

WEDDLES

LANDSCAPE ARCHITECTURE
ARBORICULTURE
GARDEN DESIGN
ECOLOGY

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TOP PARK, BURY
Preliminary Ecological Appraisal (PEA)
September 2023

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1 SUMMARY

This Preliminary Ecological Appraisal (PEA) included a desk study of designated sites and ecological data, and a detailed walkover survey of the site considering habitats and species.

This report is considered to be sufficient to draw robust and reliable conclusions to give the local authority confidence that all ecological constraints are to be avoided, mitigated and compensated for, and ecological enhancements are proposed. (See section 5.).

Reasonable Avoidance Methods (RAMs) have been recommended to be undertaken during the construction phase for Breeding Birds, Hedgehogs, Amphibians, Badgers, and Foraging and Commuting Bats. These can be secured as an appropriately worded condition of planning.

Ecological Receptor / Constraint	Timescales
Foraging and Commuting Bats Lighting strategy to be produced by lighting engineer.	Prior to construction
Birds Pre-commencement check and Reasonable Avoidance Methods (RAMs) to be undertaken. Enclosed within CEMP.	Prior to and during construction
Amphibians / Hedgehog / Badger Reasonable Avoidance Methods (RAMs) to be undertaken. Enclosed within CEMP.	During construction
Trees Existing mature trees should be protected in line with BS5837:2012.	Prior to and during construction

Table 1: Executive Summary of Ecological recommendations

2 INTRODUCTION

2.1 Background

Weddle Landscape Design were commissioned by Steve Wells Associates Ltd to undertake a Preliminary Ecological Appraisal for the site at Top Park, Bury.

This Preliminary Ecological Appraisal aims to:

- Identify any likely ecological constraints
- Propose any necessary design changes
- Identify any further ecological surveys required to enable an Ecological Impact Assessment (EclA) to be carried out
- Propose any ecological enhancements

This PEA includes a desk study and extended UK Habitat Survey undertaken in September 2023.

This report has been prepared by Christopher Braine BA (Hons) MLA MCiHort CMLI with over 12 years ecological field surveying, scoping, protected species surveys and report writing experience and checked by John Harvey BA (Hons.), ACIEEM, Consultant Ecologist NE Class 1 Bat Licence (2018-34117-CLS-CLS) and NE Class 1 GCN Licence (2018-37648-CLS-CLS).

This report has been prepared in line with BS 42020:2013 Biodiversity: Code of practice for planning and development and the CIEEM Guidance for Preliminary Ecological Appraisal (2017), Ecological Report Writing (2017) and Ecological Impact Assessment (2022).

2.2 Site Description

The approximate development site boundary is approximately 1.3ha in extent. The site is located approximately 5km to the north of Bury centre at Ordnance Survey grid reference SE 282198.

The site is part of a larger sports field which extends to the south-east. Access to the site is from Bolton Rd West which runs along the eastern edge of the site, and which leads into a carpark. A clubhouse and playground lie adjacent to this. The playing fields are levels and were a former tip. Around the edge of the playing grounds is a woodland strip on an embankment. Beyond is predominantly residential. To the south of site is Ramsbottom Cemetery and an undeveloped strip of land which connects to Broad Hay Wood further south.

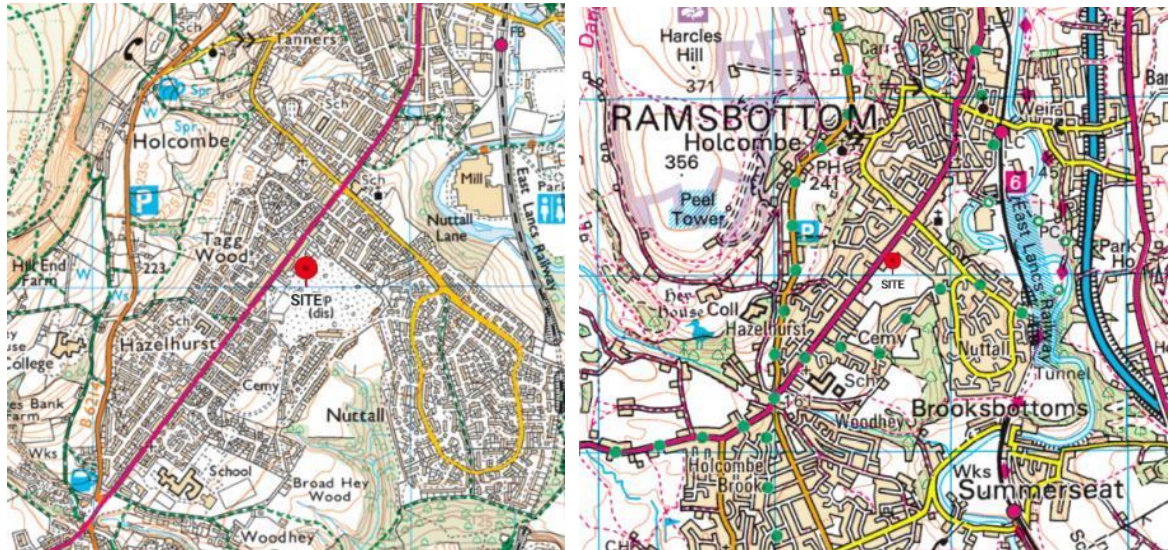


Figure 1: OS Map showing site location



Figure 2: Redline – approximate development site boundary

2.3 The Proposals

A full planning application is being prepared for installation of a new 3G pitch, the extension of an existing pavilion, the extension of existing parking and access improvements.

