Former Tannery Building, Haverigg Road, Millom LA18 4NG

ECOLOGICAL SURVEY AND ASSESSMENT

April 2025

ERAP (Consultant Ecologists) Ltd Reference: 2025-007

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Document Control

Survey Type:	Surveyors[1]	Survey Date(s)
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Daytime Bat Walkover Survey	Victoria Burrows B.Sc. (Hons) M.Sc. CEnv MCIEEM Principal Ecologist	5th March 2025
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Victoria Burrows, Natural England Class Survey Licence (bats, Level 2) Registration Number 2015-10390-CLS-CLS
Barn owl
Victoria Burrows Natural England Class Survey Licence Registration Number CL29/00061

SUMMARY

Introduction and Scope

i. This ecological survey and assessment has been prepared for the former tannery building and surrounds off Haverigg Road, Millom LA18 4NG. The assessment was requested to inform a planning application proposing the demolition of the existing derelict building and use of the site as a storage yard.

ii. This report presents the results of a desktop study, data search, extended Phase 1 Habitat Survey and a licensed bat walkover survey carried out in March 2025. The scope of survey undertaken is appropriate to identify potential ecological constraints, the remit of mitigation required and opportunities for biodiversity associated with the development proposals.

iii. The site comprises a building and an area of unmanaged neutral grassland and Bramble scrub.

Results of Survey and Assessment

iv. Due to the small scale nature of the proposals and the existing land use a direct and indirect adverse effect of the proposals on statutory and non-statutory designated sites for nature conservation is reasonably discounted.

v. None of the habitats are semi-natural habitat, an irreplaceable habitat or a Priority Habitat. The Bramble scrub is of 'site' value owing to its likely use by nesting passerine birds.

vi. No invasive non-native plant species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) were detected within the site.

vii. The Bramble scrub and unmanaged grassland within the site is of 'low' suitability for foraging bats. No evidence of use of the building by roosting bats was found. Due to the absence of potential roost features the building is assessed to be of 'negligible' suitability for roosting bats.

viii. The Bramble scrub is suitable for nesting birds. Measures to protect nesting birds are outlined in **Section 5.2**. A recommendation to enhance the site for nesting birds is outlined at **Section 5.3**.

ix. The Bramble scrub is suitable for sheltering / foraging hedgehog (a Priority Species). Reasonable avoidance measures to protect hedgehog during site clearance works are outlined in **Section 5.2**.

x. 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 required to inform a planning application.

Recommendations and Conclusion

xi. The recommendations in **Section 5.0** outline the mandatory measures and actions to be applied to ensure compliance with wildlife legislation, the National Planning Policy Framework (NPPF) and best practice.

xii. The proposals can be achieved with no risk of an adverse impact on designated sites for nature conservation or ecologically valuable habitats. In the presence of the mandatory actions and best practice measures described in **Section 5.0**, adverse effects on protected species are reasonably discounted.

xiii. The recommendations in **Section 5.3** aim to secure measurable gains for biodiversity that are proportionate to the minor impacts and aim to satisfy the requirements of the National Planning Policy Framework, *Biodiversity Net Gain: Good Practice Principles for Developmen*t (CIEEM, 2016) and best practice.

1.0 INTRODUCTION

1.1 Background and Rationale

1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by Convery Prenty Shields Architects to carry out an ecological assessment of former tannery building off Haverigg Road, Millom LA18 4NG (hereafter referred to as the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SD 16330 79042. An aerial image of the site and its surrounding habitats is appended at **Figure 1** (source image: ESRI World Imagery).

1.1.2 The assessment was requested to inform a planning application proposing the demolition of the existing derelict building and the use of the site as a storage yard.

1.2 Scope of Works

1.2.1 The scope of ecological works undertaken in March 2025 comprised:

a. A desktop study and data search for known ecological information at the site and the local area;

b. An Extended Phase 1 Habitat Survey and assessment, and assessment of the habitats present at the site using the UK Habitats Classification;

c. 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);

d. Survey and assessment of all habitats for relevant statutorily protected species[1] and other wildlife including badger (*Meles meles*), barn owl (*Tyto alba*), bird species and reptiles;

e. A daytime bat walkover survey for bats, which has comprised a licensed preliminary roost assessment of the building and an assessment of the suitability of the habitats within the site and the surrounding area for foraging and commuting bats;

f. 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

g. The identification of any further surveys or precautionary actions that may be required prior to the commencement of site clearance activities.

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

2.0 METHOD OF SURVEY

2.1 Desktop Study and Data Search

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

a. MAGiC Maps: A web-based interactive map which brings together geographic information on key environmental schemes and designations, including details of statutory nature conservation sites;

b. Ancient Tree Inventory (Woodland Trust, 2025): An online database of ancient and veteran trees;

c. Cumbria Biodiversity Data Centre (CBDC); and

d. Cumbria 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 Rachel Brown on 5th March 2025. The weather was dry with sunny intervals, a light air (Beaufort scale 1) and a maximum air temperature of 14°C.

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

2.2.3 On site habitat mapping was assisted via use of GPS technology and QField on-site mapping software, using *Site Plan as Existing. Demolition of Former Tannery Building & Formation of Storage Compounds. The Old Tannery, Haverigg Industrial Estate, Poolside, Haverigg, Millom LA18 4NG. Drawing Number: 2393_00_010* (Convery Prenty Shields Architects, 2024) as a base plan.

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

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

2.2.6 Habitats within the site were assessed in accordance with *The UK Habitat Classification Version 2.0* (UKHab Ltd, 2023). The UK Habitat Classification, or 'UKHab' has been designed to function at two scales of minimum mappable unit (MMU): fine scale (25m^2 or 5 metres length) and large scale (400m^2 or 20 metres length). It has been considered for the purposes of this survey that the fine scale of 25m^2 or 5 metres length MMU is appropriate.

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

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

2.3 Animal Life

Badger

2.3.1 The survey area for badger covered the site (as annotated on **Figure 2**) and extended to accessible land within a radius of 50 metres from the site boundary. Private land was excluded from the survey.

