

GEOSPHERE ENVIRONMENTAL

REPORT NUMBER: 5823,EC,PEA,Bat Scope/RH,KL/18.08.21/V1

SITE: Former Chambers Bus Depot, Bures

DATE: 18/08/2021



DOCUMENT CONTROL SHEET

Report Number: 5823,EC,PEA,Bat Scope/RH,KL/18.08.21/V1
Client: Rose Builders
Project Name: Former Chambers Bus Depot, Bures
Project Number: 5823,EC,
Report Type: Preliminary Ecological Appraisal and Bat Scoping Survey
Status: Final
Date of Issue: 18 August 2021

Issued By:

Geosphere Environmental Ltd, Brightwell Barns, Ipswich Road, Brightwell, Suffolk, IP10 0BJ.
T: 01603 298 076 / 01473 353 519. W: www.geosphere-environmental.co.uk

Confidentiality, Copyright and Reproduction:


This document has been prepared by Geosphere Environmental Ltd in connection with a contract to supply goods and/or services and is submitted only on the basis of strict confidentiality. The contents must not be disclosed to third parties other than in accordance with the terms of the contract. Geosphere Environmental Ltd accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.

Time Limit of Reliance:

Please note that the reported surveys were conducted on the date(s) stated in the report and that it represents site conditions at the time of the visit. The findings and recommended mitigation are based on these conditions. If site conditions change materially after the site survey, the original report cannot be relied upon and will need to be updated. Ecological reports can typically be relied on for 18 to 24 months from the date of survey.

Prepared By:

Rachel Hall
Ecologist



Reviewed and Authorised By:

Katie Linehan
Technical Director of Ecology



VERSION RECORD

Version	Date	Document Revision Details	Prepared By:	Admin
---------	------	---------------------------	--------------	-------

Non-Technical Executive Summary

Report Description	<p>This Preliminary Ecological Appraisal and Bat Scoping report has been prepared by Geosphere Environmental Limited for Rose Builders and relates to the proposed residential and commercial development of the site at Former Chambers Bus Depot, Bures.</p> <p>The purpose of this report is to identify potential ecological constraints to development, particularly in relation to potential legally protected species onsite, confirm the need for further survey work to confirm all baseline ecological conditions, if necessary and highlight opportunities for ecological enhancement.</p>
Summary of Main Findings	<p>The site comprises, buildings, hardstanding, tall ruderal and defunct species poor hedgerow.</p> <p>The findings of the extended Phase 1 Habitat Survey confirm that the habitats onsite have the potential to support roosting bats and nesting birds. The site is not considered suitable for Badger, Water Vole, Otter, reptiles, Hazel Dormouse or Great Crested Newt.</p> <p>The development site is within the 22km Zone of Influence for Recreational Disturbance of the Blackwater Estuary (SPA and Ramsar) which is likely to trigger a payment to the Essex Recreational and Avoidance Mitigation strategy (RAMS).</p>
Ecological Constraints	<p>The constraints to development will be the removal of habitats considered suitable for protected species, including buildings suitable for roosting bats and nesting birds. The hedgerow is also suitable for nesting birds.</p>
Avoidance measures & Timings of Works to reduce impact	<p>Birds: Given the onsite presence of potential bird nesting habitat, any clearance of vegetation, or buildings that support suitable nesting features, should be timed to avoid the bird breeding season (March-August inclusive). If this is not possible, these habitats can only be removed following confirmation by a suitably qualified Ecologist that they are not in active use by nesting birds.</p>
Further Survey Work Required	<p>The following are recommended at the appropriate time of year to establish an ecological baseline:</p> <ul style="list-style-type: none"> • Bat activity surveys on buildings B1 to B3 (restricted to May to September inclusive).
Conclusions	<p>The recommendations within Section 7 of this report should be adhered, to reduce the impact on protected species. Provided the recommendations within Section 7 of this report are undertaken and mitigation measures adhered to, then potential negative impacts on protected species, if present, will be negligible.</p>

CONTENTS

Page No.

NON-TECHNICAL EXECUTIVE SUMMARY	3
1. INTRODUCTION	6
1.1 Aims	6
2. LEGISLATIVE AND POLICY CONTEXT	7
2.1 Current UK Legislation	7
2.2 Planning Policy	7
3. METHODOLOGY	8
3.1 Technical Approach	8
3.2 Ecological Desk Study	8
3.3 Preliminary Ecological Appraisal	8
3.4 Bat Scoping Survey	9
3.4.1 External Inspection of Buildings	9
3.4.2 Internal Inspection of Buildings	10
3.4.3 Inspection of Trees	10
3.5 Ecological Impact Assessment	10
4. DESK STUDY RESULTS	11
4.1 Nature Conservation Sites	11
4.1.1 Non-Statutory Sites	11
4.1.2 Statutory Sites	11
4.1.3 Habitats Site	11
4.2 Protected Species Records	11
4.3 Habitat Suitability Index Assessments	13
5. FIELD SURVEY RESULTS	14
5.1 Site-Specific Limitations	14
5.2 Phase 1 Habitat Survey	14
5.2.1 Habitat Within the Development Zone	14
5.2.2 Outside the Development Zone	14
6. SPECIES APPRAISAL	15
6.1 Plants	15
6.2 Invertebrates	15
6.3 Bats	15
6.3.1 Buildings	15
6.3.2 Trees	17
6.3.3 Foraging	17
6.4 Amphibians	17
6.5 Reptiles	18
6.6 Birds	18
6.7 Badger	19

CONTENTS

Page No.

6.8	Dormouse	19
6.9	Riparian Mammal	19
6.10	Hedgehog	19
7.	EVALUATION, CONSTRAINTS AND RECOMMENDATIONS	20
7.1	Proposed Development	20
7.2	Nature Conservation Sites	20
7.3	Legally Protected and Notable Species	21
8.	GENERAL ENHANCEMENTS AND OPPORTUNITIES	23
9.	CONCLUSIONS	24

APPENDICES

APPENDIX 1 – REPORT LIMITATIONS AND CONDITIONS
APPENDIX 2 – REFERENCES
APPENDIX 3 – DRAWINGS
APPENDIX 4 – SPECIES-SPECIFIC LEGISLATION
APPENDIX 5 – DESK STUDY DATA
APPENDIX 6 – TARGET NOTES
APPENDIX 7 – BAT SCOPING PHOTOS
APPENDIX 8 – EXAMPLE ENHANCED FEATURES

TABLES

Page No.

Table 1 – Selected Protected Species Records	12
Table 2 – Bat Roost Suitability of Buildings	15
Table 3 – Ponds within 250m	17
Table 4– Birds Identified During the Survey	18
Table 5 – Protected Species - Ecological Constraints and Recommended Actions	21

1. INTRODUCTION

This Preliminary Ecological Appraisal and Bat Scoping report has been prepared by Geosphere Environmental Limited for Rose Builders and relates to the proposed residential and commercial development of the site at Former Chambers Bus Depot, Bures. This report also includes an external and internal bat scoping survey of the buildings onsite and any trees which are to be removed as part of the development.

The report relates to the proposed development of the 0.3hectare (ha) site as shown in Drawing ref. 241373-PUR-00-00-DR-A-2001 included within Appendix 3. The site is located at National Grid reference TL907340.

The development boundary is shown on Figure 1 below:

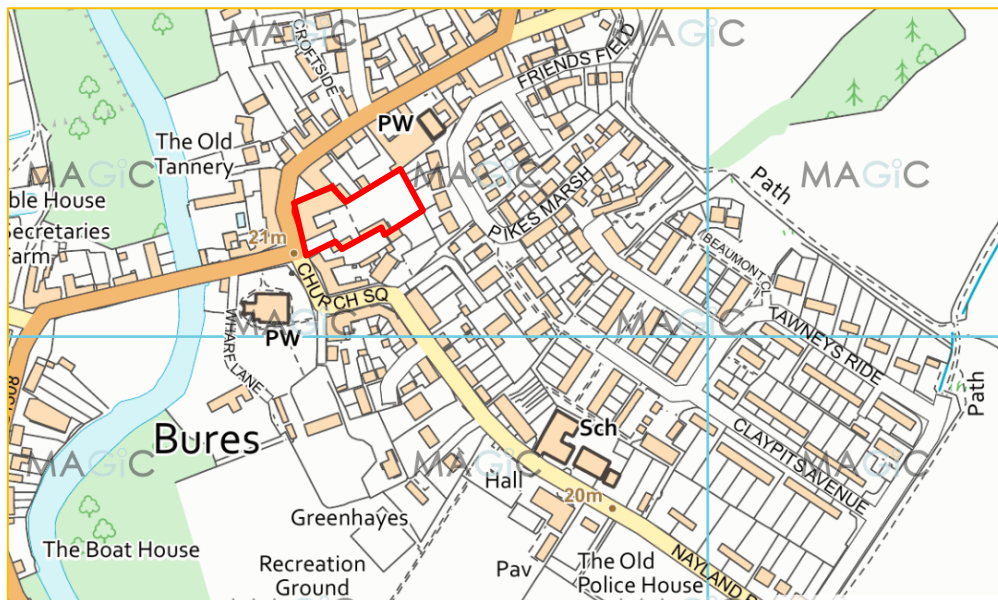


Figure 1 –The proposed development boundary is outlined in red

Any limitations and conditions pertaining to the report are stated within Appendix 1, with a full list of technical references provided within Appendix 2.