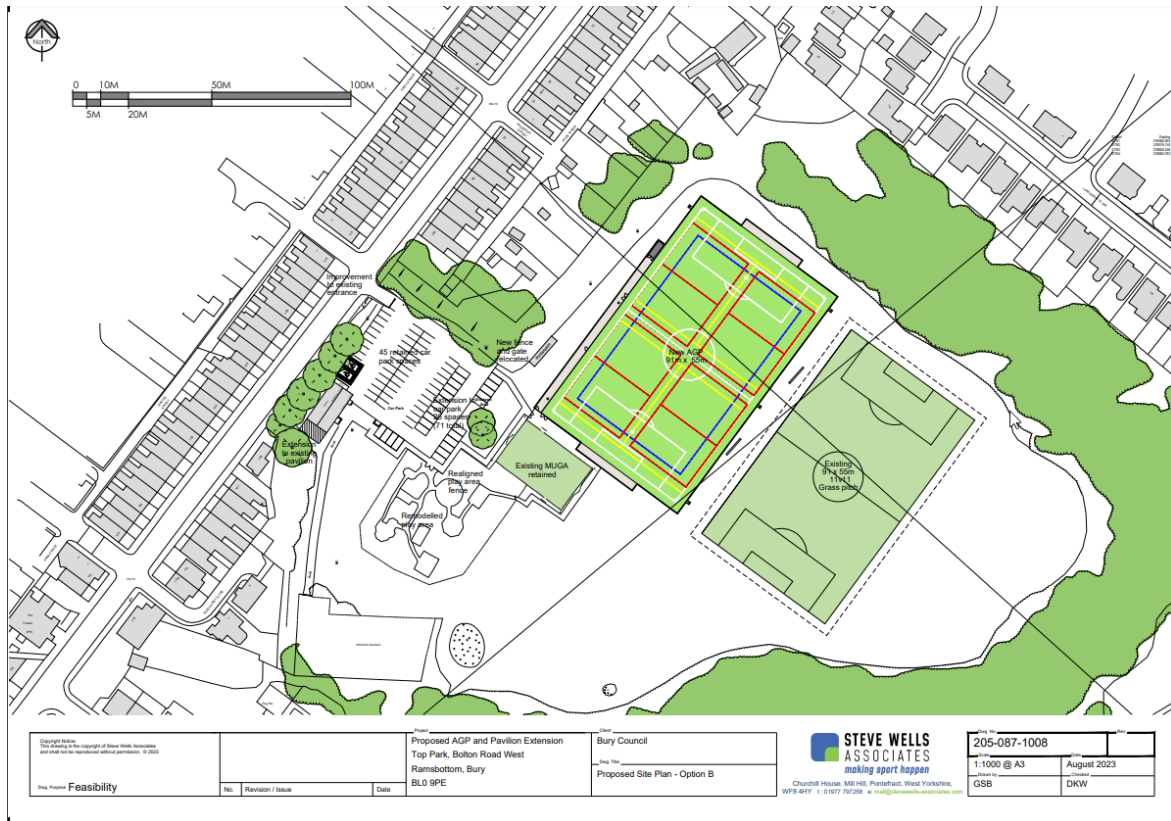


Figure 3: Steve Wells Site Plan – Option B: 205-087-1008

2.4 Planning Status

The site is in Greater Manchester under the development control of Bury Metropolitan Borough Council.

3 METHODOLOGY

3.1 Desk Study

A desk study was undertaken to collate any existing ecological data for the site and its surroundings. As part of the desk study process, the following sources of record have been considered:

- Natural England Magic website for geographic information on key environmental schemes and designations. www.magic.gov.uk, September 2023 (see Appendix C).
- Greater Manchester Local Records Centre (GMLRC) 2km data at OS grid reference SD 78672 16008. Received 28th September 2023 (see Appendix D – full data set available on request).

3.2 Field Surveys

3.2.1 Habitat Survey

Habitat surveys were carried out in accordance with the UK Habitat Classification¹ (Professional Edition) at a minimum of Level 4 and at a Minimum Mapping Unit of 25m²/5 linear m. The survey was undertaken within the optimum period for Habitat Field Surveys, between March and October

Information regarding the assessment is provided in Table 2 below:

Survey date / time	Surveyors present	Temperature (°C)	Humidity (%RH)	Windspeed (Beaufort)	Cloud cover (Okta)
27 th September 2023 / 10:00am	Chris Braine	16	75	1	5

Table 2: Survey Details

This appraisal includes a:

- Description of each habitat including a general list of species and assessment of general management.
- Condition assessment for each habitat, carried out following the condition criteria of The Biodiversity Metric 4.0 – Technical Annex 1²
- Identification of UK BAP Priority Habitats under S41 of NERC Act and Habitats Directive Annex I habitat types.

A UK Habitats Plan of the site showing the various identified habitats is provided in Appendix G.

3.2.2 Badger Surveys

The site and immediate surroundings (where access was possible), was searched for any evidence of Badger (*Meles meles*) in accordance with Surveying Badgers³ as part of the walkover survey.

¹ The UK Habitat Classification User Manual, Version 2.01, 2023

² The Biodiversity Metric 4.0 – Technical Annex 1, Natural England, 2023
<https://publications.naturalengland.org.uk/file/4510441569779712>

³ Surveying Badgers, Harris, Cresswell and Jefferies, The Mammal Society. 1989.

During the walkover the site was searched for evidence of badger including setts, paths and prints, latrines, dung pits, snuffle holes, foraging signs, and hairs caught on wire fencing.

3.2.3 Bat Preliminary Roost Assessment of Trees

Trees within the site were inspected from ground level using binoculars and elevated survey by ladder if safe to search for any field signs of bats or potential roost features (PRF's). The survey was undertaken as part of the walkover survey for all accessible trees.

Each tree was searched for potential bat roost features (PRF's) including; Woodpecker Holes; Cavity's from knots, pruning wounds and cankers; Overlapping forks; Substantial Ivy; Cracks and splits; and Loose Bark.

Each tree was then categorised as the table below which has been structured in accordance with BCT Good Practice Guidelines⁴ (as defined within Table 4.1 of the BCT Good Practice Guidelines) and BS 8596:2015 Surveying for Bats in Trees and Woodlands⁵, as depicted in the Table 3 below.

Category (Potential risk)	Description of Tree and Potential Roost Features
Known or Confirmed Roost	Bats discovered roosting within the tree, or recorded emerging from / entering the tree at dusk and / or dawn. Tree found to contain conclusive evidence of occupation by bats, such as bat droppings within a potential roost feature. A confirmed record (as supplied by an established source such as the local bat group) would also apply to this category.
High risk	Trees with a suitable potential roost feature, or with several features with some bat roost potential. Usually mature or veteran trees with multiple woodpecker holes / deep cracks and /or crevices. Often with a hollow trunk. May support dense ivy.
Medium risk	Trees with few cracks and fissures (of usable depth for low numbers of bats) and /or dense ivy / loose bark. Often semi-mature or mature specimens. Trees tend not to have large splits, hollow trunks or woodpecker holes for example. If present suitable features are likely to be low level or shallower than those in trees with high risk.
Low risk	Trees of sufficient size and age to contain bat roosts but with no obvious potential roost features seen during the ground level survey, or features seen with limited roosting potential only, e.g., small amounts of ivy.
Negligible/No risk	Trees with low or no potential to support bats. Usually without ivy or loose bark and cracks / fissures. Often young or occasionally semi-mature specimens with small girth. Likely to be relatively isolated from suitable foraging habitat or commuting features. May be located in well lit areas.

Table 3: Classification of trees for risk of bat roost presence

3.2.4 Bat Preliminary Roost Assessment of Buildings

A thorough internal and external inspection of the building to look for evidence of bats and assess bat roosting potential was undertaken as part of the walkover survey. Evidence of bats may take the form of droppings, urine stains, feeding remains, live bats, dead bats, grease mark stains, fur and claw marks made by bats regularly roosting in the same location.

