reptiles can also be reasonably scoped out, for example.

- c. Great 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 Victoria Burrows on 19th October 2021. The weather was dry and overcast with a light breeze (Beaufort scale 2) and an air temperature of 17°C.
- 2.2.2 A habitat and vegetation map was prepared for the site and the immediate surrounding area, refer to **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 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.
- 2.2.4 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.
- 2.2.5 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).
- 2.2.6 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 Licensed Bat Survey and Assessment

Survey Area

- 2.3.1 There are no buildings or trees within the red line boundary.
- 2.3.2 As the proposals will cause obstruction to the western and eastern elevations of The Britons Protection public house, the western elevation of the Jury's Inn building and the brick walls bordering the yard, a licensed daylight bat survey and assessment of these structures was carried out.

Surveyor

- 2.3.3 The daylight licensed bat survey and assessment was carried out by Victoria Burrows (Natural England Class Survey Licence WML CL18 (Bat Survey Level 2), Registration Number 2015-10390-CLS-CLS) on 19th October 2021; the weather conditions are as reported in **Section 2.2**. Victoria's qualifications and experience meet the criteria as defined in the *Technical Guidance Series Competencies for Species Survey: Bats* (CIEEM, 2013).

Habitat Assessment for Commuting / Foraging Bats

- 2.3.4 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 (3rd edn)*, (Collins, J. (ed), 2016). Reference has been made to the categories and descriptions / examples, presented below.

Table 2.1: Consideration of Suitability of Foraging and Commuting Habitat for Bats

Suitability	Commuting Habitat	Foraging Habitat
Negligible	Negligible habitat features on site likely to be used by commuting bats.	Negligible habitat features on site likely to be used by 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 or 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 linked 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 and is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. Habitats close to and connected to known roosts.	High-quality habitat that is well-connected to the wider landscape and is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Habitats close to and connected to known roosts.

Daylight Survey: Buildings

- 2.3.5 The survey was 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 (3rd edn)* (Collins, J. (ed), 2016).
- 2.3.6 An inspection of the external surfaces, walls and roof 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.
- 2.3.7 The internal survey (of the public house only) involved an examination of the accessible internal areas including the roof void to find roosting bats or evidence of previous use of the building by bats such as droppings and prey remains.
- 2.3.8 A list of equipment used is detailed below:

Table 2.2: Survey Equipment used during Daylight Bat Survey

Ladders
LED Lenser P14 torch
Canon Ixus digital camera
8x20 binoculars
Ridgid Micro Inspection Camera Borescope CA-300

- 2.3.9 The suitability of the buildings / walls has been assessed in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*, (Collins, J. (ed), 2016), taking into account any presence of gaps suitable for access by bats, features suitable for use by roosting bats within the buildings / walls (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.

2.4 Other Relevant Protected Species and Animal Life

Bird Species

- 2.4.1 Bird species observed and heard during the survey were recorded. The buildings and walls were searched for evidence of previous use by nesting birds.

- 2.4.2 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.

2.5 Survey and Reporting Limitations

- 2.5.1 All areas of the site were accessible. It is recognised that the Phase 1 Habitat Survey was carried out towards the end of the recognised survey period (typically April to October inclusive²), however, owing to the period of mild weather in Autumn 2021 many of the plants present were still either in flower and / or their identifying features were evident and the time of year the survey was carried out is not identified as a significant survey limitation.
- 2.5.2 No other survey limitations were experienced.
- 2.5.3 All measurements within this report are approximate only, and have been either measured or estimated whilst on site or calculated using mapping software (QGIS) or internet-based mapping services such as MAGiC and Google Earth.

