

# Ascerta

Landscape, Arboricultural & Ecological Solutions  
for the Built Environment

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## Preliminary Ecological Appraisal

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Former Mondi Site  
(Site 1),  
Holcombe Mill,  
Bridge Street,  
Ramsbottom,  
BL0 0BS  
Ref: P.1202.19

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August 2019  
(see revision dates below)

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**P.1202.19**

**Preliminary Ecological Appraisal**

**Of**

**Former Mondi Site (Site 1),  
Holcombe Mill,  
Bridge Street,  
Ramsbottom,  
BL0 0BS**

**For**

**Eccleston Homes Ltd**

**14 August 2019**

|                                 |                                               |
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## EXECUTIVE SUMMARY

A Preliminary Ecological Appraisal has been carried out at Former Mondi Site, Holcombe Mill, Bridge Street, Ramsbottom, BL0 OBS on 1<sup>st</sup> July 2019 by Tosha Allen and Liz Kenyon. The assessment comprised a desk study, biological records search and a site walkover survey in order to map habitat types. The survey was extended to assess the potential for protected species to use the site. The assessment provides baseline data as to current site conditions and where appropriate allows recommendations to be made in respect of further potential work in order to satisfy current wildlife legislation.

The site comprises three buildings and a chimney. The habitats on the site comprise dense scrub, introduced scrub, broadleaved scattered trees, amenity grassland, semi improved grassland, semi natural broadleaved woodland, tall ruderal and two water courses.

Assessed against the '*Guidelines for Ecological Impact Assessment in the UK and Ireland*' 2nd edition (2018), the habitats range in ecological value from **negligible** to **within the zone of influence** of the site. Some habitats are likely to be lost to the proposals. It is considered that the loss of habitats can be mitigated for and the proposals will not adversely affect the ecological value of the wider area, provided that the recommendations detailed below are followed.

The site provides habitat for nesting birds, badger, bats, otter, water vole and white-clawed crayfish. Provided the recommendations below are followed these species will not be adversely affected by the proposals.

The recommendations, if fully implemented, will enable the proposals to meet the requirements of national and local guidance and legislation including the NPPF and Policy EN6 of the Bury Council Unitary Development Plan (UDP).

### Recommendations

1. Water vole and otter surveys are to be undertaken on the River Irwell and the stream within the site to assess the potential impacts on these species.
2. An assessment of the water courses for their potential to support White-clawed crayfish are recommended to assess the potential impacts on this species.
3. Avoiding vegetation removal or demolition of buildings during the bird breeding season (1 March to 31 August inclusive) or undertaking a survey for breeding birds and ensuring that any active nests found are protected within a suitable buffer zone until they are no longer in use;
4. Control of the invasive species Himalayan balsam, wall cotoneaster and Japanese knotweed to stop it from spreading into the wild during development works;
5. Prior to works being undertaken on the buildings and the chimney on site, an updated building inspection for bats is required to fully assess their suitability to support a bat roost.
6. Prior to the removal of the lime tree with moderate bat roost potential, two nocturnal bat surveys are to be carried out on the tree between May and September in suitable weather conditions, to confirm if bats are using the tree as a roost.
7. If trees with low bat roost potential require felling, soft felling is recommended to avoid impact on bats that may use the tree as a roost opportunistically.
8. Mitigation for the loss of nesting bird habitat with the provision of two open fronted nest boxes, one house sparrow terrace and one swift nest box.

9. The use of Reasonable Avoidance Measures (RAM's) in relation to hedgehog, to include hand clearing the brash pile and scrub and storage of construction materials on pallets to avoid harm to hedgehog;
10. To enable hedgehog continued use of the site it is advised that gaps of at least 13cm by 13cm are left under any new garden fences following development;
11. Provision of a hedgehog hibernaculum on site to mitigate for loss of suitable habitat;
12. Lighting sensitive to the needs of bats, designed to avoid overspill onto the scattered trees present on site; and
13. If trees with bat roost potential are removed, replacement roosting features (one bat box / bat brick) is to be installed on retained trees and / or retained / new buildings within the site.

## 1.0 Introduction

Ascerta has been instructed by Eccleston Homes to carry out a preliminary ecological assessment of land at Former Mondi Site, Holcombe Hill, Bridge Street, Ramsbottom, BL0 0BS (hereafter referred to as the site). The site OS grid reference is SD 793 616.

Our client seeks planning consent to develop 60 residential buildings, consisting of 18 apartments, 15 town houses, 8 semi-detached and 19 detached.

The site was visited on 1<sup>st</sup> July 2019 by Tosha Allen and Liz Kenyon, when a Preliminary Ecological Appraisal, which includes an assessment of the potential for protected species to be using the site or surroundings, was carried out in accordance with the *Handbook for Phase 1 Habitat Survey: a Technique for Environmental Audit* (JNCC, 2010). The report was prepared following methods detailed in the CIEEM 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (2018) and 'Guidelines for Ecological Report Writing' (2017). This report presents the results of the survey including evaluation of habitats on site and potential for protected species to be using the site. The report includes recommendations for further actions where applicable in order to satisfy current wildlife legislation and to achieve our client's objectives.

## 2.0 Objectives

Our client's objectives are to ascertain the potential ecological constraints and opportunities of the site to inform potential future development of 60 residential buildings.

Our objectives are as follows:

- Identify and evaluate any features of ecological value and the potential of the site to support protected species based on the walkover survey and biological records search;
- Identify designated sites within 2km of the site;
- Review protected species records within 2km of the site;
- Map the habitats within the site using JNCC (2010) methods;
- Provide recommendations for further species-specific surveys and mitigation measures where current legislation requires;
- Provide recommendations that seek to enhance the ecological value of the site;
- Provide recommendations to assist our clients in achieving their objectives whilst satisfying current wildlife legislation.

## 3.0 Relevant Legislation

### 3.1 European Legislation

The following Directives have been adopted by the European Union and provide protection for fauna and flora species of European importance and the habitats which support them:

- Directive 2009/147/EC on the Conservation of Wild Birds (Birds Directive);
- Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive).

### 3.2 UK Legislation

The Habitats Directive has been transposed into national legislation through the Conservation of Habitats and Species Regulations 2017 (The Habitats Regulations). This provides for the designation and protection of 'European Sites' (SPAs, SACs and Ramsar Sites, including proposed or potential European Sites) and the protection of 'European Protected Species'.

The key UK legislation relating to nature conservation is the Wildlife and Countryside Act 1981 (as amended) (W&C Act). This Act is supplemented, *inter alia*, by provision in the Countryside and Rights of Way (CROW) Act 2000, and the Natural Environment and Rural Communities Act 2006 (NERC Act). Additional species and habitat specific UK legislation includes the Protection of Badgers Act 1992 and the Hedgerow Regulations 1997.

The UK legislation is due to be updated, with the publication of The Environment (Principles and Governance) Bill, which is due to be passed through parliament in the autumn of 2019. The draft Environment Bill sets out how the UK will maintain environmental standards following leaving of the EU. The Bill builds on the vision of the 25 Year Environment Plan, with the ambition from the government to leave the environment in a better state than it was when inherited.

The Defra Biodiversity Metric is being implemented to work alongside the Environment Bill. This tool calculates potential biodiversity impacts as a result of development and identifies mitigation and compensation requirements to ensure no net loss of biodiversity. In addition, it identifies measures that can be implemented in order to meet Biodiversity gain as a result of development. A Beta version of the Defra Biodiversity Metric 2.0 was released on the 29<sup>th</sup> July 2019, prior to the release version 19.1, of Warwickshire Council, Biodiversity Impact Assessment Calculator being used in the interim by certain councils.

The National Planning Policy Framework (NPPF) 2019 has been published to provide further planning guidance. Wildlife, biodiversity and ecological networks are referred to in Section 15 '*Conserving and enhancing the natural environment*'. The NPPF states that the planning system should contribute to and enhance the natural and local environment by: recognising the wider benefits of ecosystem services, minimising impacts on biodiversity and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. Further guidance is provided within Government Circular 06/05: *Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System*.

### **Species and Habitats of Principal Importance**

Species and Habitats of Principal Importance are listed under section 41 of the NERC Act and are a material consideration in planning decisions. Planners require relevant, up to date information from ecological surveys in order to assess the effects of a proposed development on biodiversity as Councils have a statutory obligation under section 40 of the NERC Act to consider biodiversity conservation in the determination of planning applications.

Background information about the lists of priority habitats and species (Species and Habitats of Principal Importance) can be found within the UK Biodiversity Action Plan (UK BAP). Although this has been succeeded by the 'UK Post-2010 Biodiversity Framework', many of UK BAP tools are still relevant. BAPs identify habitats and species of nature conservation priority on a UK (UK BAP) and Local (LBAP) scale. Most BAP priority habitats and species have Habitat Action Plans (HAP) and Species Action Plans (SAP) and there are also "grouped action plans" for groups of related species with similar conservation requirements. The LBAP relating to this Site is the Greater Manchester Biodiversity Action Plan.

### **Badgers**

The legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992.

Under the Protection of Badgers Act 1992 it is an offence *inter alia* to:

- Wilfully kill, injure or take a badger, or to attempt to do so;
- Cruelly ill-treat a badger; or
- Intentionally or recklessly interfere with a badger sett by (a) damaging a sett or any part of one; (b) destroying a sett; (c) obstructing access to or any entrance of a sett; (d) causing a dog to enter a sett; or (e) disturbing a badger when it is occupying a sett.

The Badger Act 1992 defines a badger's sett as "*any structure or place which displays signs indicating current use by a badger*"

Natural England can issue licences to enable works to continue that may affect a protected species. In relation to disturbance of badgers, Natural England (2009) gives guidelines on disturbance which will require a licence. These includes: "*using very heavy machinery (generally tracked vehicles) within 30 metres of any entrance to an active sett; using lighter machinery (generally wheeled vehicles), particularly for any digging operation, within 20 metres; light work such as hand digging or scrub clearance within 10 metres. There are some activities which may cause disturbance at greater distances (such as using explosives or pile driving) and these should be given individual consideration.*"

### **Bats**

In England, all bats and their roosts are protected under the Conservation of Habitats and Species Regulations 2017 and the Wildlife & Countryside Act 1981 (as amended). Several species of bat are also highlighted as Priority Species under the UK Biodiversity Action Plan and within the Local BAP.