⁴ Bat Surveys for Professional Ecologists, Good Practice Guidelines, 4th Edition, Collins J, The Bat Conservation Trust, 2023.

⁵ BS 8596:2015 Surveying for Bats in Trees and Woodlands. BSI Group.

During the external survey the roof and walls were inspected from ground level (using binoculars to aid visibility where required) and elevated survey by ladder if safe to search for gaps and voids that would allow bats access to suitable roost sites.

Each building was assigned a roost suitability as defined BCT Good Practice Guidelines, as depicted in the Table 4 below:

Suitability	Description of Roosting Habitats
High suitability	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Moderate suitability	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost 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).
Low suitability	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 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).
Negligible suitability	Negligible habitat features on site likely to be used by roosting bats.

Table 4: Classification of building suitability for bats

3.3.5 Foraging and Commuting Bats

Habitat features on site are assessed for their suitability to support foraging and commuting bat activity. This assessment is independent from the suitability of the site to support roosting bats and provides information on the likeliness of bat foraging activity within the local environment, and the dependence of individuals on these features for commuting to alternative roosting sites, foraging and migration.

The site was assigned a habitat suitability as defined BCT Good Practice Guidelines, as depicted in the Table 5 below.

Suitability	Description of Habitat
High suitability	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge High-quality habitat that is well connected to the wider landscape that is likely to be used foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site that is close to and connected to known roosts.
Moderate suitability	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as treelines and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Low suitability	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Negligible suitability	Negligible habitat features on site likely to be used by foraging or commuting bats.

Table 5: Suitability Assessment Criteria for foraging and commuting bats

3.2.5 Breeding Birds

Assessment of the sites overall suitability to support breeding and nesting birds was undertaken. The sites habitat composition, geographic locality and association with designated sites are all relevant considerations. Where habitats are suitable to support locally or nationally protected species, breeding individuals or populations of birds further breeding or wintering bird surveys may be required to understand the impact from a proposed scheme.

3.2.6 Pond Scoping Assessment

A pond scoping exercise was undertaken to identify any ponds located within 500m of the site using ordnance survey maps and aerial photography. No ponds were found.

3.2.7 Water Vole / Otter

River Irwell is located 450m north-east of the site but is separated by a 200m wide dense residential area. These species are therefore very unlikely to be present onsite and the river was not surveyed.

3.2.8 Reptiles

An assessment of the onsite habitats was undertaken in order to evaluate the suitability of the habitats to support either episodically occurring or resident populations of reptiles. Habitats such as grasslands, heathland, dunes, brownfields, golf courses are all considered suitable, as are sites featuring a mosaic of habitats with south facing slopes or decreased levels of disturbance. Reptiles can be highly dispersive, so an assessment is also made of the suitability of the connective habitat to additional optimal habitats.

3.2.9 Invasive Species

As part of the walkover survey the site and immediate surroundings were searched for any evidence of invasive non-native plant species (INNS) listed on Schedule 9 of the Wildlife and Countryside Act 1981.

The species which are often encountered are Japanese Knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*), Giant Hogweed (*Heracleum mantegazzianum*), *Cotoneaster* sp., *Rhododendron* sp., and Variegated Yellow Archangel (*Lamium galeobdolon* subsp. *argenteum*).

3.4 Biodiversity Net Gain – Baseline Assessment

A study of the baseline BNG score was carried out using the DEFRA Biodiversity Metric 4.0 providing a summary of the onsite habitat types their relevant Distinctiveness, Condition and Strategic Significance. These are multiplied along with other factors to produce an Ecological Baseline Score, presented in Biodiversity Units (BU). The Baseline Score can then be used by the applicant to inform an appropriate mitigation strategy to reach 10% Biodiversity Net Gain in accordance with the Environment Act, 2021.

3.5 Limitations

It was not possible to inspect the entire roof space of the clubhouse due to a roof partition. However, the structure and condition of the roof was very likely to match the inspected section, so it not considered to be a substantive limitation. The results of this survey are considered suitable to reflect the existing ecological baseline of the development.

4 BASELINE ECOLOGICAL CONDITION

4.1 Designations

Within 2km of the site are two sites with statutory protection including West Pennine Moors Site of Special Scientific Interest (SSSI) 700m north-west of site; and Redisher Wood Local Nature Reserve (LNR) lies 1km to the south-west of the site. Both are separated from the site by residential properties and major roads.

Ten non-statutory Sites of Biological Interest (SBIs) are located within the 2km search radius. Those within 1km of the site are listed below, with a map of all site locations in Appendix E .

Name	Grid Ref.	Distance	Description	Interest
Broadhey Wood and Woodhey	SD788151	0.17km SE	A large area of semi-natural broadleaved woodland dominated by beech (<i>Fagus sylvatica</i>) with a number of streams running through it. The majority of the woodland has been identified as ancient woodland	SBI
Crow Lumb Wood	SD791161	0.32km NE	A woodland on steep slopes above the River Irwell. The site supports a matrix of dry and wet woodland.	SBI
Nuttall Farm Pasture	SD793160	0.42km E	Biodiverse neutral grassland pasture.	SBI
Gollinrod Wood	SD798153	0.63km E	Locally important ancient and seminatural woodland habitats.	SBI
Holcombe Moor	SD770178	0.68km W	An extension of the West Pennine Moors SSSI, this habitat supports a wide range of flora and fauna	SBI
Redisher Woods and Holcombe Brook	SD767162	0.81km SW	Ancient valley woodland home to a number of important bird communities and important plant species such as bluebells and lesser celandine.	SBI

Table 6: Summary of designated sites within 2km of the site boundary

Natural England Magic website indicates that within a 1km radius there are eight types of Priority Habitat Inventory (PHI) allocations. Most are beyond 500m apart from a number of Deciduous Woodland PHI allocations, including the eastern and southern woodland edge of the playing fields. Further afield are areas of Traditional Orchards PHI, 'Good Quality Semi-improved grassland' PHI, Lowland Dry Acid Grassland PHI, Upland Heathland PHI, Lowland Fens PHI, Upland Flushes, Fens and Swamps PHI, and 'No Main Habitat' PHI 900m to the west and south-west respectively.

There are also eight areas of Ancient Woodland sites within 2km of the site, including Broad Hey Wood, which extends to within 230m south-east of the site.

4.2 Habitats and Flora

4.2.1 Flora Records

GMLRC provided no flora records for any notable plant species for the site or the 2km search area.

All higher plant species present were recorded during the site walkover and are provided within the description of each habitat.

No rare or notable plants were recorded during the site walkover.

4.2.2 Invasive Non-Native Species

GMLRC provided no invasive non-native species records for the site or the 2km search area.