1.1 Aims

This report provides baseline data for the assessment of the ecological features of the site and identifies any potential constraints with regards to protected species. It also outlines recommendations for further surveys if necessary.

2. LEGISLATIVE AND POLICY CONTEXT

2.1 Current UK Legislation

The main legislation that applies to ecological issues within England and Wales is as follows:

- The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 transposes 'The Conservation of Habitat and Species Regulations 2017', regarding the conservation of natural habitats and of wild fauna and flora (formally the EC Habitats Directive). Under the regulations, public bodies have a duty in exercising their functions to provide for the protection of 'Habitats Sites' and 'European Protected Species' (EPS).
- The Wildlife and Countryside Act 1981, (WCA) (as amended) provides detail on a range of protection and offences relating to wild birds, other animals, and plants. The level of protection depends upon which Schedule of the Act the species is listed on. Licences are available for specific purposes to permit actions that would otherwise constitute an offence in relation to species.
- The Natural Environment and Rural Communities, (NERC), Act 2006 imposes an obligation on all public bodies, including local authorities, to consider whether their activities can contribute to the protection of wildlife. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England and states that: "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity."

Species-specific legislation is detailed within Appendix 4.

2.2 Planning Policy

The recommendations of this report are in line with the key principles of the Ministry of Housing, Communities and Local Government (MHCLG) (2021) National Planning Policy Framework (NPPF) (ref. **R.1**) and Government Circular 05/06: Biodiversity and Geological Conservation – (ref. **R.2**).

Local planning policies relating to ecology are invariably based upon the conservation of species protected under the above legislation, including species and habitats of principal importance listed under Section 41 of the NERC Act 2006; and the protection of designated sites.

All of these features are considered within the scope of this Preliminary Ecological Appraisal and therefore any recommendations made herein are likely to be in line with this policy.

3. METHODOLOGY

3.1 Technical Approach

The Preliminary Ecological Appraisal has been undertaken following guidelines provided by CIEEM's Guidelines for Preliminary Ecological Appraisal (ref. **R.3**) and BS 42020: 2013 Biodiversity standards (ref. **R.4**) to provide an indication of the ecological value of the site and the potential for the site to be used by protected species.

Scientific names and common names of plant species identified are as they appear in Stace, (ref. **R.5**).

The conclusions and recommendations for further works are in accordance with current legislation and guidance.

3.2 Ecological Desk Study

A data search was conducted of freely available biological records. The sources of information included:

- The Multi-Agency Geographic Information for the Countryside (MAGIC) online database (ref. **R.6**) was consulted to obtain geographic information on key statutory designated nature conservation sites of relevance to the site.
- Suffolk Biodiversity Information Service (SBIS) and Essex Wildlife Trust (EWT) was contacted to provide details of legally protected species and non- statutory designated conservation sites within 2km of the site. Only records of protected species from within the last ten years are considered within this report.
- Ordnance survey maps were used to identify ponds/ditches within 250m of the site to assess the potential for Great Crested Newt (GCN) within the immediate vicinity of the site.

All relevant desk study data obtained is attached in Appendix 5, except for detailed lists of species given the sensitive nature of the information.

3.3 Preliminary Ecological Appraisal

The surveys used to inform the Preliminary Ecological Appraisal comprise of a Phase 1 Habitat and Protected Species Scoping Survey, more often referred to as an extended Phase 1 Habitat Survey.

An extended Phase 1 Habitat Survey of the site was undertaken on 06 August 2021 by Rachel Hall (Ecologist) BSc (Hons) Natural England Level 1 Bat Class Survey Licence (2020-46136-CLS-CLS). The weather conditions at the time of the survey were 20°C, 20% cloud cover, no rain, and light breeze (Beaufort 2).

The Phase 1 Habitat Survey involved a walkover of the site in which the habitats are classified according to JNCC Phase 1 Habitat Survey guidelines, (ref. **R.7**). The frequency and cover of each species identified as they are distributed in each habitat is estimated using the DAFOR scale, (ref. **R.8**), as follows:

- Dominant - >75% cover;
- Abundant – 51-75% cover;
- Frequent – 26-50% cover;
- Occasional – 11-25% cover;
- Rare – 1-10% cover;
- Locally dominant (LD), abundant (LA) and frequent (LF) is also used where the distribution is patchy.

The site was assessed for its suitability to support protected species and other species of conservation importance, which could pose a planning constraint. All signs and areas of habitat considered suitable for protected species or those of conservation interest, were recorded and photographed. These include burrows, droppings, footprints / paths, hairs, refuges and particular habitat types, such as ponds, known to be used by certain class of fauna. Any mammal paths found were noted down and followed where possible. Sites are taken in the context of their surroundings and so include the immediate environs outside of site boundaries, where appropriate.

All ponds within 250m of the site were also assessed for their suitability for Great Crested Newt (*Triturus cristatus*) if the ponds were publicly accessible or if access had been granted prior to the survey. This includes a habitat suitability index (HSI) assessment (ref. **R.9**) which assesses the pond based upon a number of factors including the size, water quality, permanence, shading, presence of fish, the number of nearby ponds and macrophyte cover. A score between 0 and 1 is given; where 0 represents poor suitability and 1 represents excellent suitability.

3.4 Bat Scoping Survey

The bat scoping survey has been undertaken by Rachel Hall (Ecologist) (Bat Survey Licence number: (2020-46136-CLS-CLS), with the assistance of Zeinab Faris (Graduate) and Henry Leonard (Assistant) and was undertaken at the same time as the ecological walkover.

The scoping survey for bat roost potential was undertaken in accordance with Bat Conservation Trust (BCT), JNCC and Natural England guidelines (refs. **R.10**, **R.11** and **R.12** respectively).

If bats or any other European protected species are found to be present onsite and the proposed activities will cause disturbance or destruction of a roost site then this report will only summarise the potential requirements. For works to continue a detailed mitigation plan with appropriate compensation measures would be required and a development licence would need to be sought from Natural England.

3.4.1 External Inspection of Buildings

A visual inspection of the buildings was undertaken to identify the suitability of the building to provide potential roost space for bats. In particular, potential access points and evidence of bats were searched for. This was carried out in full day light with the aid of binoculars, endoscope, torch and ladders to identify the following features:

- Age and structure of the building;
- Condition of the roof noting any missing, dislodged or lifted tiles that would provide entry;
- Condition of the walls, doors and windows that may also provide entry;
- Windowsills, walls and sheltered areas are searched for bat droppings;
- Grease marks, scratch marks and urine staining around possible entry points.

3.4.2 Internal Inspection of Buildings

This section of the survey focuses on identifying features or areas which provide the correct environmental conditions for roosting bats and the evidence of bat activity. These include:

- Identifying dark, warm undisturbed areas normally in the roof space such as, joins in traditional roof joists and beams, behind the ridge beam or roofing felt and any cracks or crevices in the bricks or stone work that could be utilised as a roost site;
- The walls, floor and any flat areas such as on top of beams were examined for bat droppings, feeding remains and bat corpses.

3.4.3 Inspection of Trees

All established trees that could be accessed onsite were inspected and assessed in terms of their suitability (negligible, low, moderate or high) to support roosting bats, in line with the Bat Conservation Trust (BCT) survey guidelines (ref. **R.10**).

3.5 Ecological Impact Assessment

The ecological evaluation and impact assessment detailed below is based upon CIEEM Guidelines for Ecological Impact Assessment in the United Kingdom, (ref. **R.13**).

CIEEM Guidelines state that the value or potential value of an ecological resource or feature should be determined within a defined geographical context from an international to site scale as follows:

- On an International scale, e.g. Ramsar, SAC or SPA site;
- On a UK scale, for example a SSSI or a National Nature Reserve, (NNR);
- On a National scale, e.g. a reserve of importance to England/Northern Ireland/Scotland/Wales;
- On a Regional scale, e.g. a local site with important regional habitats or UKBAP species;
- On a County scale, e.g. a local site with a habitat that is characteristic of the County or rare on a County scale, or with LBAP species;
- On a District scale, e.g. a site with wildlife corridors likely to improve the biodiversity of the area;
- Local or Parish, e.g. areas of green space in a predominantly urban environment;
- On a Site scale, e.g. habitats with value within the zone of influence only.

The potential for protected species to use the habitats onsite contributes significantly towards the potential value of the habitats onsite.

4. DESK STUDY RESULTS

4.1 Nature Conservation Sites

There are no designated sites within the site boundary.

4.1.1 Non-Statutory Sites

Biological records have confirmed the presence of three non-statutory designations within the 2km search radius. The closest of which is Shrubs Farm which is a Local Wildlife Site (LWS) located 1.6m north west of the site and comprises a small field of predominantly open grassland with a small area of scrub.

4.1.2 Statutory Sites

One statutory designated nature conservation sites is located within 2km of the site. Suffolk Coast and Heath/Dedham Vale is a designated Area of Outstanding Natural Beauty (AONB), which is located 1.4km east of the site. The 900 (ha) area comprises of multiple habitat types such as Deciduous Woodland, Ancient Woodland, Coastal and Flood Plain Grazing Marsh, good quality Semi-Improved Grassland, Purple Moor Grass and Rush Pasture, Wood pasture and Parkland, Lowland Dry Acid Grassland, which are all BAP priority habitat. This AONB is separated from site by residential housing, roads and agricultural fields.