Under the current legislation as summarised on pages 8 and 9 of the Bat Surveys for Professional Ecologists Good Practice Guidelines – 3rd Edition (2016) it is a criminal offence to:

*"To kill, capture, injure or take a wild bat;*

- *To damage or destroy a place used by a bat for breeding or resting. All offences of this nature are identified within the Habitats Regulations. This offence is unique in that it can be committed accidentally. No element of intentional, reckless or deliberate action needs to be evidenced;*
- *To disturb bats anywhere (roosts, flight lines or foraging areas) if levels of disturbance can be shown to impair their ability to survive, to breed or reproduce, to rear or nurture their young, to hibernate or migrate or to affect significantly local distribution or abundance;*
- *To intentionally or recklessly disturb a bat, whilst it is occupying a place of shelter or protection;*
- *To intentionally or recklessly obstruct access to any place used by a bat for shelter or protection; and*
- *To be in possession or control of a bat alive or dead (or any part of a bat or anything derived from a bat, although bat droppings are generally considered to be acceptable), or to transport a bat, to sell or exchange a bat or to offer to sell or exchange a bat taken from the wild."*

### **Breeding Birds**

Breeding Birds are protected under the Wildlife and Countryside Act which make it an offence to:

- *intentionally kill, injure or take any wild bird or take, damage or destroy the nest of any wild bird whilst it is in use or being built;*
- *intentionally take or destroy the egg of any wild bird;*
- *have in one's possession or control any wild bird, dead or alive, or any part of a wild bird (including eggs), which has been taken in contravention of the Act or the Protection of Birds Act 1954;*
- *intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.*

### **Great Crested Newt**

The great crested newt (*Triturus cristatus*) is fully protected under the Wildlife and Countryside Act, 1981 (as amended) and the Habitats Regulations, 2017. It is also a Species of Principal Importance. The legislation makes it an offence to:

- *Deliberately (or intentionally) kill, injure or capture (or take) a great crested newt, or great crested newt egg or eft;*
- *Deliberately (intentionally) damage or destroy any breeding site or resting place (i.e. pond, refuge, hibernaculum);*
- *Deliberately or recklessly obstruct access to any breeding site or resting place;*
- *Deliberately, intentionally or recklessly disturb a great crested newt, in particular disturbance which is likely to:*
  - *impair the ability of the great crested newt to survive, breed, reproduce, or to rear or nurture young;*
  - *impair the ability of the great crested newt to hibernate or migrate; or significantly affect the local distribution or abundance of great crested newts*

### **Invasive Species**

It is an offence under Section 14(2) of the Wildlife and Countryside Act 1981 to 'plant or otherwise cause to grow' in the wild any plant in Schedule 9 Part II.

### Other Aquatic Species

Water vole (*Arvicola amphibious*) are a Species of Principal Importance and also fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to:

- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection;
- intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose;
- intentionally kill, injure or take water voles;
- possess or control live or dead water voles or derivatives;
- sell water voles or offer or expose for sale or transport for sale; and
- publish or cause to be published any advertisement which conveys the buying or selling of water voles.

Otter (*Lutra Lutra*) are similarly protected under the Wildlife and Countryside Act, 1981 (as amended) and have additional protection as a European Species under The Habitats Regulations 2017.

White clawed crayfish (*Austropotamobius pallipes*) are similarly protected under the Wildlife and Countryside Act, 1981 (as amended). They are also a species of Principal Importance. A licence is required in order to survey areas where these species are suspected to be present.

### 3.3 Local Policy

The site lies within Bury Council and is covered by the Bury Council Unitary Development Plan (UDP) (adopted August 1997). Policy EN6 deals with Conservation and the Natural Environment and is the policy of relevance here. This policy has been taken into account when preparing this report.

The following table provides a summary of the main species within the UK that could be encountered within or within proximity of this development site, together with the legislation that affords them protection.

**Table 3.1 Protected Species and the Associated Legislation.**

| Species    |                                                    | Legislation                                                                                                   |
|------------|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Amphibians | Great crested newt ( <i>Triturus cristatus</i> )   | Schedule 5, W&C Act 1981 (as amended);<br>Schedule 2, The Habitats Regulations 2017; and<br>Section 41, NERC. |
| Mammals    | Badger ( <i>Meles meles</i> )                      | Protection of Badgers Act 1992.                                                                               |
|            | All species of bat<br>Otter ( <i>Lutra lutra</i> ) | Schedule 5, W&C Act 1981 (as amended);<br>Schedule 2, The Habitats Regulations 2017; and Section 41, NERC.    |
|            | Water vole ( <i>Arvicola amphibious</i> )          | Schedule 5, W&C Act 1981 (as amended) and Section 41, NERC.                                                   |

|            |                                                                                                                                                            |                                                             |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| Birds      | All wild birds                                                                                                                                             | Schedule 5, W&C Act 1981 (as amended) and Section 41, NERC. |
| Reptiles   | Adder ( <i>Vipera berus</i> )<br>Common lizard ( <i>Zootoca vivipara</i> )<br>Grass snake ( <i>Natrix natrix</i> )<br>Slow worm ( <i>Anguis fragilis</i> ) | Schedule 5, W&C Act 1981 (as amended) and Section 41, NERC. |
| Crustacean | White-clawed crayfish<br>( <i>Austropotamobius pallipes</i> )                                                                                              | Schedule 5, W&C Act 1981 (as amended) and Section 41, NERC. |

**It is a criminal offence to intentionally, wilfully kill, injure or take any of the aforementioned protected species or to destroy or disturb its habitat.**

## 4.0 Survey Methods

The Preliminary Ecological Appraisal involved the collection and review of data from a desk study and field survey along with assessment of the value of the habitats following CIEEM guidelines.

### 4.1 Desk Study

A review of the designated sites and habitats within 2km of the site has been undertaken using the Multi-Agency Geographic Information for the Countryside (MAGIC) and the Natural England websites.

A review of UK and Local priority species and habitats known to occur in the region of the site has been undertaken; using the Joint Nature Conservation Committee website and local records from Greater Manchester Ecology Unit (Appendix 3).

### 4.2 Field Survey

A walkover survey of the site was conducted on 1<sup>st</sup> July 2019, when the habitat types and features of ecological interest were identified and mapped in compliance with the Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit (JNCC, 2010). The survey methods involve the recording and mapping of all habitat types and ecological features present on site, including the identification of the main species present and examination of the potential for any protected species. Habitats were mapped and target notes made for any interesting features.

The surveys particularly focused on the following species and habitat features:

- Mammals (badgers, bats, otter and water vole);
- Birds (including birds that are designation species of Ramsar or SPA sites);
- Amphibians and reptiles;
- Invertebrates (including white-clawed crayfish);
- Hedgerows and boundaries;
- Invasive plant species; and
- Plant communities and trees.

### 4.3 Bat Survey Methods

The survey methods followed the guidelines set out by the Bat Conservation Trust Bat Surveys for Professional Ecologists Good Practice Guidelines – 3rd Edition (2016). Habitats, Buildings and Trees were assessed for suitability for use by bats and categorised independently using table 4.1 page 35 within the Bat Conservation Trust Guidelines (Collins, 2016).

#### Preliminary Ecological Appraisal for Bats

Habitats on site were assessed for their suitability for bats to use them for roosting, commuting and foraging both on the site and surrounding area. Commuting and foraging habitat suitability was categorised **low** to **high**. Commuting and foraging habitat valued as **moderate** or above may need further survey effort if lost to the proposals.

### Preliminary Roost Assessment Trees

All trees were inspected for Potential Roost Features (PRFs). Features searched for included: Natural or woodpecker holes, cracks / splits in major limbs, loose bark, hollows / cavities, dense epicormic growth, bird and bat boxes. Where such features were found they were investigated for scratches or staining, bat droppings and smoothing of surfaces around entry points. Trees assigned a suitability of **moderate** or above may require further inspection if they are to be lost to the development.

### Internal/External Inspection of the Building

Due to a 60m buffer zone around the chimney on site for health and safety reasons, it was not possible to undertake a daytime building inspection on all three buildings on site during the survey. As such the building inspection undertaken by Ecology Services UK Limited on 8<sup>th</sup> December 2011 (*Ecology Services UK Limited (2011), Report of bat survey, Former Trinity Paper Mill, Ramsbottom*).and the inspection undertaken on the Chimney by The Tyrer Partnership Ecology Consultants in December 2014 (*The Tyrer Partnership Ecology Consultants (2014), chimney at Mondi Mill, Ramsbottom Inspection & Assessment in Relation to Bats*) are referred to within this report in terms of the buildings bat roost potential.

**Table 4.1: Guidelines for assessing Potential Roost Features (PRFs), commuting and foraging habitat within a proposed development site. Guidelines taken from table 4.1 page 35 of the Bat Conservation Trust Bat Surveys for Professional Ecologists Good Practice Guidelines – 3rd Edition (2016).**

| <b>Suitability</b> | <b>Roosting Habitats</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Commuting and Foraging Habitats</b>                                                                                                                                                                                                                                                                                                                                         |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Negligible</b>  | <i>Negligible habitat features on site likely to be used by roosting bats.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <i>Negligible habitat features on site likely to be used by commuting or foraging bats.</i>                                                                                                                                                                                                                                                                                    |
| <b>Low</b>         | <i>A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions <sup>a</sup> 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 or hibernation <sup>b</sup>).<br/>A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential. <sup>c</sup></i> | <i>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un vegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.<br/>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.</i> |
| <b>Moderate</b>    | <i>A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions<sup>a</sup> and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).</i>                                                                                                                                                                | <i>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.<br/>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</i>                                                                            |
| <b>High</b>        | <i>A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions <sup>a</sup> and surrounding habitat.</i>                                                                                                                                                                                                                                                                                              | <i>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.<br/>High-quality habitat that is well connected to the wider landscape that is likely to be</i>                                                           |

|  |  |                                                                                                                                                                   |
|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  | <i>used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.</i> |
|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

<sup>a</sup> For example, in terms of temperature, humidity, height above ground level, light levels of disturbance.

<sup>b</sup> 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., 2015). 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 large buildings in highly urbanised environments.

<sup>c</sup> This system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI,2015).

#### 4.4 Badger Survey Methods

The site was searched for setts and badger field signs including foraging areas, latrines and tracks. Attention was paid to the presence of the following field signs:

- Setts: single holes or a series of holes likely to be interconnected underground;
- Latrines: badgers usually deposit faeces in excavated pits;
- Paths and footprints;
- Scratching posts: at the base of trees;
- Snuffle holes: areas where badgers have searched for insects;
- Day nest: bundles of vegetation where badgers may sleep above ground; and
- Traces of hair.

Any setts recorded were categorised into sett types using the following criteria (Thornton, 1988):

- Main sett: Usually appearing well-used, well established and having a large number of holes with big spoil heaps, often with piles of old bedding outside;
- Annexe sett: Annexe setts are always close to the main sett and are usually connected by one or more obvious well-worn paths. They consist of several holes but are not necessarily in use the whole time, even if the main sett is very active;
- Subsidiary sett: Often these have very few holes, are usually at least 50m from the main sett and do not have an obvious path connecting them with another sett;
- Outlying sett: Usually comprising one or two holes with very little spoil outside (thus indicating that the tunnel system underground is not extensive), outlying setts have no obvious path connecting them with another sett and are used only sporadically.