Extensive Himalayan Balsam (*Impatiens glandulifera*) was found in unmanaged vegetated areas around perimeter of playing field and within the woodland to the east and south.

4.3 Field Survey

The table below (Table 8) summarises the habitats present within and immediately adjacent to the site, and their relevant inclusion as a National BAP Priority Habitat and / or within the Local Biodiversity Action Plan.

Primary Habitat Code	Secondary Code (Where required)	UKHab	UKBAP	LBAP	N/A
w1g6		Line of Trees			✓
w1g	11	Urban Tree			✓
g4		Modified Grassland			✓
u1b		Sealed Surface			✓
u1b5		Buildings			✓

Table 7: UKHabs Habitat Types and their relevant inclusion in NHPI or LBAP

4.3.1 w1g6 – Line of trees (48m)

There is a line of semi-mature trees between Bolton Road West and the carpark/clubhouse. These include Lime (*Tilia x europaea*), Sycamore (*Acer pseudoplatanus*), False Acacia (*Robinia pseudoacacia*). Another line of trees early mature to mature trees which runs along strip of land north of the carpark / access road. Species here include Sycamore, Ash (*Fraxinus excelsior*), Alder (*Alnus glutinosa*), Norway Maple (*Acer platanoides*), Swedish Whitebeam (*Sorbus intermedia*), Rowan (*Sorbus aucuparia*) and Cherry (*Prunus padus*).

Line of Trees Condition Assessment	Pass / Fail
A. At least 70% of trees are native species.	Pass
B. Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	Pass
C. One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	Pass

D. There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice2.	Fail
E. At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Fail
Condition Score	Moderate

Table 8: Line of Trees Condition Assessment



Figure 4: Line of trees north of the carpark / access road

4.3.2 Individual Urban Trees

There are an additional two trees were recorded within the application site boundary (those not included within w1g6), which were assessed individually. These are two Alder (*Alnus sp.*) set within an extensive area of modified grassland.

Individual Tree Condition Assessment	Pass / Fail
A. The tree is a native species (or at least 70% within the block are native species).	Pass
B. The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Pass auto
C. The tree is mature (or more than 50% within the block are mature).	Fail

D. There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Fail
E. Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Pass
F. More than 20% of the tree canopy area is oversailing vegetation beneath.	Pass
Condition Score	Moderate

Table 9: Individual Tree Condition Assessment



Figure 5: Two Alder trees in the centre of the site

4.3.3 g4 - Modified Grassland (1.0ha)

The majority of the site is an intensively managed sports field, cut at less than 7cm. There is also areas of Modified Grassland within the clay area and around the edge of the clubhouse/carpark. Species diversity throughout is poor being comprised of Perennial ryegrass (*Lolium perenne*) with occasional Cock's-foot (*Dactylis glomerata*). Forb species included frequent Clover (*Trifolium repens*), Ribwort plantain (*Plantago lanceolata*) and rarely Dandelion (*Taraxacum officinale*) and Daisy (*Bellis perennis*).



Figure 6: Intensively managed grassland playing field at the east of the site.

Grassland Condition Assessment [4.0]	Pass / Fail
A. "There are 6-8 vascular plant species per m2 present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition.	Fail
B. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	Fail
C. "Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type."	Pass
D. Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Fail
E. Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)2.	Fail
F. Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Pass
G. There is an absence of invasive non-native plant species3 (as listed on Schedule 9 of WCA4).	Pass
Condition Score	Poor

Table 10: Low Distinctiveness Grassland Condition Assessment

4.3.4 u1b – Developed land; sealed surface (0.26ha)

The site includes a tarmac car park, a tarmac MUGA and tarmac/softfall surface to parts of the playground. These are devoid of vegetation.

There is no condition assessment for this habitat type.



Figure 7: Tarmac car park

4.3.5 u1b5 – Buildings (0.06ha)

There is one permanent building onsite, the clubhouse located adjacent to the carpark near to Bolton Road West on the western boundary. There are two portacabins on the south-western end of the clubhouse and a further portacabin west of the main playing field.

The description and suitability to support protected species are found within section 4.3.3.

4.4 Biodiversity Net Gain – Baseline Assessment

The habitats recorded within the application site were calculated to provide a total of:
2.62 Habitat Baseline Units and **0.19 Hedge Baseline Units**.

Ref	Existing area habitats			Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline
	Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Total habitat units
1	Individual trees	Urban tree	0.073	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (2)	0.58
2	Grassland	Modified grassland	1.018	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required (2)	2.04
3	Urban	Developed land, sealed surface	0.016	VLow	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00
4	Urban	Developed land, sealed surface	0.258	VLow	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00
5								
6								
7								
		Total habitat area	1.37					2.62
		Site Area (Excluding area of Individual trees and Green walls)	1.29					

Figure 8: Habitat Baseline Scores

Baseline ref	Existing hedgerow habitats			Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline
	Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Total hedgerow units
1	H1	Line of trees	0.048	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	0.19
2								
3								
4								
5								
6								
			0.05					0.19

Figure 9: Hedge Baseline Scores

4.5 Fauna

Species legislation is provided in Appendix B.

4.5.1 Amphibians

GMLRC provided five records for amphibians across two species including great crested newt (*Triturus cristatus*) (GCN) and common toad (*Bufo bufo*). The nearest record for GCN was located within Summerseat Nature Reserve approximately 0.98km southeast of the site.

MAGIC returned no EPS licences relating to GCN within a 2km radius.

The pond scoping exercise did not identify any ponds within 500m or a wider pond network of the site and therefore the site is not considered to support GCN.

The intensively managed sports field is of very low value to other amphibians. The sports field boundaries provide some shelter and foraging opportunities for common amphibians and they may be encountered within the site intermittently.

4.5.2 Badger

GMLRC provided 12 records for Badger (*Meles meles*) setts and 1 other record within the 2km search area. The closest of which is 350m from the site but disconnected by a dense residential area. An additional sett is located 600m from the site and reasonably connected by connecting suitable habitat.

No setts or other field signs of badgers were identified on the site or within the 30m zone of influence. The site itself provides some limited foraging opportunities for badgers within the grassland, and very limited opportunity for sett building.

The surrounding landscape provide suitable habitat for badgers and therefore individuals from the outlying setts may therefore pass through the application site intermittently.

4.5.3 Bats

GMLRC provided 458 relevant records for bats within the 2km search area. Sixty-eight records pertained to roosting bats. The nearest roost was located approximately 80m northeast of the site, the record pertains to common pipistrelle (*Pipistrellus pipistrellus*) in 2012. The remaining records were of bat activity and included common pipistrelle, brown long-eared (*Plecotus auritus*), Daubenton's bat (*Myotis daubentonii*), noctule (*Nyctalus noctula*), Nathusius's pipistrelle (*Pipistrellus nathusii*), soprano pipistrelle (*Pipistrellus pygmaeus*) and whiskered/Brandt's bat (*Myotis mystacinus/brandti*). The nearest record pertained to commuting common pipistrelle approximately 80m to the northeast of the site.