2.6 Evaluation Methods

- 2.6.1 The habitats, vegetation and animal life were evaluated with reference to standard nature conservation criteria as described in *A Nature Conservation Review* (Ratcliffe, 1977). These are size (extent), diversity, naturalness, rarity, fragility, typicality, recorded history, position in an ecological or geographical unit, potential value and intrinsic appeal.
- 2.6.2 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).
- 2.6.3 Government advice on wildlife, as set out in the *National Planning Policy Framework* (Ministry of Housing, Communities and Local Government, 2021) 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 Regulations 2017*, is referenced where applicable, and any impacts to protected species are evaluated in accordance with current guidance.
- 2.6.4 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 No statutory sites lies within or adjacent to the site.
- 3.1.2 The site lies within a Site of Special Scientific Interest (SSSI) Impact Risk Zone for the Rochdale Canal Special Area of Conservation (SAC) and SSSI, Hollinwood Branch SSSI and Huddersfield Canal SSSI,

² As detailed at Section 2.6 of the Joint Nature Conservation Committee Phase 1 Habitat Survey methodology (JNCC, 2010)

located within the wider area. The SSSI Impact Risk Zone requires the Local Planning Authority to consult with Natural England on likely risks from the following development categories (Ordnance Survey, 2021):

Livestock and poultry units with floorspace greater than 500m², slurry lagoons greater than 4000m²; and

General combustion processes exceeding 50MW energy input, including energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis / gasification, anaerobic digestion, sewage treatment works, other incineration / combustion.

- 3.1.3 The proposals do not meet any of these criteria.

Non-statutory Designated Sites for Nature Conservation

- 3.1.4 No non-statutory sites for nature conservation lie within or adjacent to the site.

- 3.1.5 Three Sites of Biological Importance (SBIs) are located within 2 kilometres of the site and are summarised below:

Table 3.1: Non-statutory Designated Sites for Nature Conservation within 2 kilometres

Site of Biological Importance (SBI)	Distance and Direction from Site	Reasons for Designation
Rochdale Canal Stott's Lane – Ducie Street Basin	1150 metres to the north-east	Canal habitat and Floating Water-plantain (<i>Luronium natans</i>)
Ashton Canal (West)	1220 metres to the east	Canal habitat
River Irwell	1555 metres to the north-west	Birds

- 3.1.6 The presence of these non-statutory designated sites in the wider area are considered further at **Section 4.2**.

Priority Habitats Inventory

- 3.1.7 The Priority Habitats Inventory³ was checked via MAGiC map; no Priority Habitats are noted for the site or immediate surrounds.

Protected and Notable Species

- 3.1.8 GMLRC hold a records of common pipistrelle (*Pipistrellus pipistrellus*) activity adjacent to the site. No other protected and / or notable species are recorded for the site or immediate surrounds.
- 3.1.9 Records of protected and notable species for a 2 kilometre radius of the site are summarised below.

Table 3.2: Records of Protected Species Within a 2 Kilometre Radius of the Site

Taxon Group	Species Name and Designations ¹ and Notes
Amphibian	Great crested newt (<i>Triturus cristatus</i>): EPS, PS, WCAs5 & GMBAP. 2 records dated 2017 and 2019, both located 1.8 kilometres to the north-west of the site.
	Common toad (<i>Bufo bufo</i>) PS. 2 records dated 2014 and 2019, both located 1.8 kilometres to the north-west.
Birds	WCAs1 Black redstart (<i>Phoenicurus ochruros</i>), hobby (<i>Falco subbuteo</i>), kingfisher (<i>Alcedo atthis</i>), little ringed plover (<i>Charadrius dubius</i>) and peregrine (<i>Falco peregrinus</i>).

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.