#### 4.5 Water vole and Otter

The water courses within the site were briefly assessed for use by otter and water vole following methods outlined in Chanin P (2003). Monitoring the Otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No. 10, English Nature, Peterborough and Strachan, R., Moorhouse, T., Gelling, M. (2011). Water Vole Conservation Handbook, 3<sup>rd</sup> Edition. Wildlife Conservation Research Unit: Abingdon.

Signs of otter use including prints, spraints, couches or holts were searched for from the banks. Signs of water vole use, including latrines, footprints, feeding remains, runs and burrows were searched for along the banks of the watercourse.

## 4.6 Evaluation

Habitats and species on the site were evaluated following the '*Guidelines for Ecological Impact Assessment in the UK and Ireland*' 2018. A geographical frame of reference is assigned to each habitat and species, with International Value being most important, then National, Regional, County, District, Local and lastly, within the immediate Zone of Influence (Zoi) of the proposals only

Value judgements are based on characteristics that can be used to identify ecological resources or features likely to be important in terms of biodiversity. These include site designations such as SSSIs. For undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological resource are considered. Ecological resource quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.

Although we cannot assess the survey findings fully in relation to the draft Environment Bill and Biodiversity Metric, the recommendations detailed within this report aim to meet requirements of the Environment Bill and Biodiversity Metric as far as possible at this stage.

## 4.7 Limitations

The site visit was undertaken in July, the optimal time of year for phase 1 habitat surveys, and sufficient vegetation was present to enable habitat identification.

The surveyors kept at a 60m distance from the chimney on the site due to health and safety, therefore, the surveyors could not fully assess the buildings for bat roost potential. The buildings were observed from the 60m boundary using binoculars to aid inspection. For the purpose of this report the previous building inspection undertaken in 2011 and reported within the *Ecology Services UK Limited, 2011, Report of bat survey, Former Trinity Paper Mill, Ramsbottom report if referred to*.

The limitations have been taken into account within the conclusions of the report.

## 5.0 Survey Results

### 5.1 Desk Study

Nine non-statutory sites were identified within a 2km radius of the proposed development site and three statutory sites such as Sites of Biological Importance (SBI) were identified within a 2km radius the proposed development site.

The following non-statutory sites were identified within the vicinity of the proposals (with approximate distance and direction from the site):

- Edgars Field (SBI) (420m east)
- Carr Barn Wood (SBI) (1km north west)
- Dick Field Clough (SBI) (700m north west)
- Holcombe Moor (SBI) (1km west)
- Redisher Woods and Holcombe Brook (SBI) (1.9km south west)
- Crow Lumb Wood (SBI) (140m south west)
- Nuttall Farm Pasture (SBI) (320m south)
- Gollinrod Wood (SBI) (340m south)
- Broadhey Wood and Woodhey (SBI) (720m south west)

The following statutory sites were identified within the vicinity of the proposals (with distance and direction from the site):

- Redisher Wood (LNR) (1.9km south-west);
- West Pennine Moors (SSSI) (1km west)
- Lower Red Lees Pasture (SSSI) (1.08km north west)

The site lies within a Natural England SSSI Impact Risk Zone for West Pennine Moors (SSSI), Lower Red Lees Pasture (SSSI) and Hodge Clough (SSSI) (located 2.5km north west).

Following a review of records held by the Greater Manchester Ecology Unit, several priority species that have the potential to occur within the vicinity of the proposed development have been identified. These include:

- Bats – common pipistrelle, soprano pipistrelle, Nathusius's pipistrelle, Noctule bat, Daubenton's bat, Whiskered/Brandt's bat and unknown bat sp.;
- Other mammals – badger, Hedgehog, European otter and brown hare,
- Birds - barn owl, black redstart, bullfinch, cuckoo, curlew, dunnoek, grasshopper warbler, grey partridge, herring gull, house sparrow, kingfisher, lapwing, linnet, little ringed plover, peregrine, redpoll, reed bunting, ring ouzel, skylark, small heath, song thrush, spotted flycatcher, starling, twite and wood warbler.
- Amphibians - Common toad
- Fish – Brown trout

Two European Protected Species Licence (EPSL) applications within 2km of the site since 2014 were identified using Magic Maps. These include:

- A license to allow for the damage of a resting place and destruction of a resting place for common pipistrelle and soprano pipistrelle (2014-5187-EPS-MIT) approximately 630m south-west of site; and

- A license to allow for impact on a breeding site, damage of a breeding site, damage of a resting place, destruction of a breeding site, and destruction of a resting place for common pipistrelle (2017-29122-EPS-MIT) approximately 1.2km north of site

A list of key habitats is shown in table 5.1 below and a summary description of key habitats within the survey area is provided in Section 5.2. Notes on the presence or potential presence of protected species are provided in Section 5.3. The Phase 1 Habitat map can be found in **Appendix 1**. The Target Notes (TN) and lists of species recorded during survey are presented in **Appendix 2**.

## 5.2 Habitat Survey

Habitats present within the site include dense scrubs, broad leaved scattered trees, scattered scrub, tall ruderal, semi natural broadleaved woodland, introduced scrub, and a water course. These habitats are presented on plan P.1202.19.03 (**Appendix 1**).

The site lies adjacent to the local high street where shops and industrial mills lie to the north and west. The railway line borders the site to the west. The river Irwell meanders around the site boundary to the east, with a cricket and football ground located south of the site.

Weather conditions during the survey were mild (15°C), dry and cloudy (7/8 cloud cover) with a light air (F1 on the Beaufort Scale), therefore appropriate for this type of survey.

Table 5.1 details the habitat types recorded on the site.

**Table 5.1 Habitat Types on the Proposed Development Site.**

| Description                                                                                                                                                                                                                                                                                                                                                                                | Photograph                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <p><b>Hardstanding:</b> The site is mainly hard standing comprising of tarmac and concrete. Scattered and dense scrub has established including Buddleja, and grey willow. The bare areas offer little in the way of value to wildlife. Along the eastern boundary of the site has become colonised by tall ruderal (see below). This habitat type is common in the wider environment.</p> |   |
| Ecological Value                                                                                                                                                                                                                                                                                                                                                                           | Negligible                                                                          |
| <p><b>Rubble Piles:</b> Rubble piles are present (TN1) within the hard-standing area of the site, which have become encroached by moss, short perennial and grasses.</p> <p>Rubble piles are of ecological value providing suitable hibernacula for amphibians and reptiles and nesting habitat for ground nesting birds.</p>                                                              |  |
| Ecological Value                                                                                                                                                                                                                                                                                                                                                                           | Within the zone of influence                                                        |

**Buildings:** Three buildings and a chimney are present within the site. The buildings could not be fully assessed during the survey due to a 60m buffer around the chimney in place for health and safety reasons. The buildings were assessed using binoculars from the 60m boundary.

#### Building B1

Building B1 is an unoccupied two storey house with a pitched roof. The windows were boarded up at the time of the survey. Gaps under the roof tiles and ridge tiles are present. There is a single storey lean to building attached to the main house, with slipped and missing tiles on the roof.

#### Building B2

Building B2 is a two-storey house with a hipped and pitched roof. gaps, missing and lifted tiles were present on the roof. the windows were boarded up at the time of the survey.

#### Building B3 and chimney

Building B3 is a two-storey brick structure with a chimney attached. There was a broken window on the northern elevation. No tiles were present and an open roof cavity on the eastern elevation of the building. There was no glass within the window frames of the eastern elevation of the building.

The buildings and walls have the potential for use by bats and birds. This is discussed further in Section 5.3/4 below.



Photograph 1: Eastern elevation of building B1



Photograph 2: Eastern elevation of Building B2



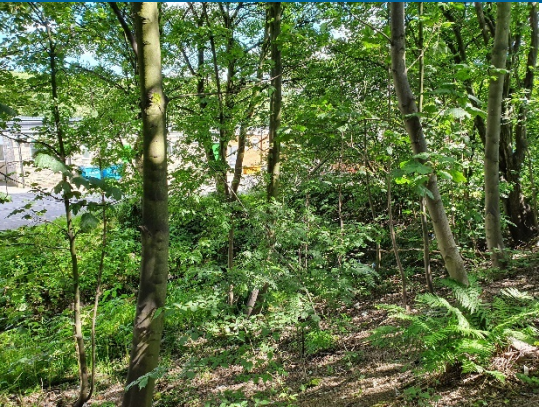
Photograph 3: Eastern elevation of building B3 and chimney

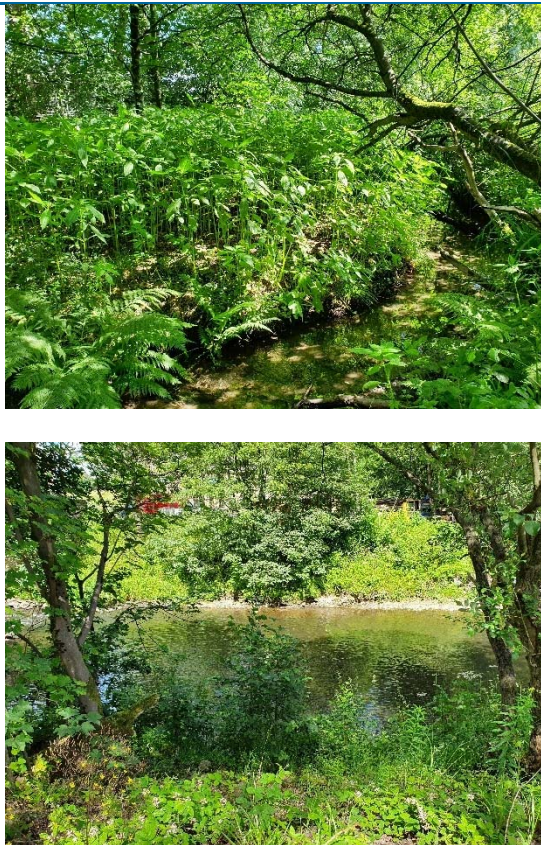
**Ecological Value**

**Within the zone of influence**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Semi-improved grassland:</b> An area of semi improved grassland is present within the west of the site. Species present include ribwort plantain, rough meadow grass, false oat grass, horsetail sp., common ragwort, cock's foot, bramble, false fox sedge and red fescue.</p> <p>This area of habitat is of value to small mammals, ground nesting birds, amphibians and reptiles. The grassland may provide limited forage opportunities for bats. This type of habitat is common within the wider environment.</p>                                                                                                                                                                                                                                                    |                                               |
| <p><b>Ecological Value</b></p> <p><b>Introduced Shrubs:</b> These are present within the site. They are located adjacent to building B1 within the north east of the site. All species could not be identified due to surveying this area from the site boundary / 60m health and safety buffer. Species present include leylandii, cotoneaster, laurel and Buddleja. Areas of cotoneaster are also present across the site.</p> <p>The areas of shrub are of value to birds and small mammal species. The areas may be of value to bats for forage and connectivity to surrounding habitats. This type of habitat is common within the wider environment.</p>                                                                                                                  | <p><b>Within the Zone of Influence</b></p>   |
| <p><b>Ecological Value</b></p> <p><b>Scattered Broadleaved Trees:</b> Scattered broadleaved trees are present within the site. a line of young trees is present along the western site boundary. Species present within the line of trees are ash, field maple and rowan. Cotoneaster shrubs were also present at this location. Mature broadleaved scattered trees are also located within the area of amenity grassland and located within the north of the site. Species include lime, sycamore, whitebeam, field maple, wych elm and silver birch.</p> <p>The trees are of value to birds and small mammal species. Bats may use the trees for forage and as a commuting corridor to surrounding habitats. This type of habitat is common within the wider environment.</p> | <p><b>Within the Zone of Influence</b></p>  |
| <p><b>Ecological Value</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p><b>Within the Zone of Influence</b></p>                                                                                      |