4.1.3 Habitats Site

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 provides an additional level of protection for sites of internationally value, specifically Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar. As such, a wider 22km search was undertaken for internationally protected sites. Four internationally protected sites were returned within this search, the closest of which is Colne Estuary (SPA, Ramsar), located 14km north east of the site

Other internationally protected sites returned within this wider search, included:

- Colne Estuary (SPA, Ramsar), located 14.0km north east of the site;
- Abberton Reservoir (SPA, Ramsar), located 16.0km south;
- Stour and Orwell Estuary (Ramsar, and SPA), located 19.6km east; and
- Blackwater Estuary (SPA, Ramsar), located 19.5km south.

4.2 Protected Species Records

There are records of protected and notable species listed within 2km of the site returned from SBIS and Essex Wildlife Trust. Absence of records should not be taken as confirmation that a species is absent from the search area.

Table 1 provides a summary below:

Table 1 – Selected Protected Species Records

Common Name	Scientific Name	Biological Records Within 2km	Date of Most Recent Record	Protective Status *
Amphibian				
Great Crested Newt	<i>Triturus cristatus</i>	Yes	2017	HabsDir, WCA Sch 5 + 6, Priority species.
Reptile				
Common Lizard	<i>Zootoca vivipara</i>	Yes	2012	WCA Sch 5, Priority species.
Slow Worm	<i>Anguis fragilis</i>	No	-	WCA Sch 5, Priority species.
Adder	<i>Vipera berus</i>	No	-	WCA Sch 5, Priority species.
Grass Snake	<i>Natrix helvetica</i>	Yes	2012	WCA Sch 5, Priority species.
Mammal				
Badger	<i>Meles meles</i>	Yes	2009	PBA.
Otter	<i>Lutra lutra</i>	Yes	2014	HabsDir, WCA Sch 5 + 6, Priority species.
Water Vole	<i>Arvicola amphibius</i>	Yes	2012	HabsDir, WCA Sch 5 + 6, Priority species.
Hedgehog	<i>Erinaceus europaeus</i>	Yes	2014	WCA Sch 6, Priority species.
Barbastelle Bat	<i>Barbastella barbastellus</i>	No	-	HabsDir, WCA Sch 5 + 6, Priority species.
Brandt's Bat	<i>Myotis brandtii</i>	No	-	HabsDir, WCA Sch 5 + 6.
Whiskered Bat	<i>Myotis mystacinus</i>	No	-	HabsDir, WCA Sch 5 + 6.
Natterer's Bat	<i>Myotis nattereri</i>	Yes	2019	HabsDir, WCA Sch 5 + 6.
Serotine Bat	<i>Eptesicus serotinus</i>	Yes	2013	HabsDir, WCA Sch 5 + 6.
Noctule Bat	<i>Nyctalus noctula</i>	No	-	HabsDir, WCA Sch 5 +6, Priority species.
Leisler's bat	<i>Nyctalus leisleri</i>	No	-	HabsDir, WCA Sch 5 + 6.
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	Yes	2011	HabsDir, WCA Sch 5 + 6, Priority species.
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	Yes	2015	HabsDir, WCA Sch 5 + 6.
Nathusius's pipistrelle	<i>Pipistrellus nathusii</i>	No	-	HabsDir, WCA Sch 5 + 6.
Brown Long-eared Bat	<i>Plecotus auritus</i>	Yes	2016	HabsDir, WCA Sch 5 + 6, Priority species.
Daubenton's bat	<i>Myotis daubentonii</i>	No	-	HabsDir, WCA Sch 5 + 6.
Hazel Dormouse	<i>Muscardinus avellanarius</i>	No	-	HabsDir, WCA Sch 5 + 6, Priority species.
Plants				

Table 1 – Selected Protected Species Records

Common Name	Scientific Name	Biological Records Within 2km	Date of Most Recent Record	Protective Status *
One record of a Schedule 8 plants, Bluebell (<i>Hyacinthoides non-scripta</i>) was received within the biological records.				
Invertebrates				
Three records of invertebrates were returned within the biological records including Small Heath (<i>Coenonympha pamphilus</i>), Cinnabar (<i>Tyria jacobaeae</i>), and Scarce Chaser (<i>Libellula fulva</i>).				
Birds				
50 records of birds were returned within the biological records. Six of these are Schedule 1 birds including, Redwing (<i>Turdus iliacus</i>) and Fieldfare (<i>Turdus pilaris</i>) Western Barn Owl (<i>Tyto alba</i>) and Kingfisher (<i>Alcedo atthis</i>). Species which are also NERC s41 including Eurasian Skylark (<i>Aluada arvensis</i>), Cuckoo (<i>Cuculus canorus</i>) Song Thrush (<i>Turdus philomelos</i>) and House Sparrow (<i>Passer domesticus</i>).				
Notes:				
*WCA Sch 1 - Wildlife and Countryside Act (1981) Schedule 1. WCA Sch 5 - Wildlife and Countryside Act (1981) Schedule 5 (Killing, injuring and sale of certain species), WCA Sch 6 - Wildlife and Countryside Act (1981) Schedule 6 (Animals which may not be killed or taken by certain methods), WCA Sch 8 - Wildlife and Countryside Act (1981) Schedule 8 (Plants which are protected), Priority species- species listed within UK Biodiversity Action Plan Species, and Natural Environment and Rural Communities Act (2006) Section 41. Species and Habitats of Principal Importance. PBA - Protection of Badgers Act (1992). HabsDir- Conservation of Habitats and Species Directive (2010) Annex II, Annex IV. BoCC Red / Amber - Birds of Conservation Concern - Red or Amber listed.				

4.3 Habitat Suitability Index Assessments

Three ponds are located within 250m of the site, referenced ponds 1 to 3 therein and shown on Drawing ref. 5823,EC,/002/Rev0, in Appendix 3. An HSI assessment has been undertaken where access was possible.

5. FIELD SURVEY RESULTS

The results of the Phase 1 habitat survey and protected species scoping survey are detailed below and annotated on Drawing ref. 5823,EC,/001/Rev0, attached in Appendix 3. Descriptions of the target notes (TN) and bat scoping photographs are included in Appendix 6 and 7.

5.1 Site-Specific Limitations

The loft of B1 was not accessed, a full assessment was not undertaken due to safety concerns. However, an assessment of bat roost potential was still undertaken based on the information obtained.

5.2 Phase 1 Habitat Survey

The following habitat types were recorded within the survey area:

- Buildings (referenced B1 to B7);
- Hardstanding;
- Tall ruderal and;
- Defunct species-poor hedgerow;
- Brick Wall.

These habitats outlined above and are discussed in more detail below.

5.2.1 Habitat Within the Development Zone

The majority of the site comprises buildings and hardstanding (TN1), a species-poor defunct hedgerow runs along the eastern boundary comprising Leyland Cypress (*Cupressus × leylandii*), Elder (*Sambucus nigra*), Lawson Cypress (*Chamaecyparis Lawsoniana*), Hedge Bindweed (*Calystegia sepium*) and Ivy (*Hedera helix*) (TN2).

The tall ruderal mainly bordered the boundaries of the site along with a few buildings. Species such as Ribwort Plantain (*Plantago lanceolate*), Common Nettle (*Urtica dioica*), Dandelion (*Taraxacum officinale*), Broad-leaved Dock (*Rumex obtusifolius*) with small patches of Bramble (*Rubus fruticosus* agg.) and Creeping Thistle (*Cirsium arvense*). Butterfly-bush (*Buddleia davidii*) and Common Ragwort (*Senecio jacobaea*), Holly (*Ilex aquifolium*) and Rose Hip (*Rosa canina*) were observed on site.

5.2.2 Outside the Development Zone

Surrounding the site is residential housing, gardens and roads (B1508). There is limited connectivity to the wider landscape. The river Stour is located 75m west of the site however, there is no connectivity between the water body and site due to hardstanding and buildings.

6. SPECIES APPRAISAL

6.1 Plants

Records of Bluebell, a Schedule 8 plant was returned within the biological records, this species is unlikely present on site as the majority of the site comprises of hardstanding. No evidence of any rare plants was noted during the site survey.

All of the plant species recorded at the site are common and widespread native or naturalised species or else ornamental, non-native species, including a minority of invasive species such as Butterfly-bush.

It should be noted that additional plant species may be present at the site at other times of the year. That said, given the nature of the identified habitats (i.e. themselves common and widespread) within and immediately adjacent to the proposed works areas, no notable plant species are expected within the affected areas. The site's proposed re-development is therefore expected to be unconstrained by notable flora.

6.2 Invertebrates

The majority of the site comprises of hardstanding with small sections of species-poor hedgerow and tall ruderal vegetation which are unlikely to support an assemblage of rare invertebrates.