Taxon Group	Species Name and Designations ¹ and Notes
	PS Bullfinch (<i>Pyrrhula pyrrhula</i>), cuckoo (<i>Cuculus canorus</i>), dunnoek (<i>Prunella modularis</i>), herring gull (<i>Larus argentatus</i>), house sparrow (<i>Passer domesticus</i>), lapwing (<i>Vanellus vanellus</i>), lesser redpoll (<i>Carduelis cabaret</i>), linnet (<i>Carduelis cannabina</i>), reed bunting (<i>Emberiza schoeniclus</i>), skylark (<i>Alauda arvensis</i>), song thrush (<i>Turdus philomelos</i>), spotted flycatcher (<i>Muscicapa striata</i>), starling (<i>Sturnus vulgaris</i>), tree sparrow (<i>Passer montanus</i>) and yellow wagtail (<i>Motacilla flava</i>).
Flowering plants	PS Grass-wrack Pondweed (<i>Potamogeton compressus</i>)
Invertebrates (moths)	PS Cinnabar (<i>Tyria jacobaeae</i>)
Terrestrial mammals	Bat species (Order <i>Chiroptera</i>): EPS, WCAs5 & GMBAP. 5 records of activity dated between 2001 and 2019, the closest of which is 500 metres to the east of the site. Badger (<i>Meles meles</i>): PBA92. 2 records, dated 2011 and 2012 and both located 500 metres to the east of the site. Brown long-eared bat (<i>Plecotus auritus</i>): EPS, PS, WCAs5 & GMBAP. 1 record of a grounded bat dated 2013 and located 1 kilometre to the north-west of the site. Common pipistrelle (<i>Pipistrellus pipistrellus</i>): EPS, WCAs5 & GMBAP. 48 records of roosts dated between 2007 and 2020, and 96 records of activity dated between 1998 and 2018. The closest of which is a record of activity located within 10 metres to the site. Daubenton's bat (<i>Myotis daubentonii</i>): EPS, WCAs5 & GMBAP. 1 record of a roost, dated 2001 and located 870 metres to the north-west of the site, and 1 record of foraging dated 2009 and located 1.1 kilometres to the north. Hedgehog (<i>Erinaceus europaeus</i>): PS. 13 records, dated between 2013 and 2020, the closest of which is 500 metres to the south of the site. <i>Myotis</i> bat species: EPS, WCAs5 & GMBAP. 1 record of a roost from 2015 and located 1.3 kilometres to the east and 1 record of activity dated 2013 and located 2 kilometres to the north-west. Noctule (<i>Nyctalus noctula</i>): EPS, PS, WCAs5 & GMBAP. 1 record of a commuting bat dated 2020 and located 1.5 kilometres to the north-east. Otter (<i>Lutra lutra</i>): EPS, PS & WCAs5. 2 records dated 2013 and 2020, both records associated with the River Irwell, 1.7 kilometres to the north and north-west. Pipistrelle species (<i>Pipistrellus</i> sp.): EPS, WCAs5 & GMBAP. 5 records of roosts and 14 records of activity, dated between 2004 and 2017, the closest of which is a record of activity located 400 metres to the east. Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>): EPS, PS, WCAs5 and LBAP. 2 records of roosts dated 2013 and 6 records of activity dated between 2006 and 2019. The closest record is activity and located 500 metres to the north-west.
¹Key to Designation Codes: EPS = European Protected Species under the <i>Conservation of Habitats and Species Regulations 2017</i>. WCAs1 = Species receives full protection under Schedule 1 of the <i>Wildlife and Countryside Act 1981</i> (as amended). WCAs5 = Species receives full protection under Schedule 5 of the <i>Wildlife and Countryside Act 1981</i> (as amended). PBA92 = 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.	

3.1.10 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

General Description

3.2.1 Sites A and B (approximately 0.4 hectare) comprise two areas of hard-standing positioned either side of The Britons Protection public house in Manchester city centre. The sites are used for car parking and are largely devoid of vegetation with margins of colonising ruderal herbs. The sites are enclosed by Trumpet

Street to the south, Albion Street to the west and Great Bridgewater Street to the north. The Jury's Inn hotel is present to the east.

- 3.2.2 A Phase 1 Habitat Survey map is appended at **Figure 2**. Photographs are appended at **Table 8.1**.