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| <p><b>Tall Ruderal:</b> Tall ruderal vegetation is present along the woodland edge adjacent to the river located east of the site. Species present include common nettle, rosebay willow herb, hedge bindweed, large-leaved evening primrose, bramble, dead nettle, Himalayan balsam and broadleaved dock.</p> <p>The area of habitat is of value to birds, small mammal species and amphibians. Bats may also use the areas for forage and as connectivity to more favourable habitat. This type of habitat is common within the wider environment.</p> |    |
| <p><b>Ecological Value</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <p><b>Within the Zone of Influence</b></p>                                           |
| <p><b>Dense Scrub:</b> Dense scrub is present throughout the site. Dense scrub has encroached on to the area of hard standing. Species present include grey willow, Buddleja and bramble.</p> <p>This habitat is of value to birds and provides limited foraging habitat for bats. This habitat is common within the wider environment.</p>                                                                                                                                                                                                              |   |
| <p><b>Ecological Value</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <p><b>Within the Zone of Influence</b></p>                                           |
| <p><b>Bare Ground:</b> Areas of bare ground which consists of earth and broken bricks is present within the site.</p> <p>This habitat is of value to basking reptiles as the areas of this habitat are surrounded by dense scrub.</p>                                                                                                                                                                                                                                                                                                                    |  |
| <p><b>Ecological Value</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <p><b>Within the Zone of Influence</b></p>                                           |

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| <p><b>Broadleaved woodland:</b> There are two areas of broadleaved woodland present within the site. One area of broadleaved woodland is located adjacent to the River Irwell in the east of the site. The canopy and understory layers consist of Sycamore, common ash, hawthorn and crack willow. The ground flora present within this area of woodland are bramble, cleavers, rosebay willowherb, horsetail sp., red campion, common hogweed, lady's fern, raspberry, oak sapling, false brome and hawthorn saplings.</p> <p>Another area of broadleaved woodland is located within the south of the site adjacent (west) to the golf course. A stream runs north to south through the centre of the woodland with sloping banks. Japanese knotweed and Himalayan balsam are present throughout the site (see plan P. 1202.19.03 for locations). The canopy layer consists of sycamore, common ash, rowan and crack willow. The understory layer consists of holly, japanese knotweed, rowan and sycamore. The ground flora present within this area of woodland is bramble, cleavers, wood avens Himalayan balsam.</p> <p>This habitat is of value to mammals including water vole, otter and badger, amphibians, reptiles and birds. This habitat is common within the wider environment.</p> |                                               |
| <p><b>Ecological Value</b></p> <p><b>Amenity Grassland:</b> An area of recently mown amenity grassland was present within the south of the site adjacent to the golf course. Species present include Himalayan balsam, yorkshire fog, daisy, dandelion, creeping buttercup, cock's foot, common nettle, selfheal and yarrow.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p><b>Within the Zone of Influence</b></p>  |
| <p><b>Ecological Value</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <p><b>Within the Zone of Influence</b></p>                                                                                      |

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| <p><b>Watercourse:</b> Two water courses are present within the site. A section of the River Irwell is located along the eastern boundary of the site and a stream which is hydrologically linked to the River Irwell is located within the site running from north to south.</p> <p>The habitats are of value to birds and mammals including schedule 1 birds such as kingfisher; bats, water vole and otter.</p> |  |
| <b>Ecological Value</b>                                                                                                                                                                                                                                                                                                                                                                                            | <b>Local</b>                                                                        |

### 5.3 Protected and Invasive Species

| Species Results                                                                                                                                                                                                                                                                                                                                                                                                                        | Evaluation and Recommendations                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Badger:</b></p> <p>Six record of badger were returned within 2km of the site. The closest record was located approximately 600m south-west of the site. All records were for badger setts. No evidence of badger use of the site was noted during survey</p> <p>The site provides suitable sett building habitat within the broadleaved woodlands. There is good connectivity to the wider landscape via the river corridor.</p> | <p>During the survey badger field signs were not recorded within the site. however, as suitable habitat is present and badgers have a large territory, badgers may be impacted by the proposed development.</p> <p>A precautionary check for badger will be required prior to works commencing within the site to advise if badger is present.</p> |
| <b>Ecological Value</b>                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Within the Zone of Influence</b>                                                                                                                                                                                                                                                                                                                |

| Species Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Evaluation and Recommendations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <p><b>Bats:</b></p> <p>Multiple records of bat signs and roosts were returned within 2km of the site. Species included bat sp., common pipistrelle, Daubenton's bat, Nathusius's pipistrelle, noctule bat, pipistrelle sp., soprano pipistrelle and whiskered/Brandt's bat. No records of bats within the site were returned.</p> <p>The closest record was for a pipistrelle sp. signs approximately 45m southwest of the site</p> <p>The closest roost to site is a pipistrelle sp., roost and is located 300m north east.</p> <p><u>Preliminary Ecological Appraisal for Bats</u></p> <p><i>Habitats:</i> The broadleaved woodland, water courses, trees, grassland, scrub and tall ruderal vegetation provide suitable foraging and commuting habitat for bats.</p> <p><i>Buildings:</i> Three buildings and a chimney are present within the site. All three buildings and chimney present within the site have the potential to support roosting bats. The buildings are detailed within table 5.1 above.</p> <p><i>Trees:</i> The trees present within the site were assessed during the survey. Three trees within the site were assessed as having bat roost potential. A lime tree within the north of the site has <b>moderate</b> bat roost potential. A lime tree within the north of the site was assessed as having <b>low</b> bat roost potential and an elder tree located within the woodland east of the site adjacent to the River Irwell was assessed as having <b>low</b> bat roost potential.</p> <p>The remaining trees within the site were considered to have <b>negligible</b> bat roost potential at the time of the survey.</p> | <p><i>Habitat:</i> The habitats on the site are considered to provide <b>high</b> bat commuting and foraging suitability. It is likely that some of these features will be retained within the proposals, including the broadleaved woodland.</p> <p><i>Buildings:</i> The buildings and chimney could not be fully assessed during the site visit due to health and safety. A 60m buffer was in place around the chimney during the site visit. Therefore, the buildings and chimney were observed from the site boundaries on the western and northern elevations and from the 60m buffer on the eastern and southern elevations.</p> <p>Buildings 1, 2, 3 and the chimney have been inspected for signs of bats in December 2011 by Ecology Services UK Limited. The survey results are detailed within the Ecology Services UK Limited (2011) Report of Bat S, Former Trinity Paper Mill. Following the inspection undertaken in 2011 all buildings and chimney present within the site were assessed as having low bat roosting potential. The Chimney was inspected by the Tyrer Partnership Ecology Consultants in September 2014, where the chimney was assessed as having roost potential for several species of crevice dwelling bats and could be used as a roost throughout the year including during hibernation. The potential for breeding was deemed low. Full detailed are recorded within the Tyrer Partnership Ecology Consultant (2014) Chimney at Mondi Mill, Ramsbottom Inspection &amp; Assessment in Relation to Bats letter report.</p> <p>Following the survey undertaken by Ascerta in 2019 the buildings present were considered to be in a deteriorating state as that originally reported following the inspections in 2011 and 2014. Therefore, a further internal and external inspection of the buildings and chimney are required to fully assess their potential to support bat roosts.</p> <p><i>Trees:</i> Three trees within the site provide <b>low-moderate</b> bat roosting potential. The remaining trees within the site were assessed as having negligible bat roost potential.</p> |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p>Two nocturnal surveys are required to be undertaken on the lime tree with <b>moderate</b> bat roost potential to assess if the tree is being used as a roost prior to works being undertaken on the tree. If the trees with <b>low</b> bat roost potential require felling, soft felling of these trees is recommended.</p> <p>The remaining trees provide negligible bat roost habitat.</p> <p>If bats are found to using either the building or tree with moderate bat roost potential then a licence application to Natural England will be required for the destruction of a bat roost.</p> <p>To enable bats continued use of retained commuting and foraging habitats on the site it is advised that lighting is kept to a minimum and designed to avoid spill into the foraging habitat. Lighting design should follow advice set out in <i>Bats and lighting in the UK- bats and the built environment series</i>, (Bat Conservation Trust, 2018).</p>                                                        |
| <b>Evaluation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>High bat commuting and foraging habitat, negligible - moderate roosting habitat within trees.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Species Results</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Evaluation and Recommendations</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p><b>Breeding Birds:</b></p> <p>Multiple records for protected and notable birds were returned within 2km of the site. No records were returned within the site. Species include lapwing, herring gull, house sparrow, barn owl, little ringed plover, black red start and kingfisher. Full detailed are displayed within <b>Appendix 3</b>.</p> <p>One record of black redstart was noted with in the records. The record is approximately 990m north east of the site. Kingfisher have been recorded directly adjacent north and south of the site along the River Irwell.</p> <p>Herring gull, wood pigeon and crow were recorded within the site during the survey.</p> <p>The habitats on site offer nesting opportunities for common bird species within trees and scrub and the banks along the River Irwell provide suitable nesting habitat for kingfisher. The buildings on site provide suitable nesting</p> | <p>There will be habitat loss for breeding and foraging birds as a result of the proposals.</p> <p>If works will be undertaken within 5m of the banks along the River Irwell, a nesting bird check for kingfisher is recommended to avoid impact of on this protected species.</p> <p>Most resident and migrant birds breed in the spring and summer months, although woodpigeons and collard doves nest throughout the year.</p> <p>In order to avoid harm to nesting birds, vegetation/buildings demolished should not be cleared during the bird breeding season along with any demolition works on the building (between 1 March and 31 August). If vegetation needs to be cleared during this period or the proposed building demolition occurs, a nesting bird survey will be required, conducted by a suitably qualified ecologist, before works begin. If any active nests are observed during the survey, exclusion zones will be set up and works will not occur in these areas until nesting is complete.</p> |