2.3.2 The survey was conducted in accordance with guidance presented within *Badgers and Development* (Natural England, 2007) and Badgers*: advice for making planning decisions* (Natural England, 2022).

2.3.3 The following signs of badger activity were searched for:

a. Sett entrances, e.g. entrances that are normally 25 to 35cm in diameter and shaped like a 'D' on its side;
b. Large spoil heaps outside sett entrances;
c. Bedding outside sett entrances;
d. Badger footprints;
e. Badger paths;
f. Latrines;
g. Badger hairs on fences or bushes;
h. Scratching posts; and
i. Signs of digging for food.

2.3.4 Habitats within and surrounding the site were assessed in terms of their suitability for use by foraging and sheltering badger in accordance with their known habitat preferences as detailed in current guidance and *Badger* (Roper, 2010).

Bat Species

Habitat Assessment for Commuting / Foraging Bats

2.3.5 Habitats within and adjacent to the site were assessed for their value and suitability for commuting and foraging bats in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023). Reference has been made to the categories, descriptions and examples presented in **Table 2.1**.

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

Suitability	Potential Flight Paths and Foraging Habitats
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade / protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible [a]	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.

Suitability	Potential Flight Paths and Foraging Habitats
Low	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
[a] Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).	

Daytime Bat Walkover Survey

Survey Personnel

2.3.6 The site was assessed for its suitability to support roosting bats by Victoria Burrows, Natural England Class Survey Licence WML CL18 (Bat Survey Level 2), Registration Number 2015-10390-CLS-CLS. The surveyor's qualifications and experience meet the criteria as defined in the *Technical Guidance Series Competencies for Species Survey: Bats* (CIEEM, 2013).

Preliminary Roost Assessment of the Building

2.3.7 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 (4th edn)* (Collins, J. (ed), 2023).

2.3.8 An inspection of the external surfaces, walls and roofs of the building 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 carried out.

2.3.9 The internal survey involved an examination of the accessible internal areas to search for roosting bats or evidence of previous use of the building by bats such as droppings and prey remains.

2.3.10 A list of equipment used is detailed in **Table 2.2**.

Table 2.2: Survey Equipment used during Daytime Bat Survey

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

2.3.11 The suitability of the building for use by roosting bats has been assessed in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023), taking into account any presence of gaps suitable for access by bats, features suitable for use by roosting bats within the building (including crevice dwelling species and species which can roost in the open in roof voids), and the suitability of the surrounding habitats for use by foraging and commuting bats. The suitability of each building has been informed by the following categories as presented in **Table 2.3**.

Table 2.3: Suitability Categories for Roosting Habitats in Buildings

Suitability	Description
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices / suitable shelter at all ground / underground levels).
Negligible[a]	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[b] and / or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats[c]).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions[b] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions[b] and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool / stable hibernation site.

[a]Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).
[b]For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.
[c]Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al*., 2016 and Jansen *et al*., 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.

Bird Species

2.3.12 Bird species observed and heard during the survey were recorded.

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

2.3.14 The building was searched for pellets, faecal splashes and feathers which may indicate use by roosting or nesting barn owl and other species with special protection under Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended). The survey was carried out in accordance with methods described in *The Barn Owl Conservation Handbook* (Barn Owl Trust, 2012) and *Barn Owl Tyto alba Survey Methodology*

and Techniques for use in Ecological Assessment. Developing Best Practice in Survey and Reporting (Shawyer, 2011).

Reptile Species

2.3.15 The site and its surroundings were assessed in terms of their suitability for use by reptile species using the important characteristics for reptiles outlined in the draft document *Reptile Mitigation Guidelines* (Natural England, 2011), and the *Reptile Habitat Management Handbook* (Edgar, et al., 2010). These habitat characteristics are outlined in **Table 2.4**.

Table 2.4: Important Habitat Characteristics for Reptiles

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

Other Wildlife

2.3.16 Evidence of other wildlife, including Priority Species, observed whilst on site, but for which specific surveys were not made, was recorded and has been included in this report where it is considered of relevance to the planning application.

2.3.17 Habitats have been assessed for their suitability for Priority Species identified in the data search results where this is considered relevant to the application.

2.4 Survey and Reporting Limitations

2.4.1 The survey was conducted in March, when many plant species are not yet in flower / leaf. The surveyor is experienced in surveying plant species from their vegetative characteristics, and it has been possible to reliably identify the habitats and principal plant species present

2.4.2 The survey was completed outside the bat active season, when any field signs of bats may have weathered from unprotected / unsheltered external elevations of the building. Daytime bat inspections can be completed at any time of year and, if needed, to comply with the guidance as outlined in *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023), further presence / absence surveys are recommended.

2.4.3 No other survey limitations on the intended scope of survey were experienced.

2.4.4 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 Maps and Google Earth.

2.5 Evaluation Methods

2.5.1 The habitats, vegetation and animal life were evaluated with reference to standard nature conservation criteria as described in *A Nature Conservation Review* (Ratcliffe, 1977). These are size (extent), diversity, naturalness, rarity, fragility, typicality, recorded history, position in an ecological or geographical unit, potential value and intrinsic appeal.

2.5.2 Habitats have been assessed to determine whether they meet those described in *UK Biodiversity Action Plan: Priority* Habitat *Descriptions* (Maddock, A (ed), 2008); these lists are used to help draw up the statutory lists of Priority Habitats, as required under Section 41 of the *Natural Environment and Rural Communities* (NERC) *Act 2006*. Where suitable, the ecological value of the habitats present has been assessed using the terms outlined in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018). Each habitat and individual trees have been assessed to determine whether they are 'irreplaceable habitat', defined in *National Planning Policy Framework* (Ministry of Housing, Communities & Local Government, 2024)[2] as '*Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen'*. The further detail presented in *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024* (GOV.UK, 2023) has also been referred to.