Vegetation within the Site Boundary

Sparse Ruderal Herbs

- 3.2.3 Refer to **Photos 1 to 3**. The site comprises hard-standing and is largely devoid of vegetation. Butterfly-bush (*Buddleja davidii*) shrubs are locally frequent and ruderal herb vegetation present is characterised by occasional Canadian Fleabane (*Conyza canadensis*) and Dandelion (*Taraxacum officinale* agg.) and very locally frequent Herb-Robert (*Geranium robertianum*). A plant species list is appended at **Table 8.2**.
- 3.2.4 The vegetation is not characteristic of a specific community of the NVC.

Rupestral (wall-growing) Plants (Target Note 1)

- 3.2.5 Refer to **Photo 4**. Rupestral (wall-growing) plants that have colonised the lime-mortar of the brick walls bordering the public house yard (particularly the west facing wall at the eastern margin of Site A, refer to Target Note 1 at **Figure 2**) are characterised by locally frequent Ivy-leaved Toadflax (*Cymbalaria muralis*) and very locally frequent Wall-rue (*Asplenium ruta-muraria*), Black Spleenwort (*Asplenium adiantum-nigrum*) and Maidenhair Spleenwort (*Asplenium trichomanes*). A plant species list is appended at **Table 8.3**.
- 3.2.6 The wall-growing vegetation is characteristic of the OV42 *Cymbalaria muralis* community of the NVC (Rodwell, 2000).

Off-site Vegetation

- 3.2.7 Young trees of Sycamore (*Acer pseudoplatanus*) and Whitebeam (*Sorbus aria*) are present in the yard of the adjacent public house and overhang the brick wall at the western margin of Site B.

Invasive Plant Species

- 3.2.8 No Japanese Knotweed, or other invasive plant species as listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) is present at the site or on the site boundaries.

3.3 Daylight Licensed Bat Survey and Assessment

Habitat Assessment for Commuting and Foraging Bats

- 3.3.1 Based on the city centre environment with the presence of street lighting and the absence of a significant cover of vegetation and other features such as waterbodies within or adjacent to the site, no habitats within or adjacent to the site are assessed to provide optimum conditions for foraging or commuting bats. The site is assessed to be of negligible to low suitability for use by foraging and commuting bats.

Daylight Survey

The Britons Protection Public House

- 3.3.2 Refer to **Photos 5 and 6**. The Britons Protection public house is a three storey brick building with a pitched slate covered roof and a single storey brick annex to the rear (south) with a pitched slate covered roof. The façade at the northern elevation is rendered and decorative fascia are present at the eaves.
- 3.3.3 The brickwork at the eastern gable end (facing Site B) is well-pointed; no gaps or features with suitability for use by roosting bats were detected.
- 3.3.4 At the west-facing gable (adjacent to Site A) the elevation brickwork is well-pointed and provides no opportunities for bat access. No bat droppings were found around the external elevations of the public

house building. Gaps suitable for bat access may be present at the roof verge (i.e. between the wall top and the underside of the slates) at this western elevation. The slate covered roof and ridge copings appear to be in a good condition, although gaps may be present between the slates and beneath the ridge copings.

- 3.3.5 Inspection of the roof void confirms that the void covers the whole footprint of the three storey section of the public house (i.e. 12 metres by 11 metres). The void is at least 2.5 metres high from floor to underside of the ridgeboard. No insulation is present and bitumen undertile roofing felt is present beneath the slates. No bats, bat droppings or other field signs to indicate the presence of a bat roost were found inside the roof void.
- 3.3.6 No evidence of the current or previous use of the building by roosting bats was detected at the public house. In consideration of the comprehensive examination of the roof void and in the context of the extent of built development with artificial lighting bordering the site (i.e. habitats assessed to be of negligible to low suitability for the attraction of foraging bats), the public house is assessed to have negligible to low suitability for use by roosting bats.