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| habitat for black redstart and house sparrow.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Ecological Value</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Within the Zone of Influence</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <p><b>Other Species:</b><br/> Nine record for common toad and no records of other amphibians or reptiles were returned within 2km of the site. The closest record for common toad was approximately 720m north west. There are no water bodies on site or within the immediate vicinity that would provide suitable habitat for amphibians such as great crested newt or common toad. The site provides suitable terrestrial habitat for amphibians and reptiles.</p> <p>One record of hedgehog was returned approximately 930m south west of the site. The site provides suitable habitat for hedgehog within the woodland and dense scrub.</p> <p>No records have been returned for water vole, white- clawed crayfish and one record of European otter was returned within 2km of the site. The otter was recorded within the River Irwell south of the site. The site provides suitable habitat for all three species within the stream and River Irwell and adjacent habitat within the and banks and the woodland provides suitable habitat for an otter holt.</p> <p>One record for brown hare has been returned within 2km of the site. the site does not provide suitable habitat for this species therefore, no further recommendations are required.</p> | <p>The site contains no suitable breeding habitat for amphibians and very little terrestrial habitat suitable for amphibians and reptiles. It is considered that these species are not using the site and need no further consideration within the current planning application.</p> <p>The site contains suitable habitat for water vole and otter within the stream, River Irwell and adjacent riparian habitats. Therefore, further surveys for water vole are recommended to fully assess if these species are using the habitats on site.</p> <p>The stream and river may provide suitable habitat for White-clawed cray fish and therefore an assessment of the watercourses to determine if the are suitable to support this species is recommended.</p> <p>Habitat exists for hedgehog and hedgehog could be influenced by the proposals as they have large territories that include urban areas. Therefore, it is recommended that Reasonable Avoidance Measures (RAMs) be employed in respect to hedgehog during the works. These include:</p> <ul style="list-style-type: none"> <li>• Construction materials stored on pallets so as not to create a hedgehog refuge area;</li> <li>• Existing refuge areas (brash pile and bramble scrub) should be removed by hand so hedgehog within are not harmed during their removal;</li> </ul> <p>To enable hedgehog continued use of the site it is advised that gaps of at least 13cm by 13cm are left under any new garden fences to enable hedgehog to roam freely within the area following development. To mitigate for the loss of habitat that could be used by hibernating hedgehog it is recommended that a hedgehog hibernaculum is provided within the landscaping.</p> |
| <b>Ecological Value</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Within the Zone of Influence</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <p><b>Invasive Species:</b></p> <p>Stands of Japanese knotweed, wall cotoneaster and Himalayan balsam are present within the site during the survey and the locations are marked on drawing P.1202.19.03 (<b>Appendix 1</b>)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <p>Japanese Knotweed, wall cotoneaster and Himalayan balsam are non-native invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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| 6.0 |                         | It is advised that these species be controlled using suitable methods to avoid spread in the wild during works. |
|     | <b>Ecological Value</b> | <b>N/A</b>                                                                                                      |

#### Assessment & Recommendations

### 6.1 Designated Sites and Habitats

There are nine non-statutory protected sites within 2km of the site boundary. There are three statutory protected sites within 2km of the site, these sites are Redisher Wood, Lower Red Lees Pasture SSSI and West Pennine Moors SSSI. Due to the distant at which these sites are located from the proposals, there will be no direct or indirect impacts to these sites

The site lies within a Natural England SSSI Impact Risk Zone for Lower Red Lees Pasture SSSI and West Pennine Moors SSSI; however, Natural England will not need to be consulted for this type of planning proposal as it does not fall within the likely impacts.

The habitats on site comprise hardstanding, bare ground, introduced shrub, dense scrub, tall ruderal, semi natural broadleaved woodland, amenity grassland scattered trees, and two watercourses. These habitats are considered to have an ecological value **within the zone of influence** of the site or lower. The site contains no designated or priority habitats.

### 6.2 Protected and Invasive Species

Three invasive plant species were recorded on the site: Himalayan balsam, Japanese knotweed and wall cotoneaster, which are listed under Schedule 9 of the Wildlife and Countryside Act 1981 and will require an invasive species management plan.

The majority of the trees on the site have been assessed as having **negligible** bat roost potential and will require no further surveys if they are to be lost within the proposals; However, one lime tree on the site has been identified as having **moderate** bat roosting potential and may be impacted by the proposals. It is recommended that a climbing inspection be carried out under the supervision of a licensed bat worker or a minimum of two nocturnal bat surveys are carried out if the tree requires removal. If the climbing inspection is inconclusive then a minimum of two nocturnal surveys will be required prior to the felling of the tree. Additionally, two trees on the site have been assessed as having **low** bat roost potential.

The buildings and chimney present within the site were assessed as having low bat roost potential in 2011 and 2014; However, during the survey visit the buildings were in a deteriorating state as what was originally reported in 2011 and 2014. An updated building inspection is required in order to determine the suitability to support roosting bats.

If bats are found to be roosting within the building or trees, a licence from Natural England will be required for the destruction of a bat roost.

Records of badger have been returned within 2km of the site, yet badger field signs were not identified during the survey. As badger are a highly mobile species, it is recommended a precautionary check is undertaken prior to the proposed works to assess if badger have inhabited habitats within the site.

The woodland, scattered trees, tall ruderal, and scrub and buildings present within the site provide suitable nesting habitat for birds. It is recommended that vegetation clearance

works to the suitable habitats is undertaken outside of the nesting bird season (1 March to 31 August inclusive). If the breeding bird season cannot be avoided, a nesting bird check undertaken by a suitably experienced ecologist will be required and any active birds' nests identified will be protected by a suitable buffer zone until the nest is no longer active. It is recommended that provision of bird boxes to be incorporated into the proposals to mitigate for the loss of suitable nesting habitat.

The banks along the River Irwell provide suitable nesting habitat for king fisher, if works are to be undertaken within 5m of the banks within the breeding bird season (1 March to 31 August inclusive), a nesting bird check for king fisher is required.

It is advised that if works are to occur within 5m of the stream and / or the River Irwell, a survey for water voles should be undertaken to identify appropriate mitigation measures to avoid harm to water vole and inform the planning application.

It is recommended that an otter survey is undertaken on the River Irwell and the stream within the site as a record of European otter has been returned and the watercourses are suitable for otter. The woodlands adjacent to the stream and river provide suitable habitat for an otter holt and couch.

It is recommended that an assessment of the stream and river is undertaken to assess the potential for them to support white clawed crayfish. If they are found to be suitable a further survey will be required.

### **6.3 Enhancements**

In order to meet requirements for biodiversity protection and enhancement outlined within the NPPF, it is recommended that ecological enhancements are included. These could include:

1. Provision of bird boxes (25mm or 32mm entrance hole boxes, house sparrow terraces, swift boxes, house martin cups, barn owl boxes), attached to retained trees and new buildings as appropriate on site;
2. Provision of 15 bat box / bricks installed onto retained tree, retained and/or newly constructed building; and
3. Suitable landscaping incorporating species that provide a food or shelter resource to wildlife to include hawthorn, honeysuckle and holly as hedgerow species and silver birch, crab apple, rowan and bird cherry as tree species.

## **7.0 Conclusions**

It is considered that there would be very limited impact on the local ecology as a result of the proposals, provided the recommendations detailed above are followed. In summary these include:

1. Water vole and otter surveys are to be undertaken on the River Irwell and the stream within the site to assess the potential impacts on these species.
2. An assessment of the water courses for their potential to support White-clawed crayfish are recommended to assess the potential impacts on this species.
3. Avoiding vegetation removal or demolition of buildings during the bird breeding season (1 March to 31 August inclusive) or undertaking a survey for breeding birds and ensuring that any active nests found are protected within a suitable buffer zone until they are no longer in use;

4. Control of the invasive species Himalayan balsam, wall cotoneaster and Japanese knotweed to stop it from spreading into the wild during development works;
5. Prior to works being undertaken on the buildings and the chimney on site, an updated building inspection for bats is required to fully assess their suitability to support a bat roost.
6. Prior to the removal of the lime tree with moderate bat roost potential, two nocturnal bat surveys are to be carried out on the tree between May and September in suitable weather conditions, to confirm if bats are using the tree as a roost.
7. If trees with low bat roost potential require felling, soft felling is recommended to avoid impact on bats that may use the tree as a roost opportunistically.
8. Mitigation for the loss of nesting bird habitat with the provision of two open fronted nest boxes, one house sparrow terrace and one swift nest box.
9. The use of Reasonable Avoidance Measures (RAM's) in relation to hedgehog, to include hand clearing the brash pile and scrub and storage of construction materials on pallets to avoid harm to hedgehog;
10. To enable hedgehog continued use of the site it is advised that gaps of at least 13cm by 13cm are left under any new garden fences following development;
11. Provision of a hedgehog hibernaculum on site to mitigate for loss of suitable habitat;
12. Lighting sensitive to the needs of bats, designed to avoid overspill onto the scattered trees present on site; and
13. If trees with bat roost potential are removed, replacement roosting features (one bat box / bat brick) is to be installed on retained trees and / or retained / new buildings within the site.

The above recommendations, if fully implemented, will enable the proposals to meet the requirements of national and local guidance and legislation including the NPPF and Policy EN6 of the Bury Council Unitary Development Plan (UDP).

## 8.0 References

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# Appendix 1



# Ascerta

Landscape | Trees | Ecology

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CLIENT:  
Eccleston Homes

PROJECT:  
Former Mondri Site, (site 1) Holcombe Mill, Bridge Street, Rammsbottom BL0 0BS

DRAWING TITLE:  
Phase One Habitat Survey

SCALE:  
1:500 @A1

DATE:  
01/07/2019

DRAWN BY:  
CP

CHKD BY:  
TA

DRAWING NO:  
P.1202.19.03

REV:  
-

KEY

|  |               |  |                              |  |                                    |  |                                        |  |                                     |
|--|---------------|--|------------------------------|--|------------------------------------|--|----------------------------------------|--|-------------------------------------|
|  | Hard standing |  | Wall                         |  | Water course                       |  | Tree with low bat roost potential      |  | Amenity grassland                   |
|  | Building      |  | Dense scrub                  |  | Scattered scrub                    |  | Tree with moderate bat roost potential |  | Semi-improved grassland             |
|  | Bare ground   |  | Broad leaved scattered trees |  | Tall ruderal                       |  | Not accessible                         |  | Target note                         |
|  | Fence         |  | Introduced shrub             |  | Semi-natural broad-leaved woodland |  | 60m buffer (from chimney)              |  | 1 - Rubble pile                     |
|  |               |  |                              |  |                                    |  |                                        |  | 2 - Japanese Knotweed               |
|  |               |  |                              |  |                                    |  |                                        |  | 3 - Metal container full of rubbish |
|  |               |  |                              |  |                                    |  |                                        |  | 4 - Himalayan Balsam                |

DO NOT SCALE

ALL COORDINATES RELATED TO LOCAL GRID LOCATED TO OS NG BY BEST FIT TO DETAIL. EXTRACTED FROM OS DIGITAL DATA.