2.5.3 Government advice on wildlife, as set out in the NPPF and associated government circulars has been taken into consideration. Legislation relating to protected species, such as those listed under Schedules 1, 5, 6 and 8 of the *Wildlife and Countryside Act 1981* (as amended) and *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*, is referenced where applicable, and any impacts to protected species are evaluated in accordance with current guidance.

2.5.4 The presence of any Priority Species, as listed under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006* is noted, and habitats are assessed in terms of their suitability and value for these species. The presence of habitats and / or species listed by the Cumbria Biodiversity Action Plan has been taken into account in the evaluation of the site.

3.0 SURVEY RESULTS

3.1 Desktop Study and Data Search

Statutory Designated Sites for Nature Conservation and SSSI Impact Risk Zones

3.1.1 The site is not and does not form part of any statutory designated site for nature conservation.

3.1.2 The site lies within a Site of Special Scientific Interest (SSSI) Impact Risk Zone for the overlapping Duddon Estuary SSSI, Morecambe Bay Special Area of Conservation (SAC), Duddon Estuary Ramsar and Morecambe Bay and Duddon Estuary Special Protection Area (SPA) located 285 metres to the south. The sites are designated for the presence of diverse habitats including sand plain, saltmarsh and sand dune. The Duddon Estuary is of international and national importance for wintering wildfowl and waders and provides a vital link in the chain of west coast estuaries used by migrating birds, as well as being of particular importance as one of a series of estuaries on the north-west coast where the majority of the British population of Natterjack Toads (*Bufo calamita*) occur. The sand dune systems are particularly important for a diverse range of community types, supporting a number of rare and uncommon plants, as well as a variety of nationally rare and scarce invertebrate species.

3.1.3 The SSSI Impact Risk Zone requires the Local Planning Authority to consult with Natural England on likely risks from the following development categories (Natural England, 2025):

[2]Hereafter the NPPF

a. **All Consultations:** All planning applications (except householder applications) where the proposed development is outside or extends outside existing settlements / urban areas and will increase lighting levels or affect greenspace, farmland, semi natural habitats, trees / woodland, waterbodies, rural buildings / structures (manmade or natural) or linear landscape features such as hedgerows, streams and rivers through direct loss, fragmentation or change of use.

b. **Infrastructure:** Pipelines and underground cables, pylons and overhead cables (excluding upgrades and refurbishment of existing network). Any transport proposal including new or extended footways, cycleways, roads / car parks, railways and waterways (excluding routine maintenance). Airports, helipads and other aviation proposals.

c. **Wind and Solar:** Solar schemes with a footprint greater than 0.5 hectare, all wind turbines.

d. **Minerals, Oil and Gas:** Planning applications for quarries, including: new proposals, Review of Minerals Permissions, extensions, variations to conditions etc. Oil and gas exploration / extraction.

e. **Rural Non-Residential:** Large non-residential developments outside of existing settlements / urban areas where the net additional gross internal floorspace is greater than 1,000m² or the footprint exceeds 0.2 hectare.

f. **Residential:** Residential development of 10 units or more.

g. **Rural Residential:** Any residential developments outside of existing settlements / urban areas with a total net gain in residential units.

h. **Air Pollution:** Any development that could cause air pollution (including: industrial / commercial processes, livestock and poultry units, slurry lagoons / manure stores).

i. **Combustion:** All general combustion processes. Including: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis / gasification, anaerobic digestion, sewage treatment works, other incineration / combustion.

j. **Waste:** Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management.

k. **Compost:** Any composting proposal. Including: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.

l. **Discharge:** Any discharge of water or liquid waste that is discharged to ground (i.e. to seep away) or to surface water, such as a beck or stream.

3.1.4 The proposals do not meet the development category which would require further consultation with Natural England on likely risks from the proposed development to the statutory designated sites for nature conservation present in the wider area. The SSSI IRZ states: "*The Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) indicate that at the location selected, the proposed development is unlikely to have a harmful effect on terrestrial Sites of Special Scientific Interest (SSSIs) and the Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin. Therefore, you do not need to consult Natural England on the likely impacts of development on terrestrial SSSIs and the SACs, SPAs or Ramsar sites that they underpin*".

Non-statutory Designated Sites for Nature Conservation

3.1.5 The site is not and does not form part of any non-statutory designated site for nature conservation.

3.1.6 Non-statutory designated sites in Cumbria include County Wildlife Sites, Local Geological Sites, Sites of Invertebrate Significance and Ancient Woodland. Non-statutory designated sites located within a 2 kilometres radius from the centre of the site are summarised in **Table 3.1**.

Table 3.1: Non-statutory Designated Sites Within a 2 Kilometres Radius from the Centre of the Site

Name	Designations	Distance and Direction from the Site
Hodbarrow Lagoon and RSPB Reserve	Sites of Invertebrates Significance	0.39 kilometres south-east
Haverigg Haws	Sites of Invertebrates Significance	0.44 kilometres to the south-west
Hodbarrow Point	Local Geological Sites	1.04 kilometres south-east
Beck Wood (Millom)	County Wildlife Site and Ancient Woodland	1.68 kilometres north
Millom Marsh	County Wildlife Site	1.82 kilometres north-east

3.1.7 The presence of the non-statutory designated sites is considered further at **Section 4.2**.

Priority Habitats Inventory

3.1.8 The Priority Habitats Inventory[3] was checked via MAGiC Maps. No Priority Habitats are identified at or adjacent to the site by the Inventory.