6.3 Bats

6.3.1 Buildings

Selected photographs of the scoping survey are included in Appendix 7 and details of the potential roost features identified and their suitability are provided in Table 2 below:



Table 2 – Bat Roost Suitability of Buildings			
Ref. No.	Building Description	Potential Roost Feature	Bat Roost Suitability
B1 	Brick walls, pitched roof with flat tiles, pan tiles and slate tile extension. Loft inaccessible.	On southern facing aspect missing tiles, missing/gaps under soffits, plaster and gaps under lead flashing were observed. Bat dropping was found on brickwork (TN5).	High

Table 2 – Bat Roost Suitability of Buildings

Ref. No.	Building Description	Potential Roost Feature	Bat Roost Suitability
<p>B2</p> 	<p>Breezeblock and corrugated asbestos style walls, with corrugated asbestos style material roof. West facing aspect wooden frame wall with glass panes.</p>	<p>Gaps between overlaying corrugated asbestos walls and missing/gaps between soffits.</p>	<p>Low</p>
<p>B3</p> 	<p>Brick wall with plaster construction with slate tiles.</p>	<p>Holes between brickwork on western aspect, gaps under soffits and missing tiles observed on northern aspect.</p>	<p>Moderate</p>
<p>B4</p> 	<p>Concrete walls and beams, corrugated felt roof.</p>	<p>Some overlapping roofing sheets, however damp roof conditions and open/exposed nature reduces roost suitability.</p>	<p>Negligible</p>
<p>B5</p> 	<p>Lean-to attached to B4, wood beams with corrugated metal roof</p>	<p>Non noted.</p>	<p>Negligible</p>
<p>B6</p> 	<p>Open sided lean-to with wooden beams, corrugated metal walls.</p>	<p>Some gaps between metal roof and wooden beams, however exposed nature reduces roost suitability.</p>	<p>Negligible</p>

Table 2 – Bat Roost Suitability of Buildings

Ref. No.	Building Description	Potential Roost Feature	Bat Roost Suitability
B7 	Corrugated asbestos style walls with corrugated metal roof.	Non noted.	Negligible
*based on external assessment unless stated otherwise			

6.3.2 Trees

The preliminary roost assessment of the established trees onsite identified no trees with bat roost potential.

6.3.3 Foraging

The species-poor defunct hedgerow and tall ruderal offers very limited commuting routes and foraging habitat for bats. The connectivity of the site with surrounding suitable habitats is not optimal given residential areas. Vegetation is limited to small gardens with little to no connectivity to the wider area.

6.4 Amphibians

There are 3 ponds within 250m of the site. These ponds are referred to as ponds 1 to 3 on Drawing ref. 5823,EC/002/Rev0/ within Appendix 3. Ponds 1 and 3 were not accessible so a Habitat Suitability Index, (HSI), was not able to be undertaken however, aerial photographs were consulted to assess the suitability and connectivity to the site. The results are summarised in Table 3 below:

Table 3 –Ponds within 250m

Pond	Distance From Site	Connected or Separated From Site	Pond Size (m ²)	HSI Score	Pond Suitability For Great Crested Newts
1	38m west	Separated by B1508. Also separated from the site by hardstanding the residential properties.	60m ²	N/A	Access was not available. Aerial photographs show this body of water appear to be a swimming pool considered unsuitable for breeding Great Crested Newts.
2	186m west	Separated by B1508. Also separated from the site by the river Stour hardstanding, and residential properties.	380m ²	N/A	Access was not available. Aerial photographs show this body of water appear to be a fish pond with a wall bordering the pond. The waterbody was deemed to be ecologically separated from site.

Table 3 –Ponds within 250m

Pond	Distance From Site	Connected or Separated From Site	Pond Size (m ²)	HSI Score	Pond Suitability For Great Crested Newts
3	196m west	Separated by B1508. Also separated from the site by the river Stour hardstanding, and residential properties.	280m ²	N/A	Access was not available. Aerial photographs show this body of water appear to be a ditch along a field boundary with a tree line. The waterbody was deemed to be ecologically separated from site.

Due to the site being separated from potential breeding grounds and the lack of habitat present on site to support GCN in their terrestrial phase, is highly unlikely the proposed development will impact on this species.

6.5 Reptiles

Due to the majority of the site comprising hardstanding and buildings, with little to no habitat for foraging opportunities the site is deemed unsuitable for reptiles. Immediate surrounding habitat consists of residential housing on all boundaries of site reducing the likelihood of any reptiles being able to move into the site.

6.6 Birds

Table 4 below, shows the species of birds that were noted during the survey:

Table 4– Birds Identified During the Survey

Common Name	Scientific Name	Status	Location Notes
Collard Dove	<i>Streptopelia decaocto</i>	Green	Pair seen perching on bus wash.
House Sparrow	<i>Passer domesticus</i>	Red/ S41 NERC	Heard calling within adjacent residential gardens.
Swallow	<i>Hirundo rustica</i>	Green	One individual flying above site.
Swift	<i>Apus apus</i>	Amber	Four individuals flying above site.
Woodpigeon	<i>Columba palumbus</i>	Green	Multiple passes across site.

The buildings, trees hedgerow provide suitable nesting habitat for common and widespread species. These habitats and the amenity grassland also provide suitable foraging habitat for birds. Inactive Collared Dove (*Streptopelia decaocto*), Feral Pigeon (*Columba livia*) nests were observed on Building 1 (TN3) and 6, and Black Bird (*Turdus merula*) nests were observed within building 6 on site (TN4). No signs of Barn Owl (*Tyto alba*) activity was observed within any buildings.

At the time of the visit, the site did not contain suitable habitat for ground nesting species such as Skylark (*Alda arvensis*).

6.7 Badger

No evidence of Badger was found onsite. The majority of the site is made up of hardstanding and buildings, unsuitable for this species. In addition, the small areas of tall ruderal on site do not provide suitable foraging habitat for this species.

6.8 Dormouse

No records of Hazel Dormouse were returned in the desk study. Dormouse require a large area of connected habitat for a population to survive which is lacking from this site. The majority of the site is hardstanding with a small section of species poor defunct hedgerow and is situated in an area separated from any habitat corridors to areas of suitable habitat. As such it is unlikely that the site supports a population of Hazel Dormouse.

6.9 Riparian Mammal

The river Stour is located approximately 75m west from the site however, there is no connectivity between the river and habitats onsite, and as such the site was not suitable for Water Vole or Otter.

6.10 Hedgehog

The site provides very limited foraging habitat for Hedgehog in the form of small areas of tall ruderal, and limited nesting and hibernating habitat in tall ruderals and defunct-hedgerow.

7. EVALUATION, CONSTRAINTS AND RECOMMENDATIONS

7.1 Proposed Development

The proposed development comprises 6 residential dwellings with the conversion of the bus depot to a retail/convenience store with associated car parking and access.

7.2 Nature Conservation Sites

The desk study identified four non- statutory designated nature conservation sites within 2km radius of the site. One statutory designated site, an AONB, was noted within 2km.

The development site does not contain any habitats which could support the important species associated with either the statutory or non-statutory sites and there is no potential habitat connectivity between the site and the statutory site, Dedham Vale AONB. It is considered unlikely, given the distance from the survey area and localised nature of the proposed development works, that the Nature Conservation sites will be directly affected by any construction activity on the surveyed area.

The site falls within a Zone of Influence for Arger Fen SSSI, however the development does not meet the criteria for consultation with Natural England. It is considered unlikely that residential development at Former Chamber Bus Depot, Bures is of sufficient size to have any indirect impacts on the Statutory designated site.

The development site is within the 22km Zone of Influence for Recreational Disturbance of the Blackwater Estuary (SPA and Ramsar) which is likely to trigger a payment to the Essex Recreational and Avoidance Mitigation strategy (RAMS).

7.3 Legally Protected and Notable Species

The ecological evaluation and impact assessment for protected species is detailed in Table 55 below:

Table 5 – Protected Species - Ecological Constraints and Recommended Actions					
Ecological Constraint/ Receptor	Biological Records Within 2km	Value of Supporting Feature	Impact without Appropriate Mitigation in Place	Recommended Actions (Avoidance/mitigation/compensation Measures and Recommendations for Further Works)	Timing Restrictions
Bats: roosting- Buildings B1-B3	Yes	<ul style="list-style-type: none"> B1 has high bat roost potential (BRP) B2 which has low BRP B3 which has moderate BRP 	Site to district significance.	Bat emergence and/or return surveys should be undertaken on buildings (B1, B2, & B3) to confirm roosting. Buildings with high roost potential required three survey events, two of which must be undertaken between May and August. Buildings with moderate potential require two surveys and those with low potential require one.	Activity surveys are restricted to May to September inclusive.
Bats: Foraging- Hedgerow at margin of the site.	Yes	<p>The foraging habitat on site is considered to be of very low value due to the majority of the site comprising hardstanding.</p> <p>Boundary vegetation offers limited foraging opportunities and commuting routes for bats.</p>	Site scale.	<p>Given the lack of habitat present, surveys will not be required.</p> <p>Further risk reduction measures could include the following:</p> <ul style="list-style-type: none"> Depending on the results of the bat roost surveys, a sensitive lighting scheme may be required in coordination between a qualified lighting engineer and a suitably qualified Ecologist, according to current best practice guidelines (ref.R.15). This should ensure that any roosting, foraging or commuting habitat (either retained or created within the development) remains as unlit as possible to allow continued and future use by bats. 	N/A
Breeding Birds – Species poor hedgerow and buildings.	Yes	Habitats offer value to breeding birds for common passerine birds and are considered important on a site scale.	Site scale	To ensure that no offences occur under the WCA, it is recommended that any vegetation clearance work/building demolition is undertaken outside of the bird nesting season. If it is not possible to undertake clearance works outside of the breeding bird season, a suitably qualified ecologist should be employed to determine if nesting birds are using the site prior to works commencing, to avoid negative impact on protected species. Any active nests that are found would need to be provided with a minimum of a 10m buffer which would have to be left until the young had fledged, (typically up to four weeks from eggs being laid for the garden and woodland species likely to be present). Clearance works within the area can recommence only once the nest is no longer in use.	Clearance during September to February only unless supervised by an Ecologist.
Hedgehog – Tall ruderal and hedgerow.	Yes	Habitats onsite offer limited commuting and foraging habitats suitable for Hedgehog.	Site scale	<p>Excavations during development or ground investigation works should be covered overnight to prevent entrapment of Hedgehogs.</p> <p>Mitigation: Hedgehog friendly fencing should be incorporated into the final design to allow Hedgehogs to continue to commute and forage in the local area. A 15cm diameter hole should be placed at the base of each fence, allowing all gardens and greenspace to be accessible to Hedgehog.</p>	N/A
Invertebrates – Tall ruderal and hedgerow.	Yes	The habitats on site are considered important on a site scale for common species.	Site	Inclusion of residential gardens and landscape planting should ensure that common species of invertebrate still use the site post development.	N/A