Roosting Bats – Trees

All trees within the application site and located along the site's boundaries were assessed from ground level for their suitability to support roosting bats. Features were identified such as splits, cracks, hollows, woodpecker holes, occlusions etc. All trees were assessed to have 'Negligible' suitability to support roosting bats except for a single mature Sycamore tree (Tree survey ref. T38) which was assessed to have 'Low' suitability to support roosting bats due to its size and extensive ivy clad stems.



Figure 10: Sycamore tree with 'low' bat suitability

Roosting Bats - Buildings

Buildings within the application site were externally and internally visually assessed for PRFs.

The Clubhouse is the only permanent building, and this was assessed to have 'Negligible' suitability to support roosting bats. The clubhouse is a single-story stone blockwork building with pitched slate roof and PVC guttering. Windows are boarded over for security and well-sealed. Doors and service hatch have metal roller doors and there was no indication of bats using these features.

The timber soffits were sound and without gaps. There are several flues and vents penetrating the roof, all well sealed. Pointing and mortaring is sound with no suitable gaps. There are a couple of slipped tiles but not opening up sufficient access for bats. The western gable end has a large vent which connects directly into a steel ducted ventilation system. There is a small gap on the righthand side of the vent, however this is shallow and cobwebby and not able to supporting roosting bats. Internally there were no evident features. The roof space is 3m high with modern timber beams, purlins, joists and struts; 300mm insulation; and modern vapour membrane under the tiles. It was not possible to inspect the entire roof space due to a partitioning wall.



Figure 11: Clubhouse north elevation



Figure 12: Clubhouse south elevation



Figure 13: vent on western gable



Figure 14: Internal roof void

There are also three portacabins onsite or immediately adjacent to the site. These were well sealed and assessed to have '**Negligible**' suitability to support roosting bats.

On the basis that the observed features are less than 'reasonably likely' to support roosting bats, it was considered that this building provided '**Negligible**' suitability and further surveys are not considered necessary or proportionate. This ecological receptor is not considered further within this report.

Foraging and Commuting Bats

The main habitat onsite, the intensively managed field, provides negligible foraging and commuting potential for bats. However, the field margins provide a reasonable foraging resource with the boundary vegetation / woodland edge providing good commuting structure and foraging resource for bat species in the local area. The network of woodland belts to the south and ornamental gardens within the local surroundings provides some continuous commuting corridor to wider more valuable foraging and commuting area. Overall, the application site is considered to support '**Moderate**' suitability to support foraging and commuting bats.

4.5.4 Birds

GMLRC provided 85 individual records for 12 different species of Red Listed and protected birds within the 2km search area. The closest record to the site was for Starling (*Sturnus vulgaris*) a Red list species located 360m southwest of the site.

The intensively managed grassland provides negligible opportunities for ground nesting birds.

The boundary trees, field margins and scrub belts provide numerous foraging, cover and nesting opportunities for small common bird species. No nests were noted during the site walkover.

Limited bird activity was observed during the site walkover with only Blackbird (*Turdus merula*) and Feral Pigeon (*Columba livia*) identified.

4.5.5 Invertebrates

GMLRC provided 116 records for notable invertebrate species within the 2km search radius. The nearest record pertained to Cinnabar (*Tyria jacobaeae*) located approximately 150m to the northwest of the site.

The onsite habitats are likely to support a range of common invertebrate species. However, the lack of diverse habitat mosaic means it is unlikely to support a rare or notable invertebrate population. This ecological receptor is therefore not considered further within this report.

4.5.6 Other Terrestrial Mammals

GMLRC provided 44 records for Hedgehog (*Erinaceus europaeus*) within the 2km search radius. The nearest record was located 60m to the west of the site.

No incidental sightings were made and no specific field signs of small mammals were noted during the site walkover.

However, the site provides extensive cover and some foraging within the scrub for hedgehog and therefore they may occur on site if present in the local area.

4.5.7 Riparian Mammals

GMLRC provided three records of Otter (*Lutra lutra*) within the 2km search radius. The nearest record was located 0.98km southeast of the site on the River Irwell.

River Irwell is located 450m north-east of the site but is separated by a 200m wide dense residential area.

The lack of suitable watercourses or water bodies on site provides no opportunity for these species and they are not considered further within this report.

4.5.8 Reptiles

GMLRC provided no reptile records for the site or the 2km search area.

The majority of the site was assessed as providing little or no value to reptiles due to the lack of suitable mosaic habitats, opportunities for basking or hibernacula and its isolated location within a suburban environment. No reptiles were identified during the walkover survey and are considered unlikely to be present on the site.

The northern half of the site provides a mosaic of habitats preferred by reptiles as well as numerous potential refugia. The surrounding roads to the east and north and commercial premises to the south and west mean that the site is relatively isolated and therefore unlikely to support large numbers of reptiles.

5 ECOLOGICAL CONSTRAINTS AND OPPORTUNITIES

5.1 Ecological Constraints

Avoidance, mitigation and/or compensation measures are required for the following constraints:

5.1.1 Badger

It is considered highly unlikely that a badger sett will be dug in the intervening period and therefore the following Reasonable Avoidance Measures (RAM's) should be implemented to ensure no indirect impacts to badgers occurs during the construction works:

- Any pipes left uncovered overnight will be capped to prevent any badger getting trapped.
- Trenches or excavations left uncovered overnight will have a suitable means of escape (such as wooden plank).

5.1.2 Bats

Foraging and Commuting Bats

The application site was considered to support 'Moderate' suitability to support foraging and commuting bats due to the surrounding environmental context. The development will see the retention of field boundary vegetation, therefore retaining the long-term suitability for the site to support foraging and commuting bats. However, artificial lighting during the construction and occupation phase of the development and in-use may result in short-term impacts to foraging and commuting individuals.