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## Appendix 2

## Species List

| English Name        | Scientific Name                             |
|---------------------|---------------------------------------------|
| Ash                 | <i>Fraxinus excelsior</i>                   |
| Bindweed            | <i>Convolvulus arvensis</i>                 |
| Black medick        | <i>Medicago lupulina</i>                    |
| Bracken             | <i>Pteridium aquilinum</i>                  |
| Bramble             | <i>Rubus fruticosus agg</i>                 |
| Broadleaved dock    | <i>Rumex obtusifolius</i>                   |
| Butterfly bush      | <i>Buddleja davidii</i>                     |
| Cleavers            | <i>Galium aparine</i>                       |
| Cock's-foot         | <i>Dactylis glomerata</i>                   |
| Coltsfoot           | <i>Tussilago farfara</i>                    |
| Common figwort      | <i>Scrophularia nodosa</i>                  |
| Cotoneaster*        | <i>Cotoneaster sp.</i>                      |
| Cow parsley         | <i>Anthriscus sylvestris</i>                |
| Crack willow        | <i>Salix fragilis</i>                       |
| Creeping buttercup  | <i>Ranunculus repens</i>                    |
| Creeping toadflax   | <i>Linaria repens</i>                       |
| Daisy               | <i>Bellis perennis</i>                      |
| Dandelion           | <i>Taraxacum officinale</i>                 |
| Dead nettle         | <i>Lamiun sp.</i>                           |
| Dockleaf            | <i>Rumex obtusifolius</i>                   |
| Elder               | <i>Sambucus nigra</i>                       |
| English stonecrop   | <i>Sedum anglicum</i>                       |
| Evening primrose    | <i>Oenothera sp.</i>                        |
| False-brome         | <i>Brachypodium sylvaticum</i>              |
| False oat-grass     | <i>Arrhenatherum elatius</i>                |
| False fox sedge     | <i>Carex otrubae</i>                        |
| Foxglove            | <i>Digitalis purpurea</i>                   |
| Goat willow         | <i>Salix caprea</i>                         |
| Hawthorn            | <i>Crataegus monogyna</i>                   |
| Hedge bindweed      | <i>Calystegia sepium</i>                    |
| Herb robert         | <i>Geranium robertianum</i>                 |
| Himalayan balsam*   | <i>Impatiens glandulifera</i>               |
| Horsetail           | <i>Equisetum sp.</i>                        |
| Hogweed             | <i>Heracleum sphondylium</i>                |
| Holly               | <i>Ilex aquifolium</i>                      |
| Japanese knotweed * | <i>Fallopia japonica</i>                    |
| Lady fern           | <i>Athyrium filix-femina</i>                |
| Laurel              | <i>Laurus sp.</i>                           |
| Leyland cyprus      | <i>Cupressus x leylandii</i>                |
| Lime                | <i>Tilia x europaea</i>                     |
| Maple               | <i>Acer sp.</i>                             |
| Mayweed             | <i>Matricaria sp.</i>                       |
| Meadow buttercup    | <i>Ranunculus acris</i>                     |
| Moss                | <i>Sphagnum</i>                             |
| Nettle              | <i>Urtica dioica</i>                        |
| Oak                 | <i>Quercus robur</i>                        |
| Ragwort             | <i>Senecio jacobaea / Jacobaea vulgaris</i> |
| Raspberry           | <i>Ribes</i>                                |
| Red campion         | <i>Silene dioica</i>                        |
| Red clover          | <i>Trifolium pratense</i>                   |
| Red fescue          | <i>Festuca rubra</i>                        |
| Redshank            | <i>Polygonum persicaria</i>                 |
| Ribwort plantain    | <i>Plantago lanceolata</i>                  |
| Rosebay willowherb  | <i>Chamerion angustifolium</i>              |

| English Name       | Scientific Name              |
|--------------------|------------------------------|
| Rough meadowgrass  | <i>Poa trivialis</i>         |
| Rowan              | <i>Sorbus aucuparia</i>      |
| Selfheal           | <i>Prunella vulgaris</i>     |
| Silver birch       | <i>Betula pendula</i>        |
| Sow-thistle        | <i>Sonchus sp.</i>           |
| Spear thistle      | <i>Cirsium vulgare</i>       |
| Sweet vernal grass | <i>Anthoxanthum odoratum</i> |
| Sycamore           | <i>Acer pseudoplatanus</i>   |
| Vetch              | <i>Vicia sp.</i>             |
| Weld               | <i>Reseda luteola</i>        |
| Whitebeam          | <i>Sorbus aria</i>           |
| Willowherb         | <i>Epilobium sp.</i>         |
| Wood avens         | <i>Geum urbanum</i>          |
| Wych elm           | <i>Ulmus glabra</i>          |
| Willow             | <i>Salix sp.</i>             |
| Yarrow             | <i>Achillea millefolium</i>  |
| Yorkshire fog      | <i>Holcus lanatus</i>        |