Ancient Tree Inventory

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

Bat Species

3.1.10 Cumbria Biodiversity Data Centre (CBDC) hold no records of bat species for the site.

3.1.11 Records of bat species for a 2 kilometres radius from the centre of the site are summarised in **Table 3.2**.

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

Species Name and Designations[1] and Notes
Bat (Order *Chiroptera*): EPS, WCAs5 & LBAP. 5 records, dated between 1990 and 2014. The closest record is 1200 metres to the north and from 2014.
Natterer's bat (*Myotis nattereri*): EPS, WCAs5 & LBAP. 1 record from 2004. An accurate estimation of the location of the record in relation to the site cannot be made due to the locational data being less than a six figure grid reference.
Pipistrelle (*Pipistrellus pipistrellus*): EPS, WCAs5 & LBAP. 22 records, dated between 2005 and 2014. The closest record is 755 metres to the west and from 2014.
Common pipistrelle (*Pipistrellus pipistrellus*): EPS & WCAs5. 6 records, dated between 2002 and 2012. The closest record is 940 metres to the north-west and from 2012.
[1]Key to Designation Codes: EPS = European Protected Species under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. WCAs5 = Species receives full protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). PS = Priority Species listed under Section 41 of the NERC Act 2006. LBAP = Species listed on the Cumbria Biodiversity Action Plan.

3.1.12 The presence of bat species within the wider area has been taken into account throughout this report.

[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.

3.2 Vegetation and Habitats

General Description

3.2.1 The approximately 0.07 hectare site is located on the outskirts of the village of Haverigg, Millom and comprises a vacant derelict building and an area of unmanaged neutral grassland and Bramble scrub.

3.2.2 The northern site boundary is defined by the northern elevation of the building beyond which lies hardstanding and operational commercial buildings. The eastern site boundary is defined by an unnamed road beyond which lies grassland fields. Land to the south and west is characterised by hardstanding and other buildings.

3.2.3 A Phase 1 Habitat Survey map is appended at **Figure 2**. Photographs are appended in **Section 8.2**.

Building

3.2.4 The building is described in terms of its suitability for use by roosting bats in **Section 3.3**. The building has sparse rupestral vegetation characterised by occasional Butterfly-bush (*Buddleja davidii*), Maidenhair Spleenwort (*Asplenium trichomanes*), Common Polypody (*Polypodium vulgare*) and Hart's Tongue-fern (*Asplenium scolopendrium*) and locally frequent Red Fescue (*Festuca rubra*). The building is described by UKHab as u1b5 buildings.

Unmanaged Neutral Grassland

3.2.5 Refer to **Photo 1**. The neutral grassland is unmanaged and is characterised by frequent and locally abundant Perennial Rye-grass (*Lolium perenne*) and Ribwort Plantain (*Plantago lanceolata*), frequent Creeping Bent (*Agrostis stolonifera*), occasional and locally abundant Cock's-foot (*Dactylis glomerata*), Yorkshire-fog (*Holcus lanatus*), Rough Meadow-grass (*Poa trivialis*), Creeping Buttercup (*Ranunculus repens*) and Bramble (*Rubus fruticosus* agg.), occasional and locally frequent Crested Dog's-tail (*Cynosurus cristatus*), Cleavers (*Galium aparine*), Common Ragwort (*Senecio jacobaea*), Dandelion (*Taraxacum officinale* agg.) and White Clover (*Trifolium repens*), occasional False Oat-grass (*Arrhenatherum elatius*) and Broad-leaved Dock (*Rumex obtusifolius*), rare Dog-rose (*Rosa canina*) and Common Hogweed (*Heracleum sphondylium*). A plant species list is appended at **Table 8.1**.

3.2.6 The grassland has affinities with the MG6 *Lolium perenne – Cynosurus cristatus* NVC community (Rodwell, 1992), and is described by the UKHab as g4 modified grassland with the secondary code 518 neglected (unmanaged for 3 to 10 years).

Bramble Scrub

3.2.7 Refer to **Photo 2**. The Bramble scrub has encroached over the grassed verge due to lack of recent management. The scrub is characterised by dominant Bramble, locally frequent Hawthorn (*Crataegus monogyna*) and rare Dog-rose. The understorey is typically bare soil with occasional and locally abundant Common Nettle (*Urtica dioica*) and Yorkshire-fog and occasional Creeping Bent. The Bramble scrub is characteristic of an W24 *Rubus fruticosus – Holcus lanatus* underscrub NVC community (Rodwell, 1991), and is described by the UKHab as h3d Bramble scrub with the secondary code 518 neglected (unmanaged for 3 to 10 years).

Invasive Plant Species

3.2.8 No invasive non-native plant species listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) were detected within the site.

3.3 Animal Life

Badger

3.3.1 No badger or signs of badger were detected within the site. The small (0.0188ha) area of unmanaged grassland is of limited suitability for foraging badger. The presence of badger is reasonably discounted.

Bat Species

Habitat Assessment for Commuting and Foraging Bats

3.3.2 The small area of unmanaged grassland and Bramble scrub within the site is unlikely to provide an abundance or diversity of invertebrate prey, and the site does not contain any trees or waterbodies and has poor connectivity to habitats in the wider area. The site is therefore considered to be of 'low' suitability for use by foraging bats.

Daytime Survey: Building

3.3.3 Refer to **Photos 3** to **14**. The derelict building is a single storey steel and timber framed structure with brick and concrete block elevation walls with decorative concrete sections. A recessed porch is present in the centre of the eastern elevation. The hipped roofs on each end have corrugated sheet coverings. The central section has a flat roof.

3.3.4 The eastern elevation has timber framed windows and the timber framed doorway; no gaps or opportunities for bat access were found around the frames.

3.3.5 Occasional cracks in the external brickwork, particularly at the north-eastern corner were examined at height with an endoscope (refer to **Photos 6** and **8**). No bats or evidence of use by bats such as droppings were found. The cracks are shallow (less than 0.07m deep) and do not permit access to a deeper cavity or crevice. In many areas the gaps are damp due to rainwater ingress.

3.3.6 Inspection of the internal areas confirmed that the extent of the dilapidation and water ingress. Due to the presence of skylights and windows the internal areas beneath the sections with hipped corrugated sheet covered roofs at the northern and southern ends of the building are illuminated by daylight. The concrete block walls throughout the internal areas of the building are well-mortared and no gaps or suitable opportunities for bat access were found. No bats or bat droppings were found inside the building.

3.3.7 Due to the absence of suitable potential roost features and the exposed and dilapidated condition the building is assessed to be of 'negligible' suitability for use by roosting bats.