8. GENERAL ENHANCEMENTS AND OPPORTUNITIES

The following general enhancements have been recommended to be included within the final development Scheme:

- Planting of native plant species beneficial to wildlife should be incorporated into the final design. This will provide additional habitat for invertebrates, which will in turn provide a food source for reptiles, birds, bats, and Hedgehog.
- Hedgehog friendly fencing should be incorporated into the final design to allow Hedgehogs to continue to commute and forage in the local area. A 15cm diameter hole should be placed at the base of each fence, allowing all gardens and greenspace to be accessible to Hedgehog.
- The final development plan should incorporate bird boxes/bricks into the scheme target for Swifts and House Sparrow along with general bird boxes. This will provide additional roosting and nesting habitats for birds post-development.
- The final development plan should bat boxes/bricks into the scheme. Additional recommendations regarding bats may be made following completion of further roost surveys.

Examples of potential enhancement features are included as Appendix 8.

9. CONCLUSIONS

The proposed development does not adversely affect statutory or non- statutory designated nature conservation sites. However, the development site is within the 22km Zone of Influence for Recreational Disturbance of the Blackwater Estuary (SPA and Ramsar) which is likely to trigger a payment to the Essex Recreational and Avoidance Mitigation strategy (RAMS).

None of the habitats that occur within the survey area were considered to have high ecological importance on an international, national, regional or county scale. The habitats onsite are of site to district significance only.

The findings of the extended Phase 1 Habitat Survey confirm that the habitats onsite have the potential to support roosting bats nesting birds. The recommendations within Section 7 of this report should be adhered, to reduce the impact on protected species.

As the buildings with bat roost potential are due to be removed, additional surveys for roosting bats will be required.

Opportunities exist for the provision of ecological enhancements in the form of integrated bat, and bird boxes/bricks, hedgehog friendly fencing and the incorporation of locally-sourced native plant species, or those of known wildlife benefit, into the landscape strategy.

APPENDICES

Appendix 1 – Report Limitations and Conditions

General Limitations and Exceptions

This report was prepared solely for our Client for the stated purposes only and is not intended to be relied on by any other party or for any other use. No extended duty of care to any third party is implied or offered.

Geosphere Environmental Ltd does not purport to provide specialist legal advice.

The Executive Summary, Conclusions and Recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon until considered in the context of the whole report.

Interpretations and recommendations contained within the report represent our professional opinions, which were arrived at in accordance with currently accepted industry practices at the time of reporting and based upon current legislation in force at that time.

Ecology Limitations and Exceptions

Any limitations associated with the report will be stated. The consequences of any limitations, findings and/or recommendations in the report are made clear in line with CIEEM (2013) 'Guidelines for Preliminary Ecological Appraisal' (GPEA) and BSI (2013) BS 42020:2013 Biodiversity – 'Code of practice for planning and development'.

This report is prepared and written in the context of the proposals stated in the introduction to this report and should not be used in a differing context.

The wildlife and habitats present on any site are subject to change over time. Surveys of this kind can have limited validity, with the possibility of behaviour patterns and territory boundaries varying over time, due to the dynamics of adjacent populations.

New information, improved practices and legislation may necessitate an alteration to the report in whole or in part after its submission. Therefore, with any change in circumstances or after the expiry of one year from the date of the report, the report should be referred to us for re-assessment and, if necessary, re-appraisal.

It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the natural environment.

The scoping survey does not assess the presence or absence of a species, but is used to assess the potential for habitat to support them. Additional surveys may be recommended if, on the basis of the preliminary assessment or during subsequent surveys, it is considered reasonably likely that protected species may be present.

This survey does not constitute an invasive species survey and should not be treated as such.

Owing to seasonal variances and prevailing weather, conditions may sometimes be sub-optimal for surveying and this may delay or disrupt planned survey programmes. If applicable, full details are given in the report.

Geosphere Environmental Ltd may not be aware of information that could be held by other organisations or individuals, and it is always possible for features of nature conservation interest to be unrecorded during surveys.

Scientific survey data will be shared with local biological records centre in accordance with the CIEEM professional code of conduct.

Appendix 2 – References

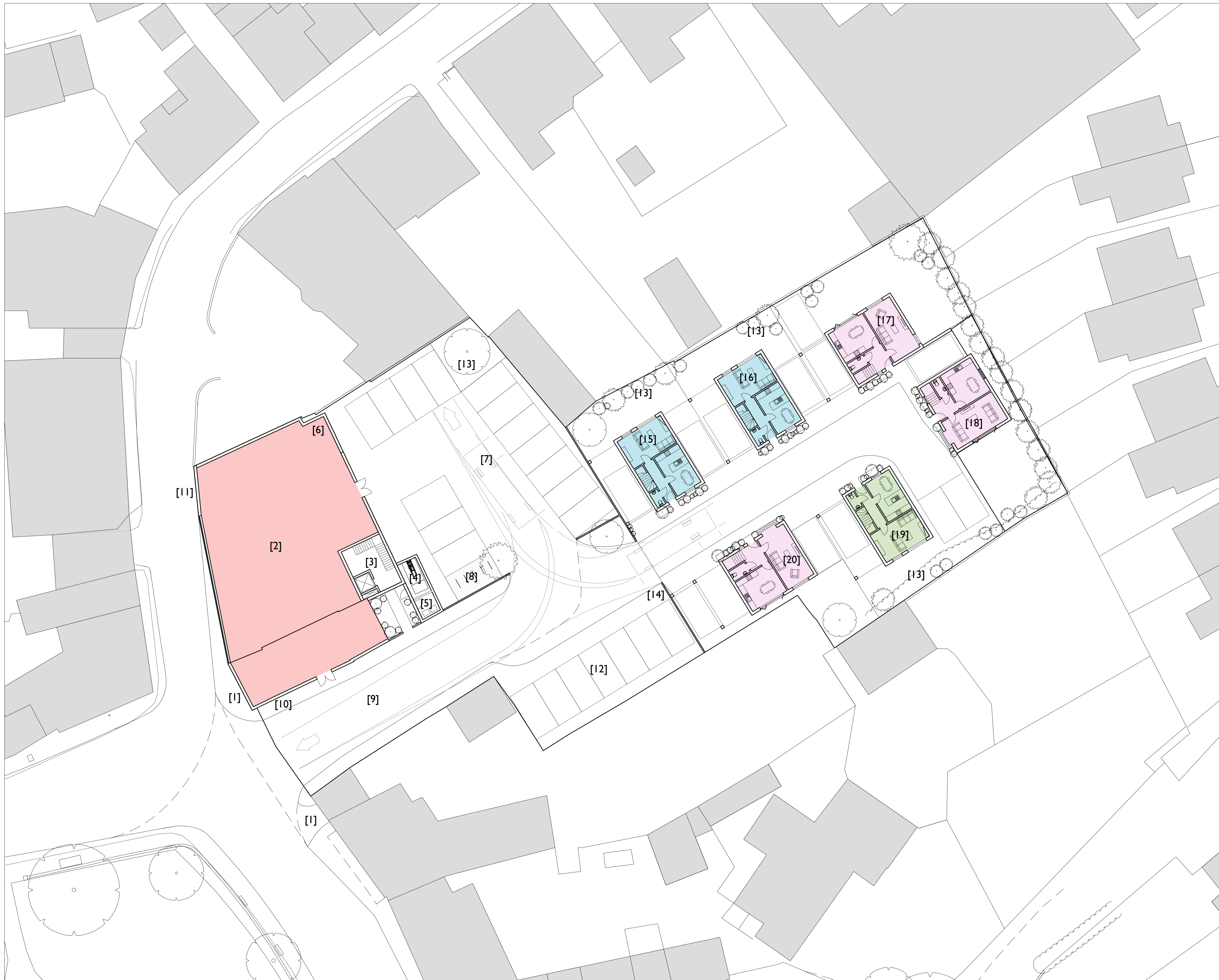
- R.1.** Ministry of Housing, Communities and Local Government (MHCLG) (2021) National Planning Policy Framework (NPPF).
- R.2.** ODPM (2005) Government Circular: Biodiversity and Geological Conservation – statutory obligations and their impact within the planning system.
- R.3.** CIEEM (2013) Guidelines for Preliminary Ecological Appraisal (GPEA).
- R.4.** BSI (2013) BS 42020:2013 Biodiversity – Code of practice for planning and development. BSI Standards Limited 2013.
- R.5.** Stace, C. A. (2010). New Flora of the British Isles (third edition), Cambridge University Press.
- R.6.** Magic 6/08/21. (Site Check Report. www.magic.gov.uk).
- R.7.** JNCC, (2010). ‘Handbook for Phase I Habitat Survey: A technique for environmental audit’ (reprint). Joint Nature Conservation Committee, Peterborough.
- R.8.** Goldsmith, B. (1991). Monitoring for Conservation and Ecology, Chapman & Hall.
- R.9.** Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10 (4), 143-155.
- R.10.** BCT (2016). ‘Bat Surveys – Good Practice Guidelines’ Bat Conservation Trust, London, 3rd edition.
- R.11.** JNCC (2004). ‘Bat Workers Manual’ 3rd edition. Joint Nature Conservation Committee, Peterborough.
- R.12.** English Nature (2004) Bat mitigation guidelines.
- R.13.** CIEEM, (2018). Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland
- R.14.** BS 5837 (2012), ‘Trees in Relation to Design, Demolition and Construction’.
- R.15.** Institution of Lighting Professionals (2018) Bats and artificial lighting in the UK, Bats and the Built Environment series – Guidance Note 08/18