Western Elevation of the Jury's Inn Hotel Building

- 3.3.7 The western elevation of the Jury's Inn hotel building is constructed from well-pointed brick with well-sealed window frames; no gaps or features with suitability for use by roosting bats were detected. The relevant part of the Jury's Inn building is assessed to have negligible suitability for use by roosting bats.

Brick Walls Bordering the Yard

- 3.3.8 None of the brick walls at the site boundaries support cracks, crevices or other features with suitability for use by roosting bats; the walls have negligible suitability for use by roosting bats.

3.4 Bird Species

- 3.4.1 No birds were detected at the site on the survey date.
- 3.4.2 Owing to its young condition none of the colonising vegetation is suitable for use by nesting passerine (i.e. perching) species.
- 3.4.3 No evidence of the previous use of the public house or the walls bordering the site by nesting birds was detected. The Britons Protection public house offers limited opportunities for nesting birds; this is considered further at **Section 4.4**, below.

4.0 EVALUATION AND ASSESSMENT

4.1 Introduction and Description of Proposals

- 4.1.1 In accordance with *Apex Tower, Manchester, Scheme Proposals Document, 8158-L(00)54* (Leach Rhodes Walker Ltd, 2020) it is proposed to construct two residential apartment towers with commercial units at Sites A and B on either side of The Britons Protection public house.
- 4.1.2 No buildings will be demolished to facilitate the proposals, however the towers will occupy the whole footprint of Sites A and B and will be of a greater height than the adjacent public house and of equal height to the Jury's Inn building.
- 4.1.3 **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 the habitat 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 The site is sufficiently distant from any statutory and non-statutory designated sites for nature conservation in the wider area. Adverse effects as a result of the development proposals on designated sites for nature conservation and their features of special interest are reasonably discounted.

4.3 Vegetation and Habitats

- 4.3.1 Sites A and B contain hard-standing that is largely devoid of vegetation. The rupestral vegetation on the walls bordering the site is typical of similar conditions throughout the city centre and it contributes to the biodiversity of the urban environment, however, none of the detected species are rare or are identified as Priority Species.
- 4.3.2 None of the habitats present are representative of semi-natural habitat or are Priority Habitat.
- 4.3.3 There are no ecological constraints in relation to invasive plant species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended).
- 4.3.4 It is identified that the west facing brick wall at Target Note 1 with the variety of rupestral herbs will be removed to facilitate the proposals or is unlikely to survive owing to the shade create by the presence of the building. As similar brick walls with lime-mortar are present around the boundaries of the public house yard it is advised that this is not a significant impact and this habitat / resource which is common to lime-mortared brickwork will not be lost from the local area as a result of the proposals, refer to **Section 5.2**.
- 4.3.5 Recommendations outlining the scope for vegetative planting (such as green walls / roof gardens) to enhance the availability of habitats at the site to attract invertebrates and bird species typically associated with urban environments are presented at **Section 5.4**.

4.4 Protected Species and Other Wildlife

Bats

- 4.4.1 No evidence of current or previous use of the brick walls, the public house and the western elevation of the Jury's Inn hotel by roosting bats was detected during the daylight survey and assessment carried out in October 2021.
- 4.4.2 In accordance with paragraph 5.2.9 and the flow chart at Figure 5.1 as presented in *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn) (Collins, J. (ed), 2016), for buildings with negligible suitability for use by roosting bats (i.e. the western elevation of the Jury's Inn and the brick walls), no further surveys are required to inform the planning application.
- 4.4.3 The public house is assessed to be of negligible to low suitability for use by roosting bats (i.e. it is not of negligible suitability owing to the presence of gaps at the wall tops and beneath the ridge copings that could be accessed by bats, if present). Section 5.2.9 of the guidelines (Collins, J. (ed), 2016) states '*If the structure has been classified as having low suitability for bats ...an ecologist should make a professional judgement on how to proceed based on all the evidence available. If sufficient areas (including voids, cracks and crevices) of a structure have been inspected and no evidence found (and is unlikely to have been removed by weather or cleaning or be hidden) then further surveys may not be appropriate. Information should be presented in the report to justify the conclusion and the likelihood of bats being present at other times of the year estimated. If there is a reasonable likelihood that bat roosts could be present, and particularly if there are areas that are inaccessible for survey, the further surveys may be needed and these should be proportionate to the circumstances.*'
- 4.4.4 Given the context of the location of the building in a city centre, the negligible to low suitability of the surrounding habitats for use by foraging and commuting bats and the fact that the building will be retained it is advised that the presence of a bat roost is assessed to be reasonably unlikely and no further survey is required to inform the planning application.