Bird Species

3.3.8 Birds detected in the site and immediate surrounds on 5th March 2025 are listed in **Table 3.3**.

Table 3.3: Bird Species Detected on 5th March 2025

Scientific Name	Common Name	BOCC Status[1]	Location
Carduelis carduelis	Goldfinch	Green	Within vegetation to the east
Columba livia	Feral pigeon	Green	Nesting in the building
Corvus monedula	Jackdaw	Green	Flying over buildings to the south-west
Parus caeruleus	Blue tit	Green	Within vegetation to the east
Passer domesticus	**House sparrow**	**Red**	**In Bramble scrub within the site**
Sturnus vulgaris	**Starling**	**Red**	**Perched on buildings to south-west**
Turdus merula	Blackbird	Green	Within vegetation to the east

[1]BOCC: Birds of Conservation Concern (Stanbury, et al., 2021).
Priority Species are presented in **bold**.

3.3.9 The building is used by nesting and roosting feral pigeon. The Bramble scrub is suitable for use by nesting passerine (i.e. perching) species. This is considered further at **Section 4.4**, below.

Barn Owl / Schedule 1 Bird Species

3.3.10 No evidence of the current or previous use of the building by nesting or roosting barn owl or other Schedule 1 listed bird species were found.

Reptiles

3.3.11 The small area of habitat within the site provides poor quality habitat for sheltering, basking and hibernating reptiles. There are no piles of garden waste or other suitable debris for use by sheltering or hibernating reptiles.

3.3.12 The site is not adjacent or linked to any areas of favourable habitat for reptile species. The presence of reptiles within the site is reasonably discounted.

Other Wildlife

3.3.13 The site may be traversed by hedgehog (*Erinaceus europaeus*), a Priority Species and best practice guidance to be applied prior to and during site clearance and construction operations are described in **Section 5.2**.

4.0 EVALUATION AND ASSESSMENT

4.1 Introduction and Description of Proposals

4.1.1 It is proposed to demolish the existing building and use the site as a storage yard, refer to *Site Plan as Proposed. Demolition of Former Tannery Building & Formation of Storage Compounds. The Old Tannery, Haverigg Industrial Estate, Poolside, Haverigg, Millom LA18 4NG. Drawing Number: 2393_00_0100* (Convery Prenty Shields Architects, 2024).

4.1.2 **Section 4.2** provides an assessment of any impacts of the proposed development on the designated sites for nature conservation present in the wider area. The ecological value of habitats within the site are 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 small site does not contain any habitats that are complementary to the habitats in in the designated sites for the nature conservation in the wider area. The site has no habitat or hydrological connectivity to any non-statutory designated sites for nature conservation in the wider areas and adverse impacts on non-statutory designated sites are reasonably discounted.

4.2.2 It is considered that the site is sufficiently small and distant from the known statutory designated sites for nature conservation that the proposed development will have no direct or indirect impact on the sites and their features of special interest.

4.3 Vegetation and Habitats

4.3.1 Only common and widespread plant species were found. None of the habitats present are representative of semi-natural habitat, irreplaceable habitat or Priority Habitat. The NVC communities present are typical of the geographical area and the unmanaged conditions present.

4.3.2 In terms of each habitat's importance in a geographical context[4], the Bramble scrub is of 'site' value only owing to its likely use by nesting passerine birds. The building and verge of neutral grassland are not considered to hold any importance on a geographical scale.

4.4 Protected Species and Other Wildlife

Bats

4.4.1 Habitats within and adjacent to the site are suitable for foraging and commuting bats. Recommendations to avoid an adverse impact on the suitability of the adjacent habitats for use by foraging bats in the presence of the storage yard are outlined in **Section 5.2**.

4.4.2 No evidence of the current or previous use of the building by roosting bats was detected during the survey. No further surveys at the building are required to inform the planning application; the presence of roosting bats is reasonably discounted at the building.

Nesting Birds

4.4.3 The Bramble scrub and building provide a small area of foraging and nesting habitat for the species of birds detected within the site and the wider area. The nesting opportunity, particularly at the Bramble scrub, will be lost from the site in the presence of the proposals. Mandatory measures for the protection of nesting birds and for compliance with relevant wildlife legislation are outlined in **Section 5.2**. Recommended compensatory measures / enhancements for Priority Species of bird are presented at **Section 5.3** of this report.

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

Other Animal Life Including Hedgehog

4.4.4 Appropriate survey effort and / or assessment in accordance with standard guidance, has been carried out to reasonably discount adverse effects on other relevant protected species; no further surveys are required to inform the planning application. Best practice guidance for the protection of wildlife, such as visiting hedgehog, to be applied prior to and during site clearance and construction operations are described in **Section 5.2**.

5.0 RECOMMENDATIONS AND ECOLOGICAL ENHANCEMENT

5.1 Introduction

5.1.1 The recommendations described below are appropriate and proportionate to the scale of the proposals and aim to ensure that the proposals are implemented in accordance with the mitigation hierarchy, relevant wildlife legislation, Natural England guidance, the principles of the *National Planning Policy Framework* (NPPF) (Ministry of Housing, Communities & Local Government, 2024), local planning policy and best practice.

5.1.2 All recommendations are appropriate to the geographical area, are proportionate to the baseline conditions at the site and take into consideration the end use of the site as a storage yard.

5.2 Protection of Habitats and Wildlife

Lighting in Relation to Bats

5.2.1 Paragraph 198(c) in Chapter 15 (conserving and enhancing the natural environment) of the NPPF states that development should:

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

5.2.2 If the storage yard will have artificial lighting it is advised that the lighting scheme must involve the use of appropriate products and screening / timers, where necessary, to ensure no excessive artificial lighting shines over the adjacent habitat, as lighting overspill may deter use by wildlife such as foraging bats.

5.2.3 The lighting scheme will be designed with reference to current guidance, namely:

a. *Guidance Note 08/23: Bats and Artificial Lighting at Night* (Institution of Lighting Professionals & Bat Conservation Trust, 2023); and

b. *Bats and lighting: Overview of current evidence and mitigation guidance* (Stone, 2014).