Appendix 3 – Drawings

241373-PUR-00-00-DR-A-2001

Phase 1 Habitat Survey Plan – Drawing ref. 5823,EC,/001/Rev0

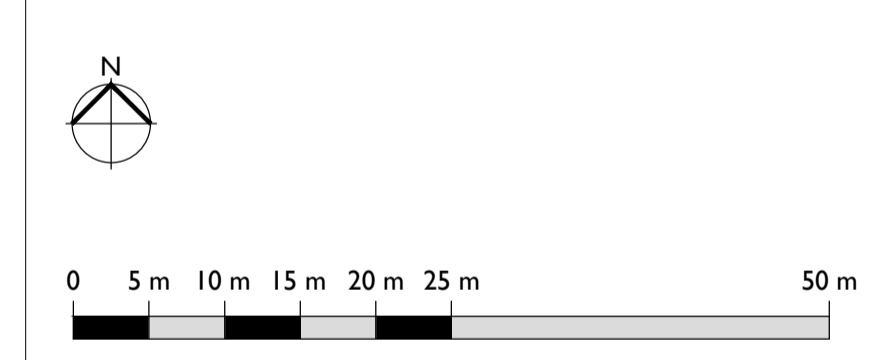
Pond Location Plan – Drawing ref. 5823,EC,/002/Rev0



Notes:
 Drawings are based on survey data and may not accurately represent what is physically present.
 Do not scale from this drawing. All dimensions are to be verified on site before proceeding with the work.
 All dimensions are in millimeters unless noted otherwise.
 Purcell shall be notified in writing of any discrepancies.

- Key Plan**
 not to scale
- 1 Bedroom Apartment
 - 2 Bedroom Apartment
 - 3 Bedroom House/Apartment
 - 4 Bedroom House
 - 5 Bedroom House
 - Retail/Convenience Store

1. Existing pavement widened to improve visibility at junction
2. New retail convenience store
3. Stair and lift core to first floor apartments
4. Secure cycle storage for apartment residents
5. Secure refuse storage for apartment residents
6. Refuse storage for convenience store
7. Convenience store customer car parking
8. Cycle hoops for public/customer use
9. Access road resurfaced and landscaped
10. Existing brickwork envelope and roof retained
11. Existing shopfront retained
12. Car parking for apartment residents
13. Screen planting to boundaries
14. New brickwork wall to define threshold into residential
15. House 1 - 4 bedroom house
16. House 2 - 4 bedroom house
17. House 3 - 3 bedroom house
18. House 4 - 3 bedroom house
19. House 5 - 5 bedroom house
20. House 6 - 3 bedroom house



REV	DATE	BY	CHK	DESCRIPTION
P01	03/08/2021	PB	PB	Issue for comment
P02	04/08/2021	EL	PB	Issue for Information

CLIENT
TBC
 PROJECT
Former Chambers Bus Depot, Bures
 JOB NUMBER
241373

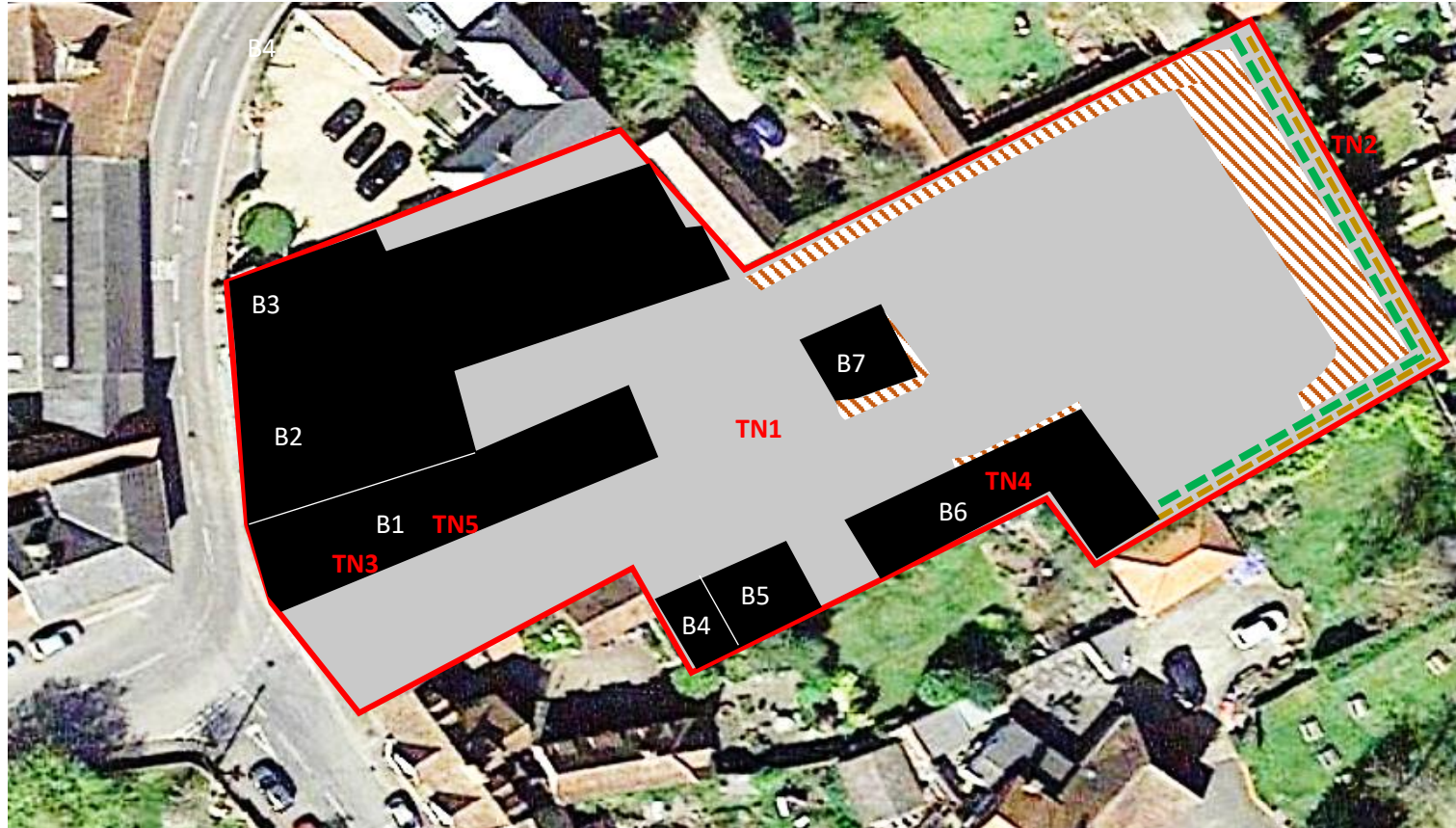


TITLE
Ground Floor Plan
As Proposed








SIZE	SCALE	LAST REVISED	DRAWN	CHECKED
A1L		04/08/2021	EL	PB

REV
P02 **S2 - For Information**
 DRAWING NAME
241373-PUR-00-00-DR-A-2001

I As Proposed Ground Floor
2001 1:200



LEGEND

-  Tall Ruderal
-  Hard Standing
-  Building Locations & Building Number
-  Survey Area
-  Target Notes
-  Defunct Species-poor Hedgerow
-  Brick Wall

SOURCE

www.google.com/maps

PROJECT

Former Chambers Bus Depot, Bures, Suffolk, CO8 5AB

TITLE

Phase 1 Habitat Plan

DRAWING NUMBER

5823,EC/001/Rev0

SCALE

As marked

DATE

05/08/2021

DRAWN BY




ZF

CHECKED BY

RH



LEGEND

-  Site boundary
-  250m buffer
-  Pond number

Pond 1

SOURCE

[© OpenStreetMap contributors](#)