- 4.4.5 The site is not identified to be, nor is it adjacent to, an optimum area for use by roosting, foraging and commuting bats. It is not therefore considered necessary, in this instance, to implement a restricted lighting strategy to limit lighting over the adjacent areas in the interests of the avoidance of impacts on bats, particularly in the interest of pedestrian safety in the city centre.

Nesting Birds

- 4.4.6 Mandatory actions in relation to the protection of nesting birds during the construction period are described at **Section 5.3**. The installation of enhanced opportunities for nesting birds as part of the proposals and to achieve a net gain for biodiversity are detailed at **Section 5.3**.

Other Animal Life

- 4.4.7 Appropriate and proportionate survey effort and / or assessment, in accordance with standard survey guidelines has been applied to discount adverse effects on other relevant protected species. No further surveys for other protected species are necessary to support a planning application.

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, the principles of the National Planning Policy Framework (NPPF), local planning policy and best practice.

- 5.1.2 In accordance with Chapter 15, paragraph 180(d) of the NPPF:

'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 secure ecological enhancement and seek biodiversity gain through appropriate landscape planting and habitat creation have been identified. 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.

5.2 Protection of Existing Features

- 5.2.1 To ensure that the opportunity for colonisation of rupestral plants and plants indicative of the OV42 *Cymbalaria muralis* community of the NVC is not lost from the local area it is recommended that the proposals and construction phase seek to retain and protect brick walls with lime-mortar at the site boundaries and in the immediate area (i.e. around the yard of the public house, including the elevations of the wall that face into the yard).

5.3 Birds

Protection

- 5.3.1 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are breeding. Although opportunities for nesting birds are limited at the site in the interests of best practice it is advised that any works such as vegetation clearance that will affect habitats suitable for use by nesting birds are 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.
- 5.3.2 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.

5.4 Enhancements for Nesting Birds and Landscaping

Provisions for Nesting Swift

- 5.4.1 The swift (*Apus apus*) has recently been added to The Birds of Conservation Concern Red list (Stanbury et al, 2021) owing to the recorded recent declines and its identified status as a high conservation priority.
- 5.4.2 A tall building in the city centre provides an opportunity for the installation of additional nesting opportunities for swift to assist their conservation. It is recommended that a minimum of four swift nest boxes, such as those illustrated at **Insert 1**, are installed at the plant room / lift mechanism housing at the roof of the towers.



Insert 1: Examples of swift nest boxes (e.g. Woodstone Swift Nest Box (centre) and Ibstock Eco-habitat for Swift (right) available from www.NHBS.com)

Landscape Planting and Planters

- 5.4.3 To maximise opportunities for biodiversity such as feeding invertebrates at the site and within the urban environment to achieve biodiversity net gain it is recommended that any landscape planting within the site is composed from native species and species known to be of value for the attraction of wildlife.
- 5.4.4 The understorey and ground cover planting design should be appropriate to the environmental conditions (i.e. shade tolerant species such as fern species in areas which will be shaded by the building) and 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.
- 5.4.5 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.
- 5.4.6 It is recommended that the potential for installing green walls on the buildings (or as stand-alone structures) is investigated as part of the proposed development to maximise opportunities to achieve net gains for biodiversity. Green walls would provide additional benefits to wildlife associated with urban environments, including nectaring invertebrates and foraging bird species, and would provide complementary habitat to the swift nest boxes.