A sensitive low-level lighting scheme will be prepared by a lighting engineer to ensure the correct illumination required directed onto the sports surfaces with minimal overspill beyond the artificial grass pitch perimeter fence. The lighting strategy should follow best practice as dictated by the Bat Conservation Trust⁶:

- Consider employing a competent lighting designer who will apply the principals of providing the right light, in the right place, at the right time and controlled by the right system.
- Minimise the spread of light to at, or near horizontal and ensure that only the task area is lit. Flat cut-off lanterns or accessories should be used to shield or direct light to where it is required.
- Consider the height of lighting columns. It should be noted that a lower mounting height is not always better. A lower mounting height can create more light spill or require more columns.
- Column height should be carefully considered to balance task and mitigation measures.
- Limit the times that lights are on to provide some dark periods. The task being lit often varies, for example roads are less used after 23.00hrs and car parks are empty. A lighting designer can vary the lighting levels as the use of the area changes reducing lighting levels or perhaps even switching installations off after certain times. This use

⁶ (A review of the impact of artificial light on invertebrates. Buglife. 2011)
(Royal Commission on Environmental Pollution. 2009. Artificial light in the environment. London, HMSO)
(The Ecological Consequences of Artificial Night Lighting" edited by Longcore and Rich)
(Shedding Light: A survey of local authority approaches to lighting in England. CPRE 2014)

of adaptive lighting can tailor the installation to suit human health and safety as well as wildlife needs.

5.1.3 Breeding Birds

The site and boundary trees / shrub provide bird nesting habitat and in compliance with Wildlife and Countryside Act 1981, no construction work which will disturb nesting birds should take place during the breeding season (March – August).

If this is unachievable a Breeding Birds Check should be carried out by a qualified ecologist within 24hrs prior to the onset of works. If nesting birds are recorded where work is programmed, the area will be protected and fenced off until the young have fledged.

5.1.4 Trees

Mature trees should be protected in line with BS5837:2012 '*Trees in relation to Design, Construction and Demolition -recommendations*'.

5.1.5 Amphibians / Hedgehog

To minimise the risk of killing or injury to common amphibians/hedgehogs the following RAM's should be implemented during the construction works:

- Any suitable habitat such as brash, log piles, and the section of hedge to be removed will be carefully searched by hand prior to clearance. Any amphibians/hedgehogs found during the search will be relocated to an area of retained habitat.
- Trenches or excavations left uncovered overnight will have a suitable means of escape (such as wooden plank).

5.2 Summary of Recommendations

No further survey work is considered necessary to establish the ecological baseline of the site.

The below information will be required as part of a planning condition/s:

Ecological Receptor / Constraint	Timescales
Foraging and Commuting Bats Lighting strategy to be produced by lighting engineer.	Prior to construction
Birds Pre-commencement check and Reasonable Avoidance Methods (RAMs) to be undertaken. Enclosed within CEMP.	Prior to and during construction
Amphibians / Hedgehog / Badger Reasonable Avoidance Methods (RAMs) to be undertaken. Enclosed within CEMP.	During construction
Trees Existing mature trees should be protected in line with BS5837:2012.	Prior to and during construction

Table 11: Summary of Ecological recommendations

5.3 Ecological Enhancement Opportunities

The following ecological enhancements should be incorporated into the proposed development:

- Any tree removals should be compensated by additional tree planting which includes a diverse mix of native and non-native species in accordance with recognised good practice to the north and north-west boundaries.
- Bat roosting opportunities affixed to trees within the wider ownership.
- Bird Nesting Opportunities affixed to the clubhouse extension or located on trees within the wider ownership.

5.4 Mechanism to secure Mitigation and Enhancement

The mitigation measures and enhancement opportunities set out above can be secured through appropriately worded planning conditions as part of any planning consents granted.

6 CONCLUSION

This Preliminary Ecological Appraisal has identified a number of ecological constraints as defined within section 5 and specific avoidance, mitigation and compensation measures have been provided.

No further survey work is considered to be necessary to establish the ecological baseline of the site.

Ecological enhancements have been proposed within section 5.3.

This report is considered to be sufficient to support the planning application and the mitigation and enhancement opportunities can either be incorporated into the site layout design or secured through appropriately worded planning conditions and/or legal agreement as part of any planning consents granted.

APPENDIX A

Species List

Common Name	Scientific Name
Alder	<i>Alnus glutinosa</i>
Ash	<i>Fraxinus excelsior</i>
Cherry	<i>Prunus padus</i>
Cock's-foot	<i>Dactylis glomerata</i>
Clover	<i>Trifolium repens</i>
Dandelion	<i>Taraxacum officinale</i>
False Acacia	<i>Robinia pseudoacacia</i>
Lime	<i>Tilia x europaea</i>
Norway Maple	<i>Acer platanoides</i>
Perennial Rye-grass	<i>Lolium perenne</i>
Ribwort Plantain	<i>Plantago lanceolata</i>
Rowan	<i>Sorbus aucuparia</i>
Swedish Whitebeam	<i>Sorbus intermedia</i>
Sycamore	<i>Acer pseudoplatanus</i>
Ivy	<i>Hedera helix</i>

APPENDIX B

Key Species Legislation

Bats

Bats are European Protected Species (EPS) listed on Annex IV of the Habitats Directive 1992 which is transposed into UK law by the Conservation (Natural Habitats &c) Regulations 1994 or “Habitats Regulations” and consolidated within The Conservation of Habitats and Species Regulations 2017. Bats are also protected through Schedules 5 and 6 of the Wildlife and Countryside Act (WCA) 1981 (as amended). Certain species are also listed in Section 41 of the NERC Act 2006, as species which are of principal importance for the conservation of biodiversity in England. A number of Bat species are listed as a Biodiversity Action Plan (BAP) priority species on the UK BAP.

European Water Vole (*Arvicola amphibious*)

Water Vole is protected under Schedule 5 of the WCA 1981 (as amended) and is listed as a species of principal importance for the conservation of biodiversity in England under Section 41 of the NERC Act 2006. Water Voles are also listed as a UK BAP priority species.

Eurasian Badger (*Meles meles*)

Badgers are protected in the UK under the Protection of Badgers Act 1992 which protects both the individual animals and their setts. However, habitats used for any other purpose are not afforded any form of protection under this or other legislation. This species is also listed on Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) which outlaws certain methods of taking and killing when this is necessary.

European Hedgehog (*Erinaceus europaeus*)

Hedgehog are listed as a species of principal importance for the conservation of biodiversity in England under Section 41 of the NERC Act 2006 and is also listed as a UK BAP priority species.

Birds

All bird species including their eggs and nests, are protected from harm during the breeding season under the WCA 1981 to varying degrees. Some bird species are also included on Schedule 1 of the WCA 1981 (as amended) and inclusion on this schedule makes it an offence to intentionally or recklessly disturb these birds at, on or near an ‘active’ nest. A number of birds are listed as species of principal importance for the conservation of biodiversity in England under Section 41 of the NERC Act 2006.

Reptiles

Widespread reptiles; Adder (*Vipera berus*), Grass snake (*Natrix natrix*), Common lizard (*Lacerta vivipara*) and Slow-worm (*Anguis fragilis*) are protected against killing, injuring and sale under UK legislation through their inclusion in Appendix III of the Bern Convention (1979), Schedule 5 of the WCA 1981 (as amended).