\* invasive species

## Target Notes

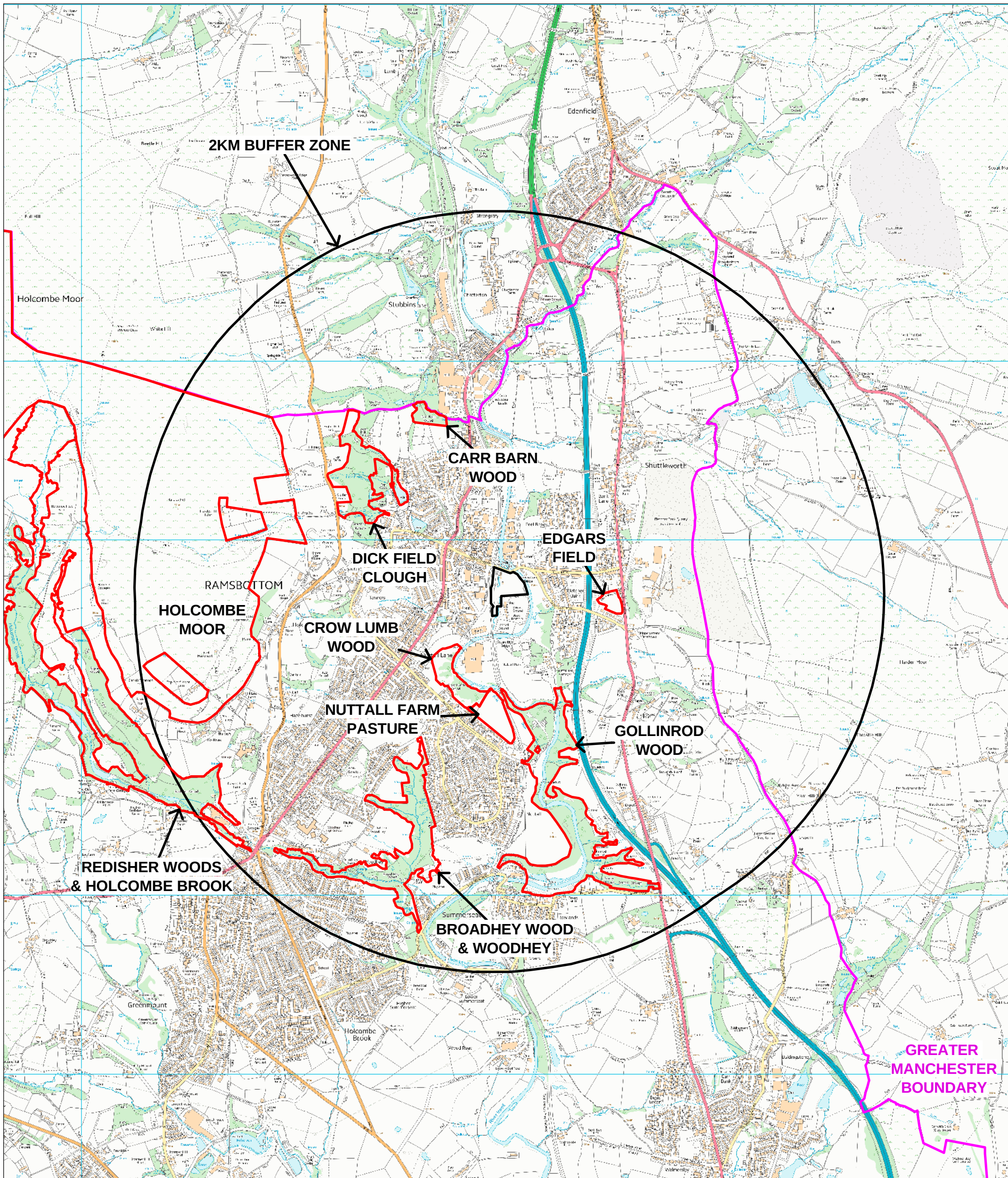
**TN1** – Rubble pile - bricks

**TN2** – Japanese knotweed

**TN3** – Metal Container filled with rubbish

**TN4** – Himalayan Balsam

## Appendix 3



# **KEY**

**SITE OF BIOLOGICAL IMPORTANCE**

**SBI BOUNDARY**

**GREATER MANCHESTER ECOLOGY UNIT  
ECOLOGICAL SEARCH - SD 7939 1675  
MONDI HOLCOMBE MILL - MAP 1**

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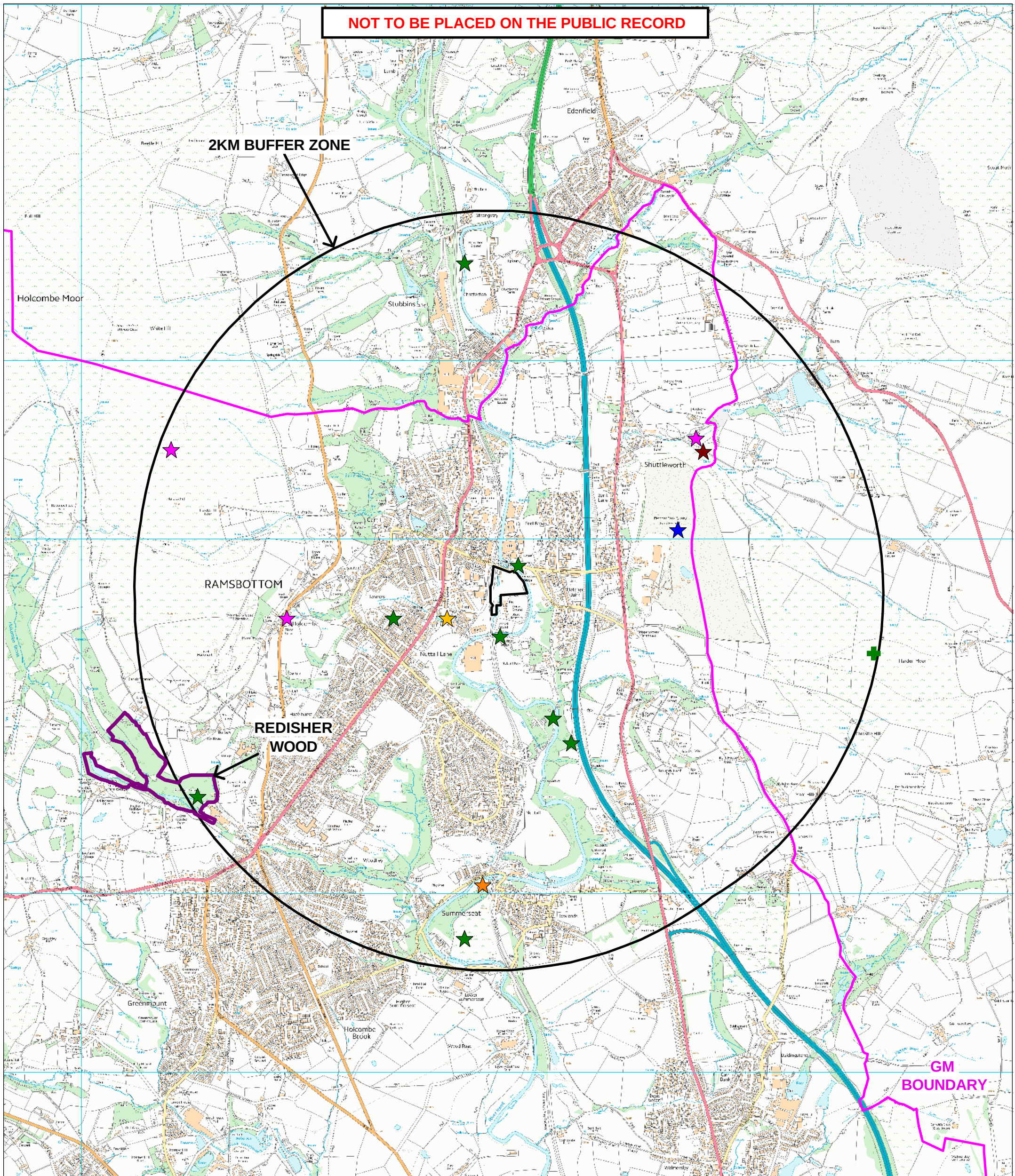


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**KEY**  
**PROTECTED SPECIES**

-  BROWN HARE
-  BARN OWL
-  BLACK REDSTART
-  EUROPEAN OTTER
-  KINGFISHER
-  LITTLE RINGED PLOVER
-  PEREGRINE

**SITES**

-  LOCAL NATURE RESERVES

**GREATER MANCHESTER ECOLOGY UNIT**  
**ECOLOGICAL SEARCH - SD 7939 1675**  
**MONDI HOLCOMBE MILL - MAP 2**

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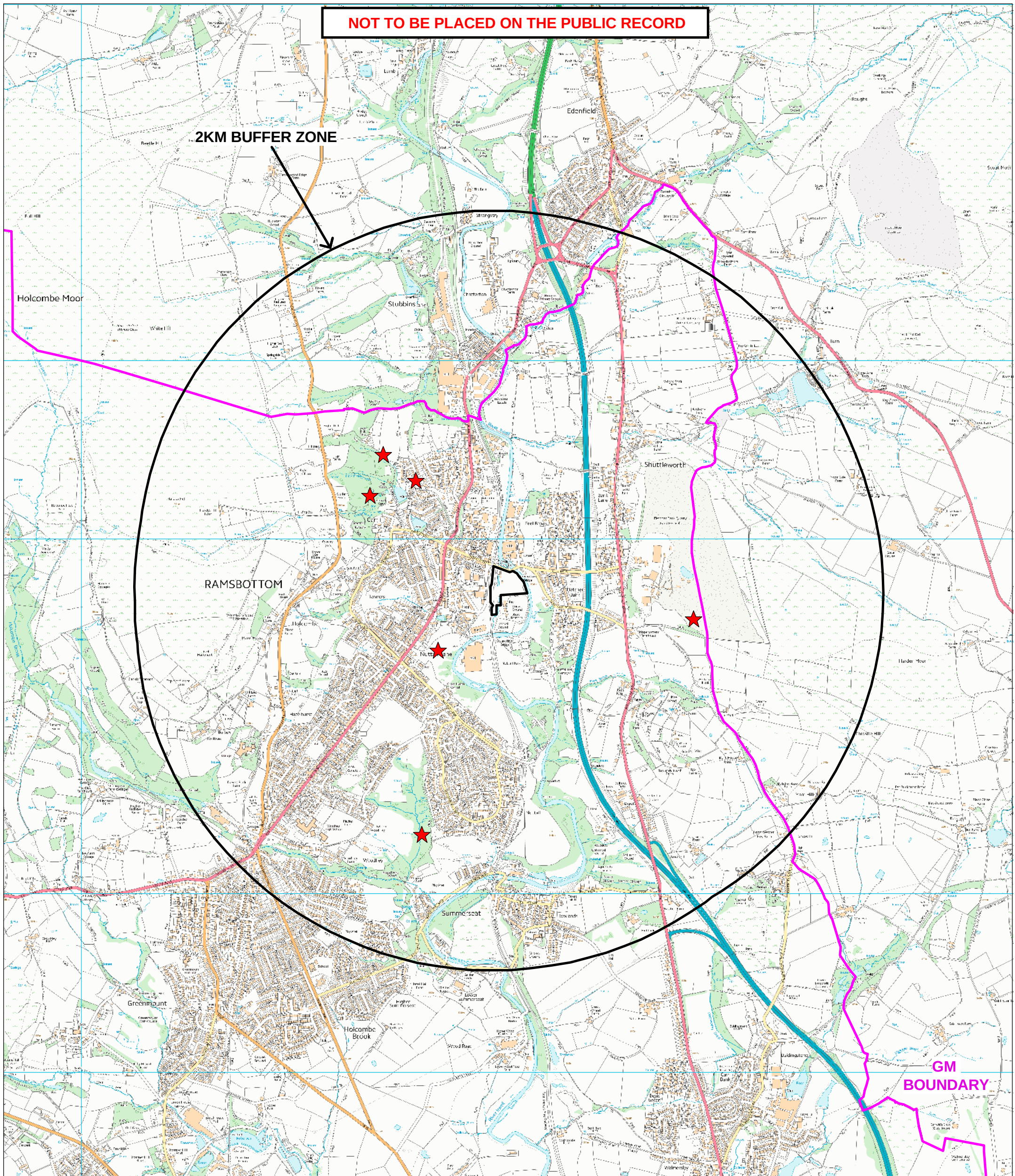


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**KEY**  
**BADGERS**  
★ SETTS  
● OTHER SIGNS

**GREATER MANCHESTER ECOLOGY UNIT**  
**ECOLOGICAL SEARCH - SD 7939 1675**  
**MONDI HOLCOMBE MILL - MAP 3**  
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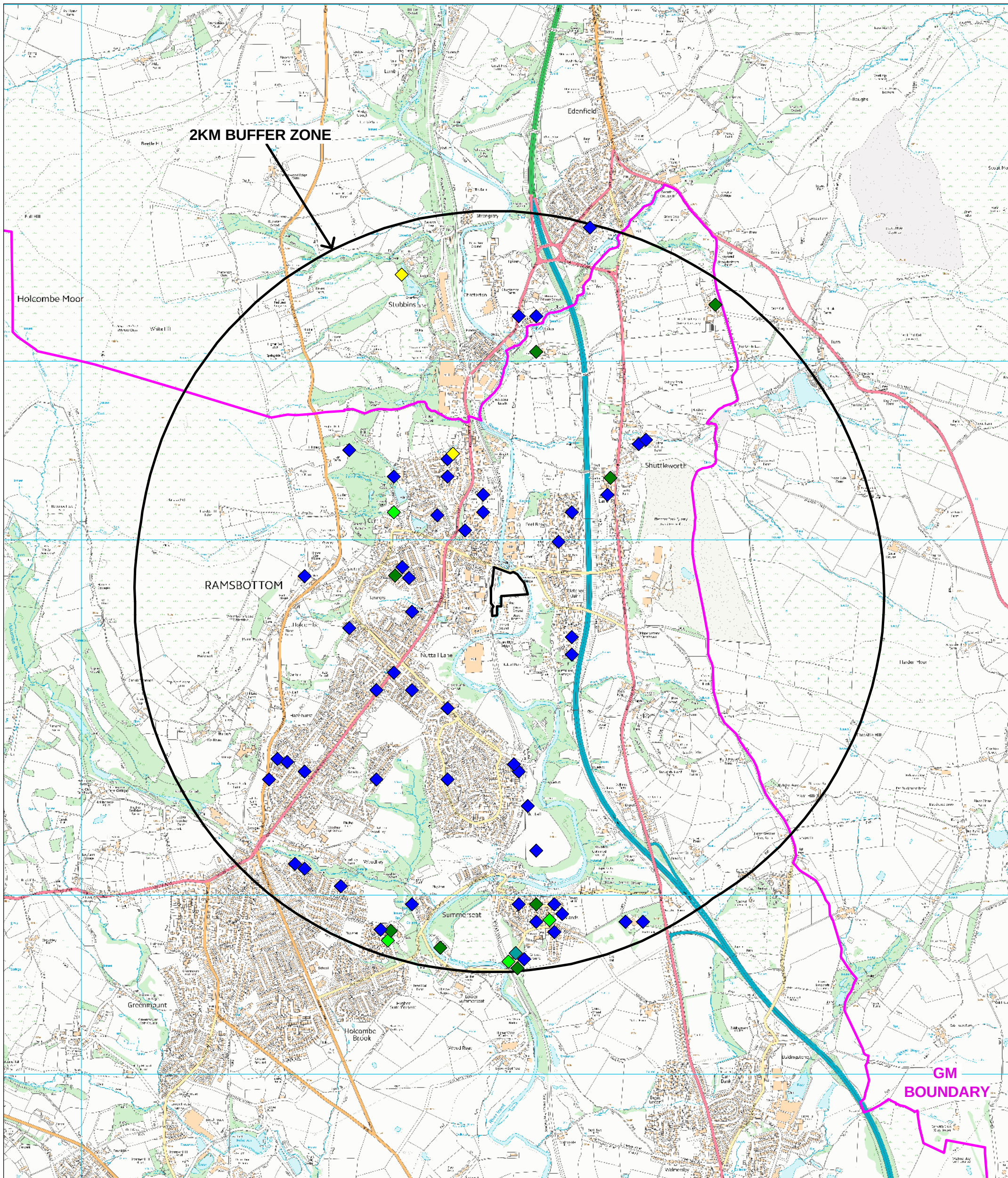
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**KEY**  
**BAT ROOSTS**