6.0 CONCLUSION

- 6.1 The proposals at Sites A and B off Albion Street can be achieved with no adverse effect on designated sites for nature conservation, Priority Habitat, irreplaceable habitats, rare species or protected species.
- 6.2 The recommendations in **Section 5.0** outline the mandatory measures and additional actions to be applied to avoid adverse effects on nesting birds and to ensure compliance with relevant wildlife legislation, the National Planning Policy Framework (NPPF) and best practice.
- 6.3 The report describes the appropriate and proportionate measures and recommendations that aim to enhance the value of the site for wildlife such as nesting birds and biodiversity to achieve measurable gains for biodiversity and compliance with the NPPF, local planning policy and best practice.

7.0 REFERENCES

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8.0 APPENDIX: PHOTOGRAPHS, TABLES AND FIGURES

8.1 Photographs

Table 8.1: Photographs

	
Photo 1: Site A showing hard-standing and sparse ruderal herbs at margins	Photo 2: Sparse ruderal herbs at margins of Site A
	
Photo 3: Site B (facing north)	Photo 4: Rupestral vegetation at Target Note 1
	
Photo 5: Western elevation of The Britons Protection public house with the western elevation of the Jury's Inn in the background	Photo 6: Southern and eastern elevations of The Britons Protection public house

8.2 Plant Species Lists

Table 8.2: Plant Species List for the Sparse Ruderal Colonising Vegetation over the Areas of Hard-standing

Scientific Name	Common Name	DAFOR ¹	Cover
Woody Species			
<i>Buddleja davidii</i>	Butterfly Bush	LF	15%
<i>Salix caprea</i>	Goat Willow	R	<1%
<i>Sambucus nigra</i>	Elder	R	<1%
Herb Species			
<i>Cirsium vulgare</i>	Spear Thistle	O	<1%
<i>Conyza canadensis</i>	Canadian Fleabane	O	<1%
<i>Epilobium hirsutum</i>	Great Willowherb	O	<1%
<i>Geranium robertianum</i>	Herb Robert	VLF	<1%
<i>Rubus fruticosus</i> agg.	Bramble	R	<1%
<i>Senecio squalidus</i>	Oxford Ragwort	VLF	<1%
<i>Senecio vulgaris</i>	Groundsel	R	<1%
<i>Sisymbrium officinale</i>	Hedge Mustard	O	<1%
<i>Solanum dulcamara</i>	Bittersweet	R	<1%
<i>Stellaria media</i>	Common Chickweed	VLA	<1%
<i>Taraxacum officinale</i> agg.	Dandelion	O	<1%
<i>Tussilago farfara</i>	Coltsfoot	VLF	<1%

¹**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species

Table 8.3: Plant Species List for the Rupestral Plants

Scientific Name	Common Name	DAFOR ¹	Cover
<i>Asplenium adiantum-nigrum</i>	Black Spleenwort	VLF	<1%
<i>Asplenium ruta-muraria</i>	Wall-rue	VLF	<1%
<i>Asplenium scolopendrium</i>	Hart's-tongue Fern	VLF	<1%
<i>Asplenium trichomanes</i>	Maidenhair Spleenwort	VLF	<1%
<i>Conyza canadensis</i>	Canadian Fleabane	O	<1%
<i>Cymbalaria muralis</i>	Ivy-leaved Toadflax	LF	<1%
<i>Hedera helix</i>	Ivy	VLF	<1%
<i>Solanum dulcamara</i>	Bittersweet	R	<1%
<i>Taraxacum officinale</i> agg.	Dandelion	O	<1%