Sand Lizard (*Lacerta agilis*) and Smooth snake (*Coronella austriaca*) are also EPS listed on Annex IV of the Habitats Directive 1992 which is transposed into UK law by the Habitats Regulations, and on Schedule 5 of the WCA 1981 (as amended).

All reptiles are listed as UK BAP Priority species and are also listed as a species of principal importance for the conservation of biodiversity in England under Section 41 of the NERC Act 2006.

Amphibians

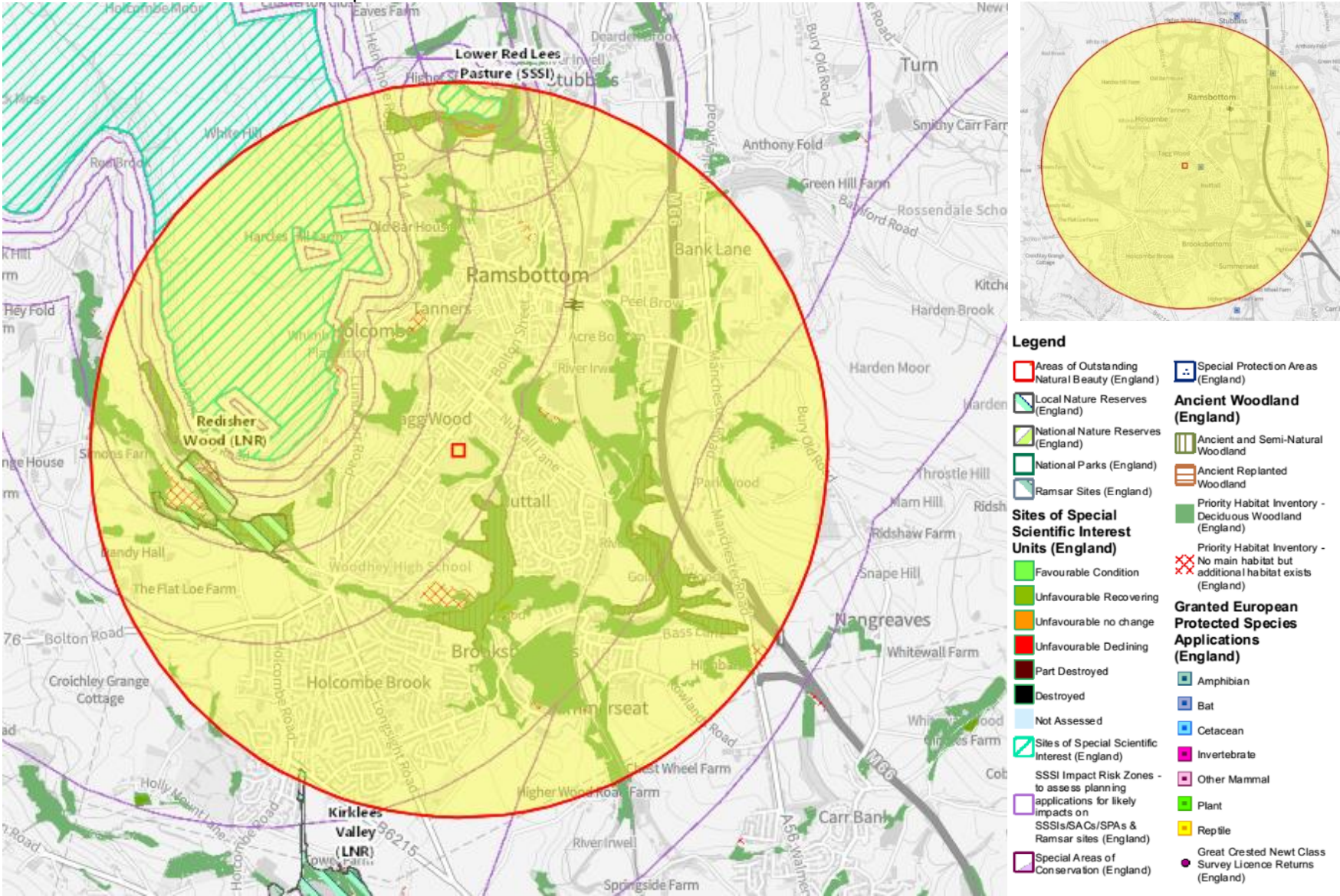
Widespread amphibians; Smooth newt (*Triturus vulgaris*), Palmate newt (*Triturus helveticus*), Common frog (*Rana temporaria*) and Common toad (*Bufo bufo*) are only protected from sale under Schedule 5 of the WCA 1981 (as amended). Common toad is also listed as a UK BAP Priority species.

Great crested newt (*Triturus cristatus*) and Natterjack toad (*Bufo calamita*) are also EPS listed on Annex II and IV and Annex IV respectively of the Habitats Directive 1992 which is transposed into U.K law by the Habitats Regulations, and on Schedule 5 of the WCA 1981 (as amended). Both are also listed as a UK BAP Priority species and GCN are also listed as a species of principal importance for the conservation of biodiversity in England under Section 41 of the NERC Act 2006.

Invertebrates

A large number of British invertebrates are protected under Schedule 5 of the WCA 1981 (as amended). Different species are protected under one, some or all of the parts of Section 9. Hundreds of invertebrate species are of principal importance for the conservation of biodiversity in England under Section 41 of the NERC Act 2006. Similarly, several hundred are also listed as a UK BAP priority species.