PROJECT

Former Chambers Bus Depot, Bures, Suffolk, CO8 5AB

TITLE

250m Buffer Pond Map

DRAWING NUMBER

5823,EC/002/Rev0

SCALE

As marked

DATE

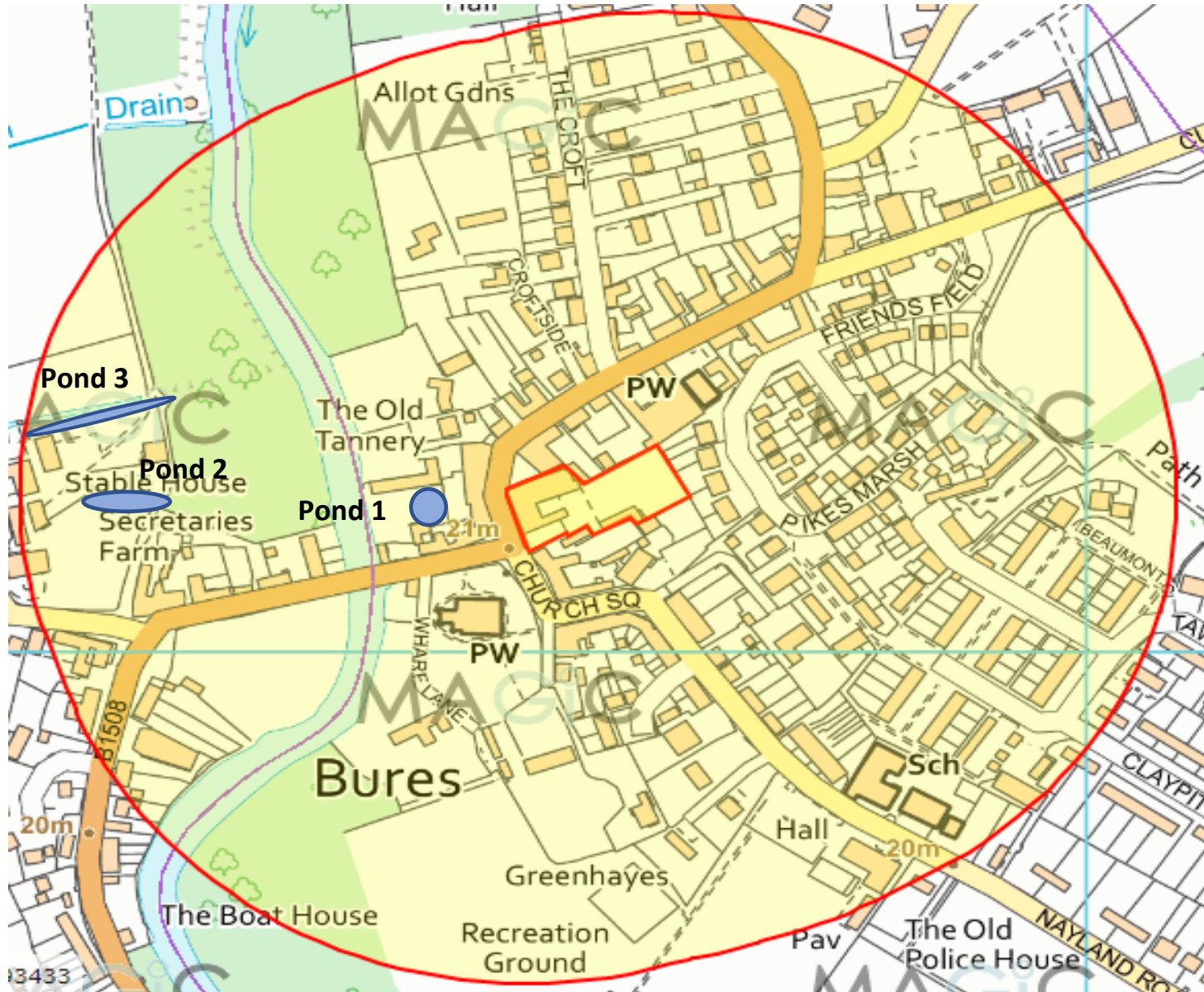
dd/mm/yy

DRAWN BY

RH

CHECKED BY

KL



Appendix 4 – Species-Specific Legislation

Badger

The Protection of Badgers Act 1992 exists for welfare reasons, to protect badgers from cruelty. Under the act it is a criminal offence to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so, or to intentionally or recklessly interfere with a sett.

Bats

All bat species are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010. It is illegal to kill or injure bats, cause disturbance at their resting places or to block access to, damage or destroy their roost sites.

Great Crested Newts

Great Crested Newts are protected under the Wildlife and Countryside Act 1981 (as amended) Section 5 and the Conservation of Habitats and Species Regulations 2010. It is illegal to intentionally or deliberately kill, injure or capture Great Crested Newts or intentionally, deliberately or recklessly damage or destroy their breeding and resting places or obstruct access to their place of shelter or protection.

Hazel Dormouse

Hazel Dormice are protected under the Wildlife and Countryside Act 1981 (as amended) Schedule 5 and the Conservation of Habitats and Species Regulations 2010. It is illegal to intentionally or deliberately kill, injure or capture a Dormouse or intentionally, deliberately or recklessly disturb a Dormouse, or damage its breeding or resting place or obstruct its place of shelter or protection.

Otters and Water Voles

Otters are protected under the Wildlife and Countryside Act 1981 (as amended) Schedule 5 and the Conservation of Habitats and Species Regulations 2010. It is illegal to take, injure, kill or sell an otter, it is also an offence to damage, destroy or obstruct access to a resting place or disturb or harm an Otter at any time.

Water Voles are protected under the Wildlife and Countryside Act 1981 (as amended) Schedule 5. It is illegal to deliberately kill, injure, capture or disturb them or to destroy, damage or obstruct access to any places used for shelter or protection

White-clawed Crayfish

White-clawed Crayfish (*Austropotamobius pallipes*) are protected under the Wildlife and Countryside Act 1981 (as amended) Schedule 5, Sections 9(1) & 9 (5). It is an offence to intentionally take White-clawed Crayfish from the wild or to sell them. It is also a qualifying Annex II species for some Special Areas of Conservation under the Habitats Directive.

Birds

Wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). It is illegal to take or harm them, their nests (whilst in use or being built) or their eggs.

Additionally, for some species listed under Schedule 1 of the Act, it is an offence to intentionally or recklessly disturb the adults while they are in and around their nest or intentionally or recklessly disturb their dependent young.

Reptiles

Common reptiles include Slow-worm, Adder, Grass Snake and Common Lizard. These are protected under the Wildlife and Countryside Act 1981 (as amended) Schedule 5, Sections 9 (1) & 9 (5) only. It is illegal to kill or injure them.

It is not illegal to capture, disturb or to damage their habitats. However, the reptiles themselves are protected so any works to damage their habitat could risk causing harm to reptiles and hence could be illegal.

Rare reptiles which include Sand Lizard and Smooth Snake are restricted to a few locations in Britain and are fully protected under the Wildlife and Countryside Act 1981 (as amended) Schedule 5, Section 9 and the Conservation of Habitats and Species Regulations 2010. It is illegal to kill, injure or intentionally disturb them whilst occupying a 'place used for shelter or protection' and destruction of these places.

Appendix 5 – Desk Study Data

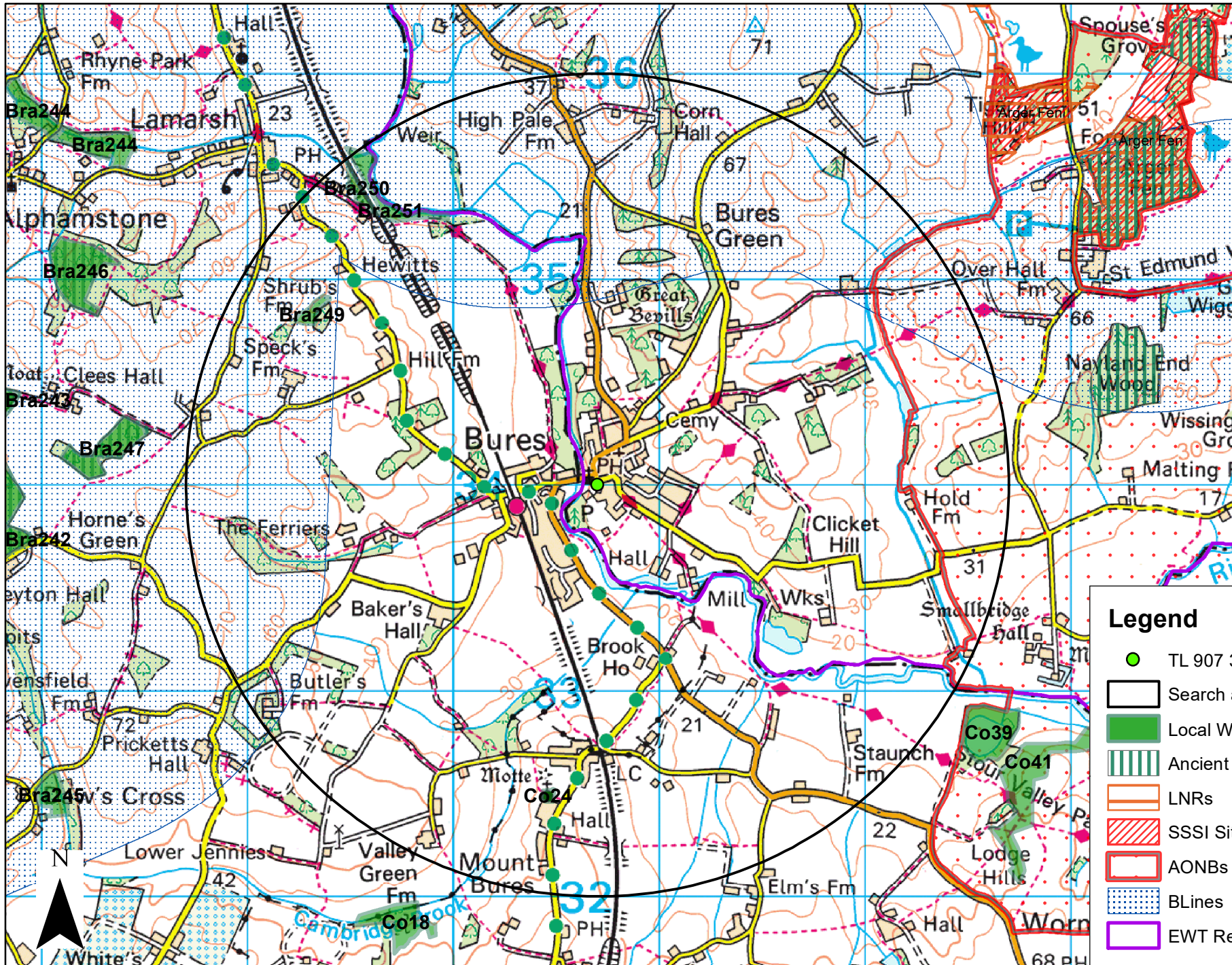
Essex Wildlife Trust Records Centre - designated sites within 2km search boundary for Former Chambers Bus Depot, Bures area