Protection of Nesting Birds

5.2.4 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are breeding. Any works such as vegetation clearance that will affect habitats suitable for use by nesting birds 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.

5.2.5 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.

Feral Pigeon

5.2.6 In the instance of the presence of nesting feral pigeon, the works may commence under the reliance on the General Licence 41 issued by the Secretary of State[5] and is only applicable if it can be demonstrated that Condition 1 of the licence is of relevance.

5.2.7 In relation to the reliance on General Licence 41, and for the avoidance of doubt, the following information is recorded:

- The site / building does not lie within or adjacent to a Site of Special Scientific Interest (SSSI);
- The site does not lie within a European designated site (as listed on the licence) or its buffer zone; and
- It is not proposed to trap or shoot birds under this method statement / licence.

Reasonable Avoidance Measures for the Protection of Hedgehog / Wildlife

5.2.8 Notwithstanding the measures to be applied in relation nesting birds, during the site clearance works and construction operations it is essential that the following best practice and Reasonable Avoidance Measures Method Statement (RAMMS) are applied for the protection of wildlife:

a. All site personnel must be made aware of this RAMMS and best practice guidance;

b. Clerance of the dense Bramble must be carried out carefully and under observation of site personnel to search for hedgehog. It is recommended that the Bramble scrub is cleared and prior to the demolition of the building

c. To avoid the creation of suitable habitat for the attraction of sheltering hedgehog and other wildlife, construction materials must not be accumulated on site and all waste must be transferred to skips;

d. Where practical, any pipes must be stored with caps on (to prevent entry by wildlife);

e. No fires must be lit at the site;

f. Deep trenches / excavations must not be left open overnight. Trenches or holes must be fitted with a means of escape (such as ramped edge or a sloping plank of timber). This will ensure that any inquisitive animals do not become trapped. All holes and trenches must be checked for wildlife prior to backfilling;

g. The use of chemicals (such as fertiliser and herbicides) harmful to wildlife should be avoided wherever possible;

h. If a hedgehog or other wildlife (subject to species) is detected within the working area, it must be carefully picked up, placed in a clean bucket and moved to an area of suitable habitat beyond the operational construction site boundary.

[5] Available at https://www.gov.uk/government/publications/wild-birds-licence-to-kill-or-take-for-public-health-or-safety-gl41/gl41-general-licence-to-kill-or-take-certain-species-of-wild-birds-to-preserve-public-health-or-public-safety

5.3 Ecological Enhancements

Nesting Birds: House Sparrow

5.3.1 House sparrows are associated with suburban areas. Monitoring suggests a severe decline in the UK house sparrow population, estimated as dropping by 71 per cent between 1977 and 2008 with large falls in both rural and urban populations (RSPB, 2023).

5.3.2 To secure benefits for biodiversity as part of the proposals and to comply with the principles of the NPPF, the installation of one house sparrow terrace nest boxes is recommended at the eastern elevation of the off-site building to be retained (within the client's ownership). It is understood that this eastern wall will be rebuilt when the demolition has been carried out. The box will not be positioned over windows or doorways where droppings may become a nuisance. RSPB advice states that boxes should ideally be sited facing north to east, to avoid exposure to direct sunlight, which may cause overheating of chicks in the nest.

5.3.3 House sparrow boxes are available from the NHBS (www.nhbs.com) or Wild Care (www.wildcare.co.uk). An example of a suitable house sparrow bird box is given below at **Insert 1**.

Insert 1: Schwegler 1SP House Sparrow Nesting Terrace

6.0 CONCLUSION

6.1 This ecological survey and assessment has demonstrated that the proposals at the former tannery building, Haverigg Road are feasible and acceptable in accordance with ecological considerations and the National Planning Policy Framework (NPPF).

6.2 The proposals can be achieved with no risk of an adverse impact on designated sites for nature conservation or ecologically valuable habitats. In the presence of the mandatory actions and best practice measures described in **Section 5.0**, adverse effects on protected species are reasonably discounted.

6.3 The recommendations in **Section 5.3** aim to secure measurable gains for biodiversity to satisfy the requirements of the National Planning Policy Framework, *Biodiversity Net Gain: Good Practice Principles for Development* (CIEEM, 2016) and best practice.

7.0 REFERENCES

Bainbridge, I. et al., 2013. *Guidelines for the Selection of Biological SSSIs.* Peterborough: Joint Nature Conservancy Council.

Barn Owl Trust, 2012. *Barn Owl Conservation Handbook.* Exeter: Pelagic Publishing.

CIEEM, 2013. *Technical Guidance Series Competencies for Species: Bats.* Winchester: Chartered Institute of Ecology and Environmental Management.

CIEEM, 2016. *Biodiversity Net Gain: Good Practice Principles for Development,* Winchester: CIEEM.

CIEEM, 2018. *Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1,* Winchester: Chartered Institute of Ecology and Environmental Management.

Collins, J. (ed), 2023. *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn).* London: The Bat Conservation Trust.

Convery Prenty Shields Architects, 2024. *Site Plan as Existing. Demolition of Former Tannery Building & Formation of Storage Compounds. The Old Tannery, Haverigg Industrial Estate, Poolside, Haverigg, Millom LA18 4NG. Drawing Number: 2393_00_010,* Glasgow: Convery Prenty Shields Architects.

Convery Prenty Shields Architects, 2024. *Site Plan as Proposed. Demolition of Former Tannery Building & Formation of Storage Compounds. The Old Tannery, Haverigg Industrial Estate, Poolside, Haverigg, Millom LA18 4NG. Drawing Number: 2393_00_0100,* Glasgow: Convery Prenty Shields Architects.

Edgar, P., Foster, P & Baker, J., 2010. *Reptile Habitat Management Handbook.* Bournemouth: Amphibian and Reptile Conservation.