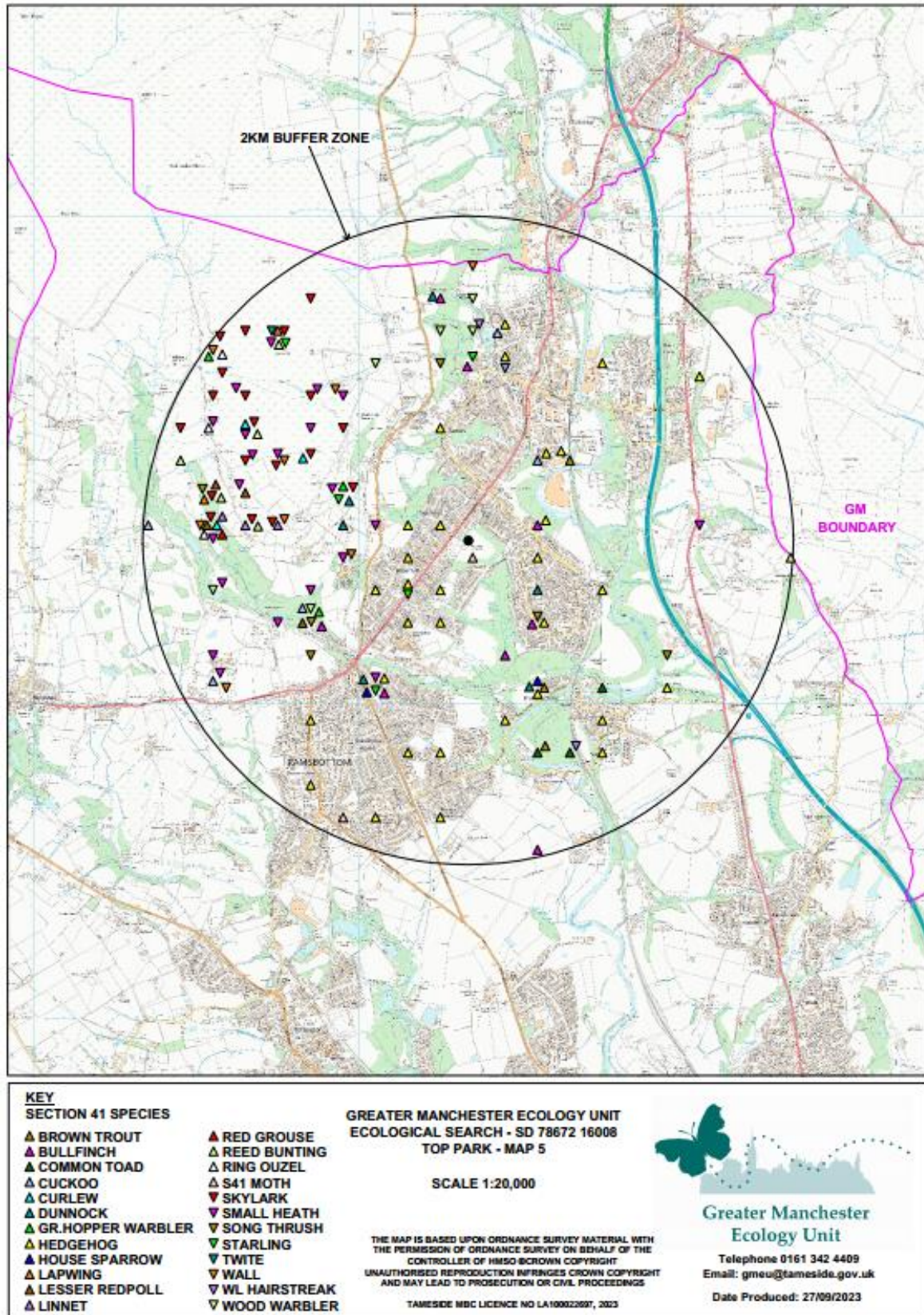
APPENDIX C
Natural England Magic environmental schemes and designations
2km Radius on site centre. Insert map with EPS licences



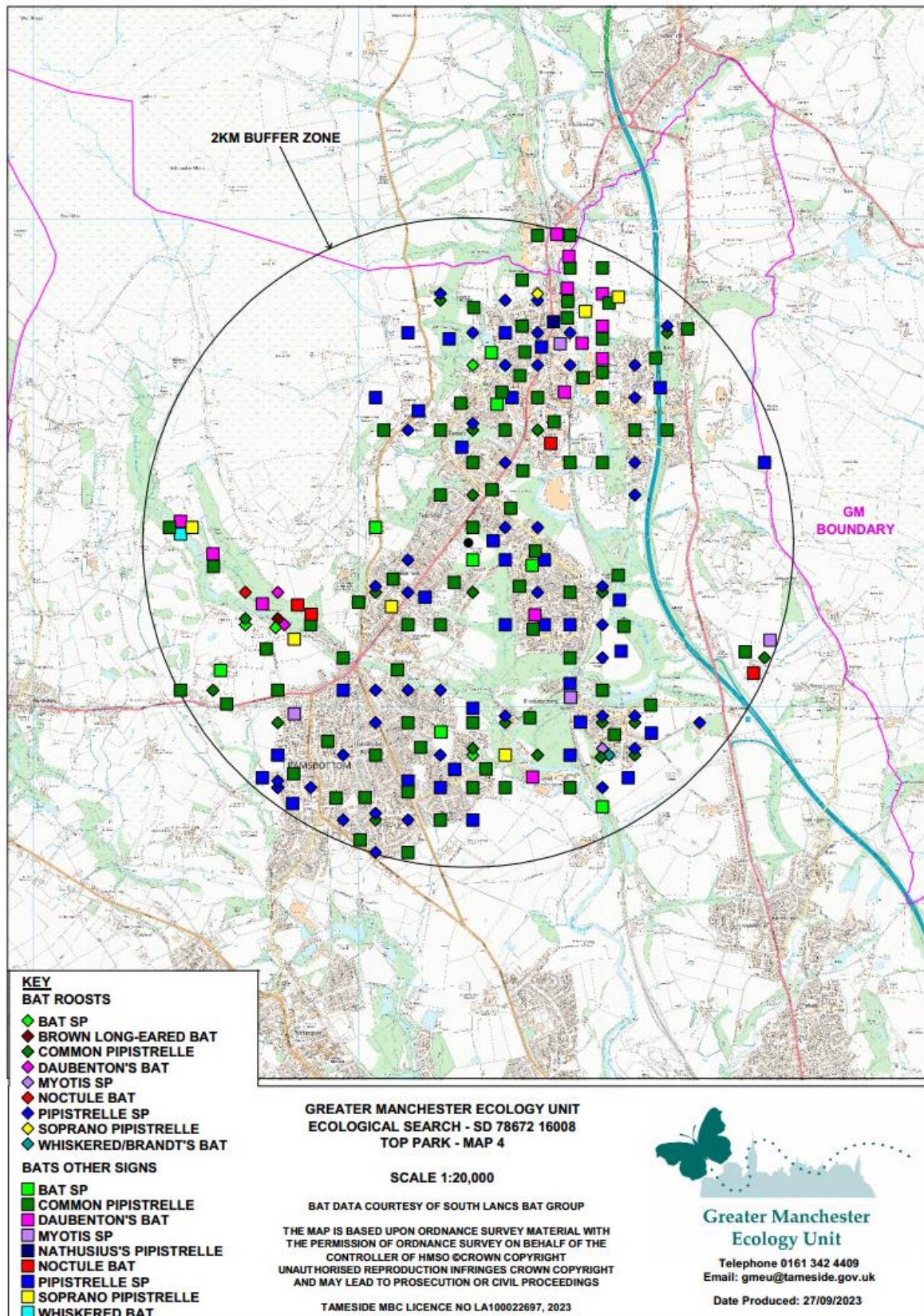
APPENDIX D

GMLRC's Biological Data Record Mapping. September 2023

Section 41 Species Map:



Bat Record Map:



APPENDIX E

Sites of Biological Importance, GMLRC, September 2023