- ◆ BAT SP
- ◆ COMMON PIPISTRELLE
- ◆ PIPISTRELLE SP
- ◆ SOPRANO PIPISTRELLE
- ◆ WHISKERED/BRANDT'S BAT

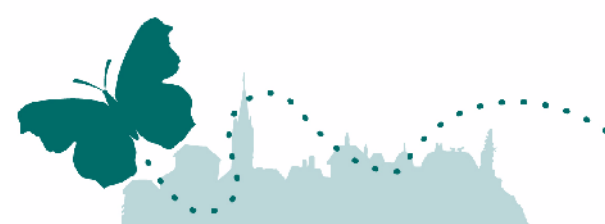
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**ECOLOGICAL SEARCH - SD 7939 1675**  
**MONDI HOLCOMBE MILL - MAP 4A**

**SCALE 1:20,000**

BAT DATA COURTESY OF SOUTH LANCS BAT GROUP

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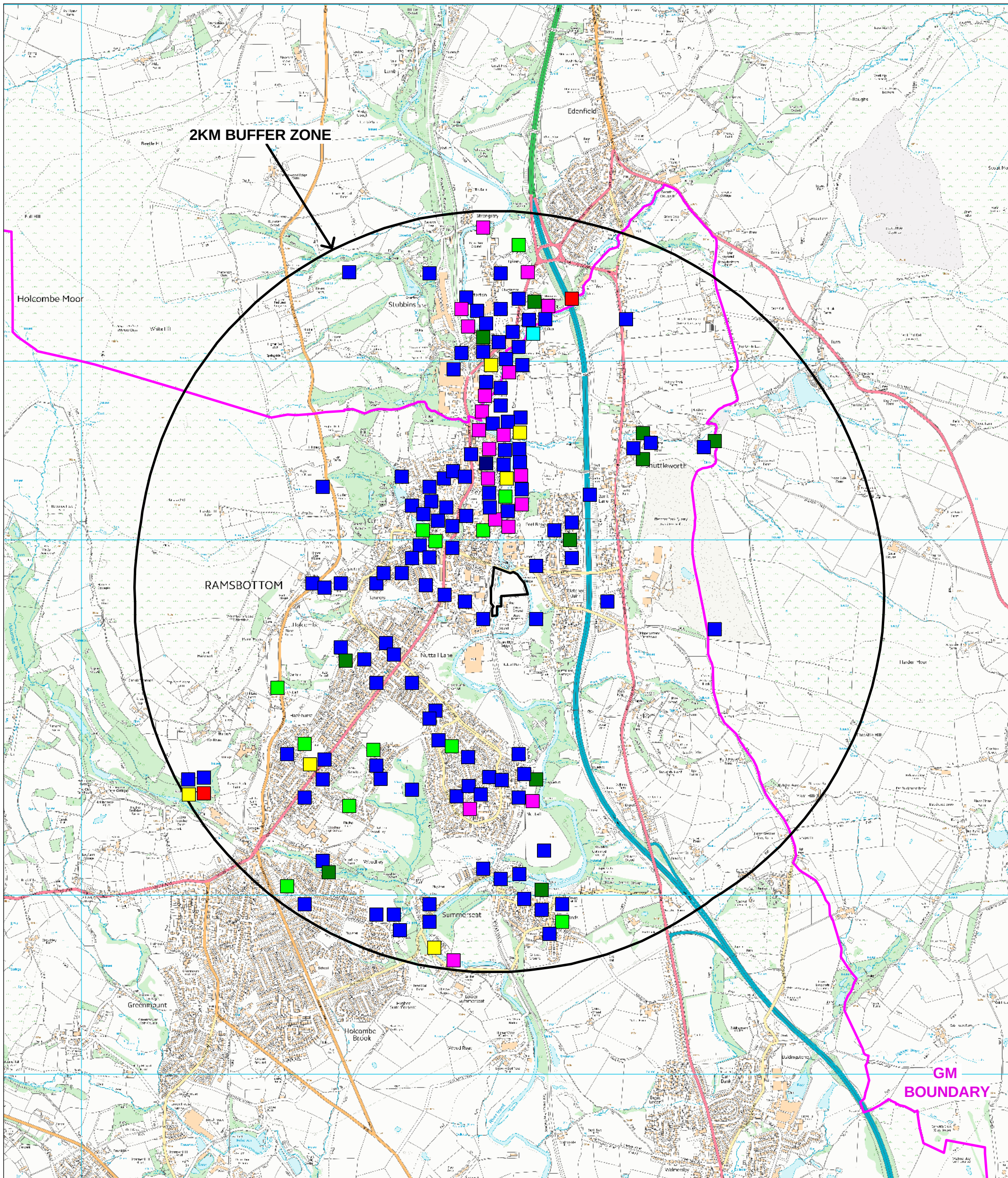
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**KEY  
BAT SIGNS**

- BAT SP
- COMMON PIPISTRELLE
- DAUBENTON'S BAT
- NATHUSIUS'S PIPISTRELLE
- NOCTULE BAT
- PIPISTRELLE SP
- SOPRANO PIPISTRELLE
- WHISKERED BAT

**GREATER MANCHESTER ECOLOGY UNIT  
ECOLOGICAL SEARCH - SD 7939 1675  
MONDI HOLCOMBE MILL - MAP 4B**

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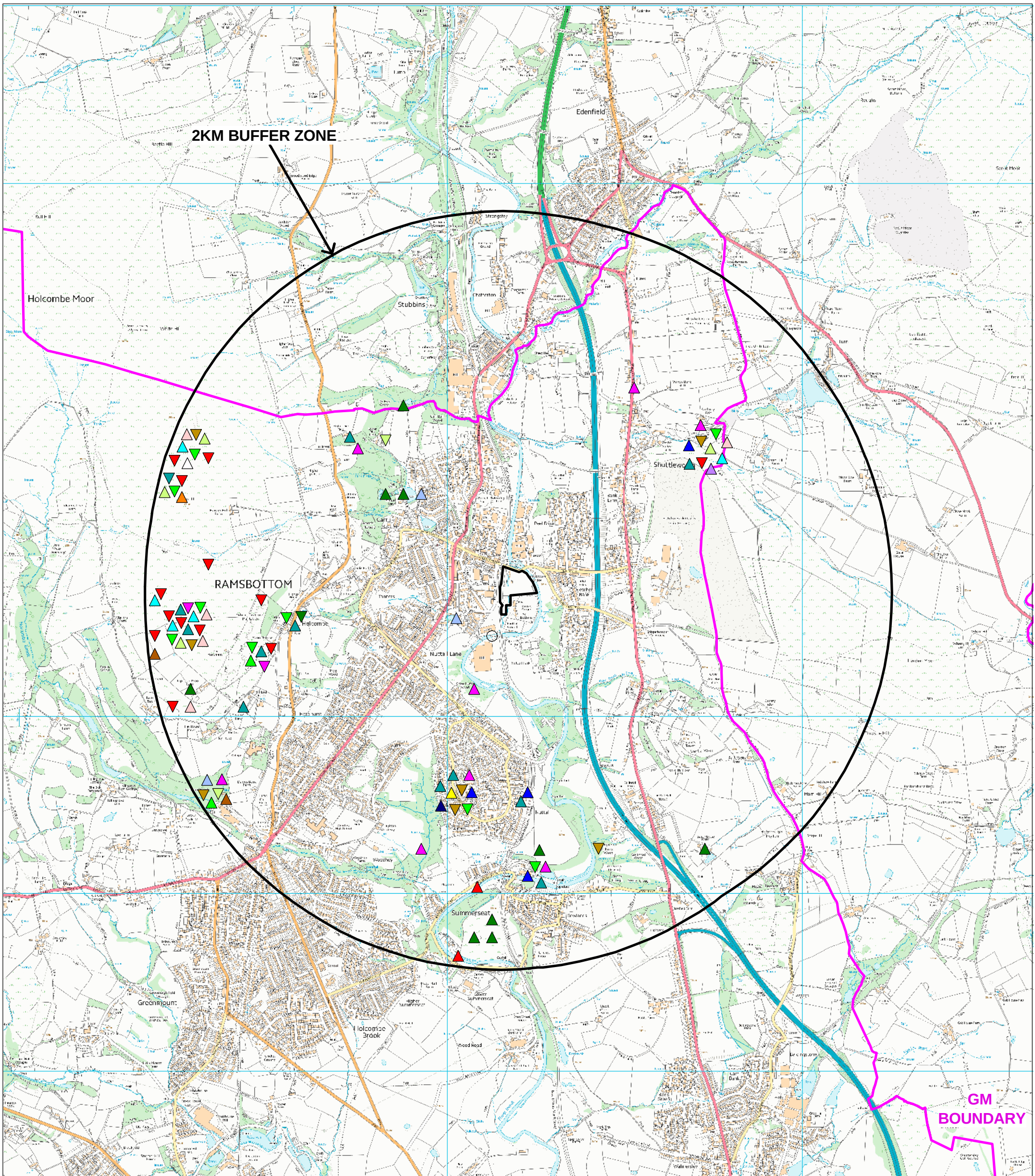
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# **KEY** **SECTION 41 SPECIES**

- |                     |                      |
|---------------------|----------------------|
| ▲ BROWN TROUT       | ▲ LINNET             |
| ▲ BULLFINCH         | ▲ REDPOLL            |
| ▲ COMMON TOAD       | ▲ REED BUNTING       |
| ▲ CUCKOO            | ▲ RING OUZEL         |
| ▲ CURLEW            | ▲ SKYLARK            |
| ▲ DUNNOCK           | ▲ SMALL HEATH        |
| ▲ GR.HOPPER WARBLER | ▲ SONG THRUSH        |
| ▲ GREY PARTRIDGE    | ▲ SPOTTED FLYCATCHER |
| ▲ HEDGEHOG          | ▲ STARLING           |
| ▲ HERRING GULL      | ▲ TWITE              |
| ▲ HOUSE SPARROW     | ▲ WOOD WARBLER       |
| ▲ LAPWING           |                      |

## **GREATER MANCHESTER ECOLOGY UNIT** **ECOLOGICAL SEARCH - SD 7939 1675** **MONDI HOLCOMBE MILL - MAP 5**

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