GOV.UK, 2023. *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024.* [Online]
Available at: https://www.gov.uk/government/publications/the-biodiversity-gain-requirements-irreplaceable-habitat-regulations-2024
[Accessed 2025].

Institution of Lighting Professionals & Bat Conservation Trust, 2023. *Guidance Note 08/23: Bats and Artificial Lighting at Night.* [Online]
Available at: https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/
[Accessed 2025].

JNCC, 2010. *Handbook for Phase 1 Habitat Survey: A technique for Environmental Audit.* Peterborough: NCC.

Legislation.gov.uk, 1981. *Wildlife and Countryside Act.* [Online]
Available at: https://www.legislation.gov.uk/ukpga/1981/69
[Accessed 2025].

Legislation.gov.uk, 2006. *Natural Environment and Rural Communities Act.* [Online]
Available at: https://www.legislation.gov.uk/ukpga/2006/16/contents
[Accessed 2025].

Legislation.gov.uk, 2019. *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations.* [Online]
Available at: https://www.legislation.gov.uk/ukdsi/2019/9780111176573
[Accessed 2025].

Maddock, A (ed), 2008. *UK Biodiversity Action Plan: Priority Habitat Descriptions.* [Online]
Available at: http://jncc.defra.gov.uk/page-5718

Ministry of Housing, Communities & Local Government, 2024. *National Planning Policy Framework.* London: H.M.S.O.

Mitchell-Jones, A., 2004. *Bat Mitigation Guidelines.* Peterborough: English Nature.

Mitchell-Jones, A. J. & Mcleish, A. P., 2004. *Bat Workers' Manual, 3rd Edition.* Peterborough: Joint Nature Conservation Committee.

Natural England, 2007. *Badgers and Development,* Peterborough: Natural England.

Natural England, 2011. *The Reptile Mitigation Guidelines.* Peterborough: Natural England.

Natural England, 2022. *Badgers: advice for making planning decisions.* [Online]
Available at: https://www.gov.uk/guidance/badgers-advice-for-making-planning-decisions
[Accessed 2025].

Natural England, 2025. *Impact Risk Zones for Sites of Special Scientific Interest.* [Online]
Available at:
https://irz.geodata.org.uk/IRZ/step2.html?irzcode=3111221211120&notes=&location=316546,479126%20%20(IRZ%20polygon%20centre)
[Accessed 2025].

Office of the Deputy Prime Minister, 2005. *Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within The Planning System,* London: Office of the Deputy Prime Minister.

Ratcliffe, D. A., 1977. *A Nature Conservation Review.* Cambridge: Cambridge University Press.

Rodwell, J. S., 1991. *British Plant Communities: Volume 1, Woodlands and Scrub.* Cambridge: Cambridge University Press.

Rodwell, J. S., 1992. *British Plant Communities: Volume 3, Grasslands and Montane Communities.* Cambridge: Cambridge University Press.

Roper, T., 2010. *Badger (Collins New Naturalist Library, Book 114).* Glasgow: Harper Collins.

RSPB, 2023. *House Sparrow.* [Online]
Available at: https://www.rspb.org.uk/birds-and-wildlife/house-sparrow
[Accessed 2025].

Shawyer, C., 2011. *Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment. Developing Best Practice in Survey and Reporting,* Winchester: IEEM.

Stace, C. A., 2010. *New Flora of the British Isles 3rd Edition.* Cambridge: Cambridge University Press.

Stanbury, A. et al., 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds,* Issue 108, pp. 723-747.

Stone, E. L., 2014. *Bats and Lighting: Overview of current evidence and mitigation guidance.* Bristol: University of Bristol.

UKHab Ltd, 2023. *The UK Habitat Classification Version 2.0 (at https://www.ukhab.org),* Stockport: UKHab Ltd.

Woodland Trust, 2025. *Ancient Tree Inventory.* [Online]
Available at: https://ati.woodlandtrust.org.uk/
[Accessed 2025].

8.0 APPENDIX 1: TABLES AND FIGURES

8.1 Plant Species List

Table 8.1: Plant Species List for Unmanaged Neutral Grassland

Scientific Name	Common Name	DAFOR[1]	Cover
Woody Species			
Rosa canina	Dog-rose	R	<1%
Herb Species			
Agrostis stolonifera	Creeping Bent	F	15%
Arrhenatherum elatius	False Oat-grass	O	5%
Bellis perennis	Daisy	O/LA	<1%
Carex pendula	Pendulous Sedge	R	<1%
Cerastium fontanum	Common Mouse-ear	R	<1%
Cynosurus cristatus	Crested Dog's-tail	O/LF	5%
Dactylis glomerata	Cock's-foot	O/LA	10%
Festuca rubra	Red Fescue	O/VLF	<1%
Galanthus nivalis	Snowdrop	VLF	<1%
Galium aparine	Cleavers	O/LF	<1%
Heracleum sphondylium	Hogweed	R	<1%
Holcus lanatus	Yorkshire-fog	O/LA	10%
Hyacinthoides non-scripta	Bluebell	VLF	<1%
Lolium perenne	Perennial Rye-grass	F/LA	20%
Narcissus pseudonarcissus	Daffodil	VLF	<1%
Plantago lanceolata	Ribwort Plantain	F/LA	5%
Poa annua	Annual Meadow-grass	LF	<1%
Poa trivialis	Rough Meadow-grass	O/LA	10%
Ranunculus repens	Creeping Buttercup	O/LA	5%
Rubus fruticosus agg.	Bramble	O/LA	10%
Rumex obtusifolius	Broad-leaved Dock	O	<1%
Senecio jacobaea	Common Ragwort	O/LF	<1%
Taraxacum officinale agg.	Dandelion	O/LF	5%
Trifolium repens	White Clover	O/LF	<1%