¹**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species

8.3 Figures

Figure 1: Aerial Image of the Site and Surrounds

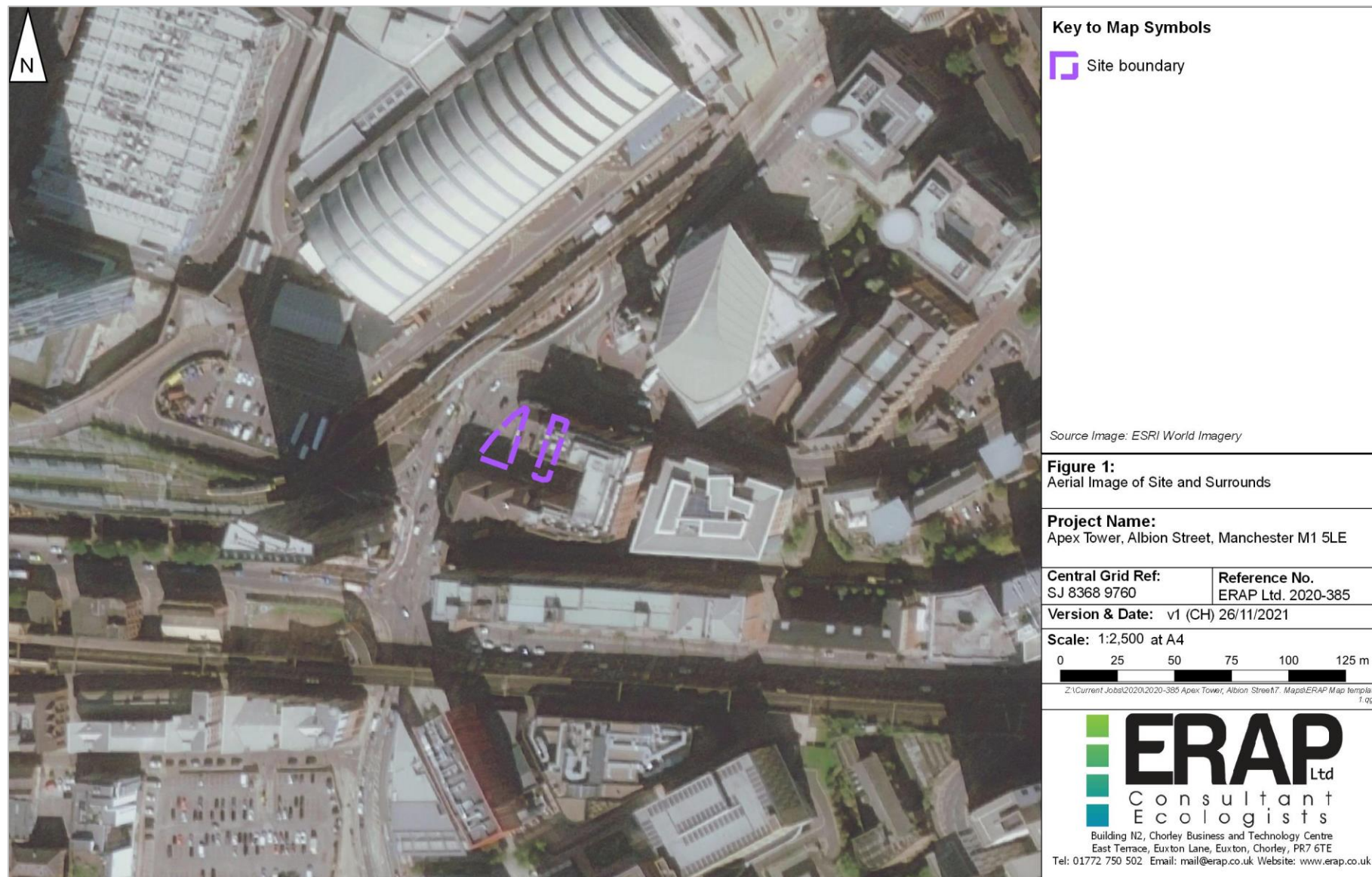


Figure 2: Phase 1 Habitat and Vegetation Map