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

8.2 Photographs

Table 8.2: Photographs

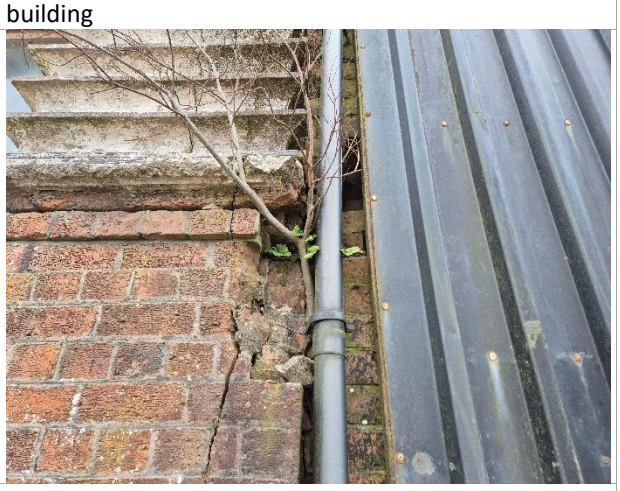
	
Photo 1: Verge of unmanaged neutral grassland to the east of the building	**Photo 2:** Bramble scrub to the east of the building
	
Photo 3: Southern and eastern elevations of the building	**Photo 4:** Eastern and northern elevations of the building
	
Photo 5: Western elevation of the building	**Photo 6:** Gaps in external brickwork were inspected at height with an endoscope and torch; no bats or evidence of use by roosting bats. Gaps are damp owing to water ingress.

Photo 7: No gaps or potential roost features at timber doorways or beneath porch canopy

Photo 8: Gaps in external brickwork were inspected at height with an endoscope and torch; no bats or evidence of use by roosting bats. Gaps are damp owing to water ingress.

Photo 9: Interior of northern section showing skylights

Photo 10: Well pointed internal concrete block walls; no potential roost features

Photo 11: Ceiling beneath flat-roofed section; extensive areas of water ingress

Photo 12: Beneath ceiling at flat roofed section. Timber planks at wall tops cover any holes at the top of the concrete block wall

Photo 13: Occasional gaps in internal walls were inspected

Photo 14: Interior of the southern portion

8.3 Figures

Figure 1: Aerial Image of the Site and its Surroundings

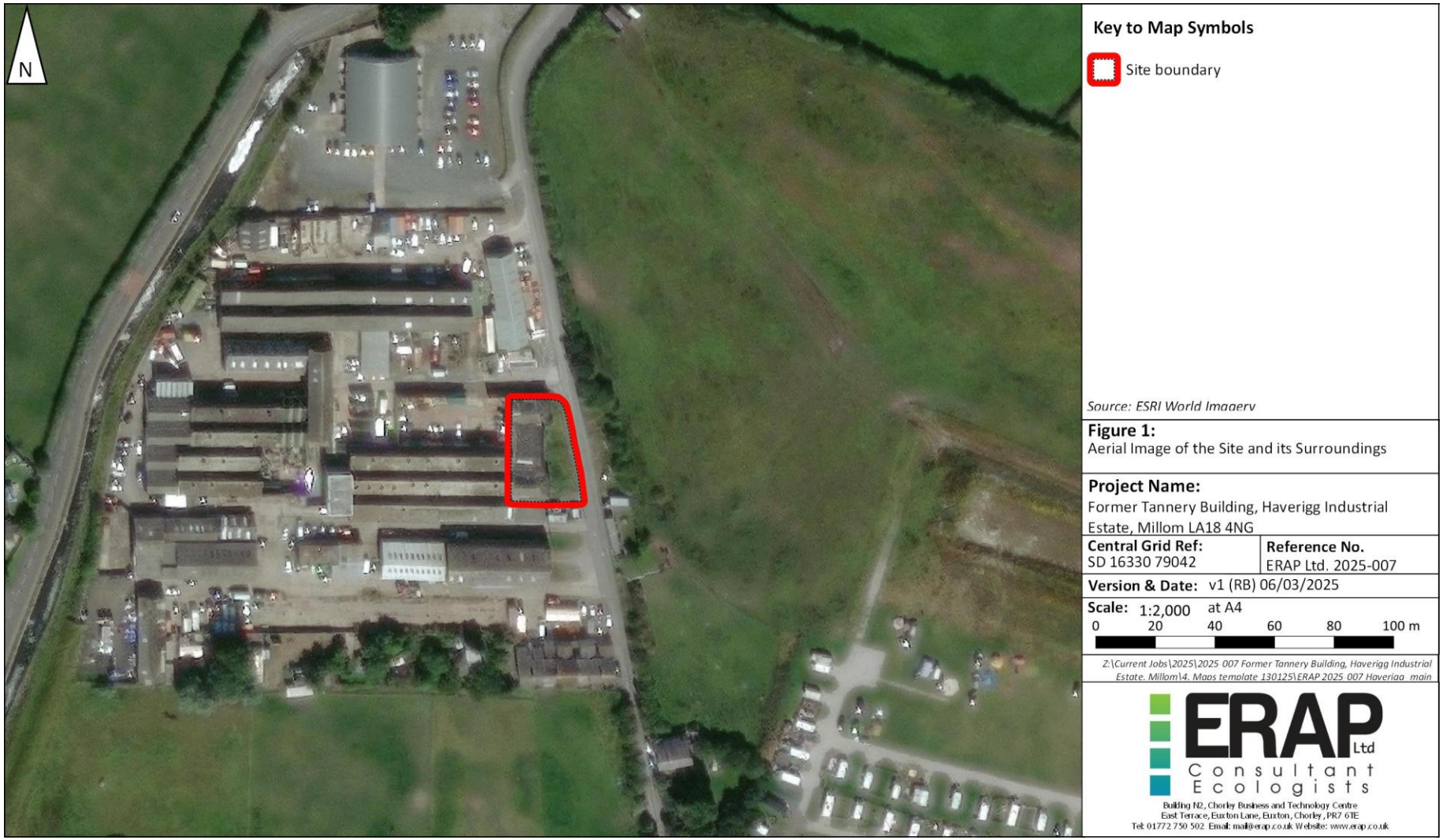


Figure 2: Phase 1 Habitat Vegetation Map of the Site