Essex
Wildlife Trust

Essex Wildlife Trust
Biological Records Centre
Abbotts Hall Farm
Great Wigborough
Essex
CO5 7RZ

www.essexwtrecords.org.uk
records@essexwt.org.uk
[@EssexWTrecords](https://www.facebook.com/EssexWTrecords)



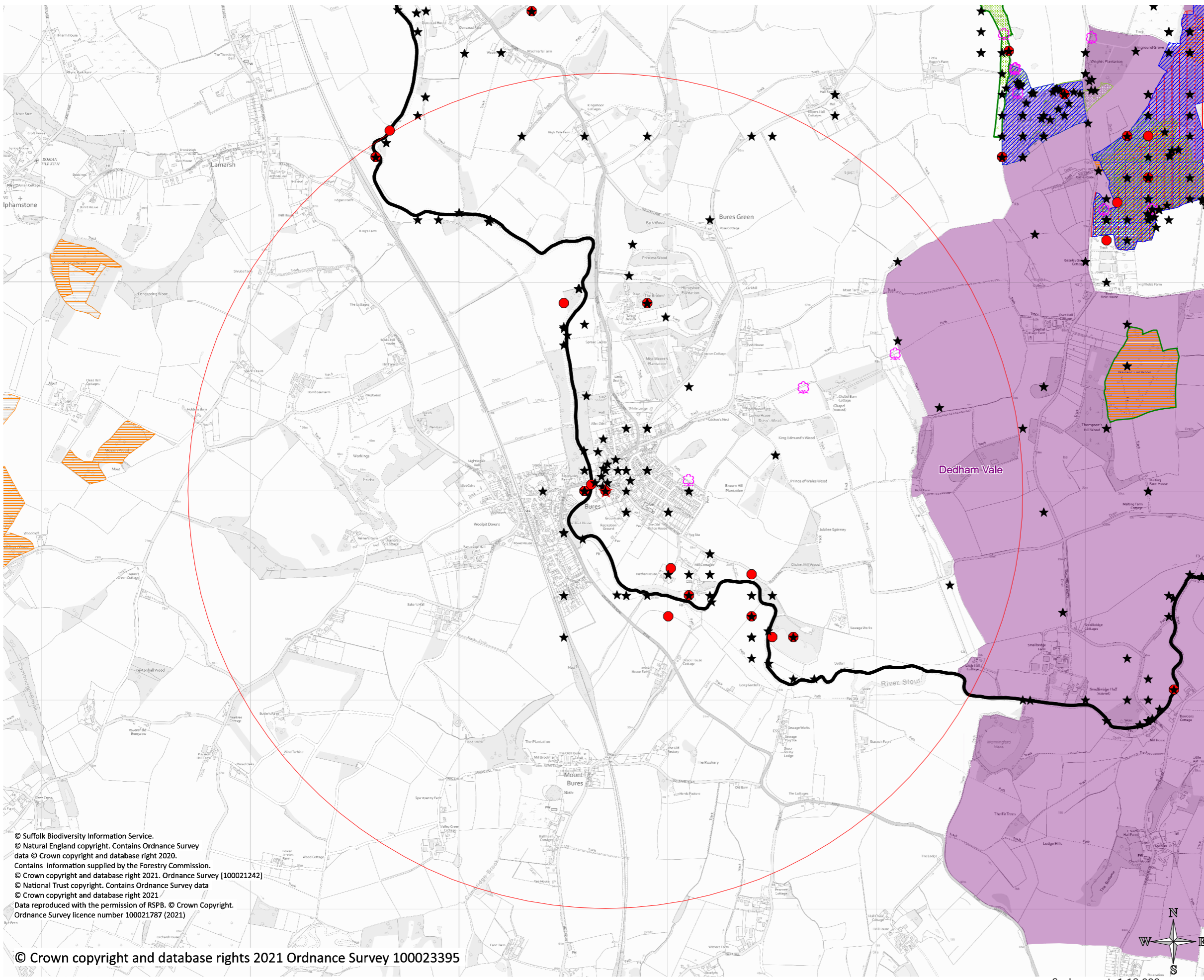
Legend

- TL 907 340
- Search area
- Local Wildlife Sites
- Ancient Woodlands
- LNRs
- SSSI Sites
- AONBs
- BLines
- EWT Records Centre Boundary

0 0.275 0.55 1.1 Kilometers 1:25,000

Crown Copyright ©. All Rights Reserved.
Ordnance Survey Licence Number: 100025798

Date: 26/07/2021 Created by : Dana Knollova



Data Enquiry

- ☆ Search Point
- Search Area

Protected, Locally Scarce and Rare Species

- ★ Record Locations (for grids of 6 fig. or greater)

Schedule 9 Species

- Record Locations (for grids of 6 fig. or greater)

Ancient/Veteran/Notable Trees

- ✿

Roadside Nature Reserve

- ▭

County Wildlife Sites

- ▭

County GeoSites

- ▭

SSSI

- ▭

LNR

- ▭

SPA

- ▭

SAC

- ▭

RAMSAR

- ▭

NNR

- ▭

SWT Reserve

- ▭

Ancient Woodland Inventory

- ▭

AONB

- ▭ Suffolk Coast and Heaths or Dedham Vale

National Park

- ▭ The Broads

Other Public or Conservation Ownership/Management

- ▭ Forestry Commission, National Trust (public access), RSPB (public access)

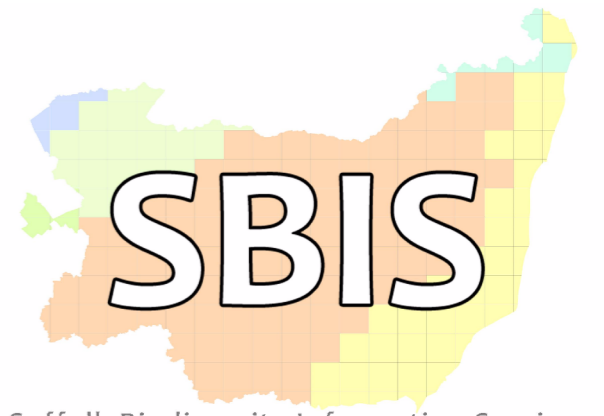
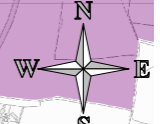
County Border

- ▭

© Suffolk Biodiversity Information Service.
 © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2020. Contains information supplied by the Forestry Commission.
 © Crown copyright and database right 2021. Ordnance Survey [100021242]
 © National Trust copyright. Contains Ordnance Survey data © Crown copyright and database right 2021.
 Data reproduced with the permission of RSPB. © Crown Copyright. Ordnance Survey licence number 100021787 (2021)

© Crown copyright and database rights 2021 Ordnance Survey 100023395

Scale report: 1:18,000



Suffolk Biodiversity Information Service

Date: 26/07/2021 | Drawn by: Andy Mercer

Geosphere Environmental (5823, EC, Former Chambers Bus Depot, Bures TL907340) 2km Data Enquiry

Site Check Report Report generated on Thu Aug 12 2021
You selected the location: Centroid Grid Ref: TL90743408
The following features have been found in your search area:

Ramsar Sites (England) - points

Name	ABBERTON RESERVOIR
Reference	UK11001
Hectares	718.31

Ramsar Sites (England)

Name	ABBERTON RESERVOIR
Reference	UK11001
Hectares	718.31

Name	BLACKWATER ESTUARY (MID-ESSEX COAST PHASE 4)
Reference	UK11007
Hectares	4403.41

Name	COLNE ESTUARY (MID-ESSEX COAST PHASE 2)
Reference	UK11015
Hectares	2713.99

Name	STOUR AND ORWELL ESTUARIES
Reference	UK11067
Hectares	3672.57

Special Areas of Conservation (England)

Name	ESSEX ESTUARIES
Reference	UK0013690
Hectares	46111.43
Hyperlink	http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?eucode=UK0013690

Special Protection Areas (England) - points

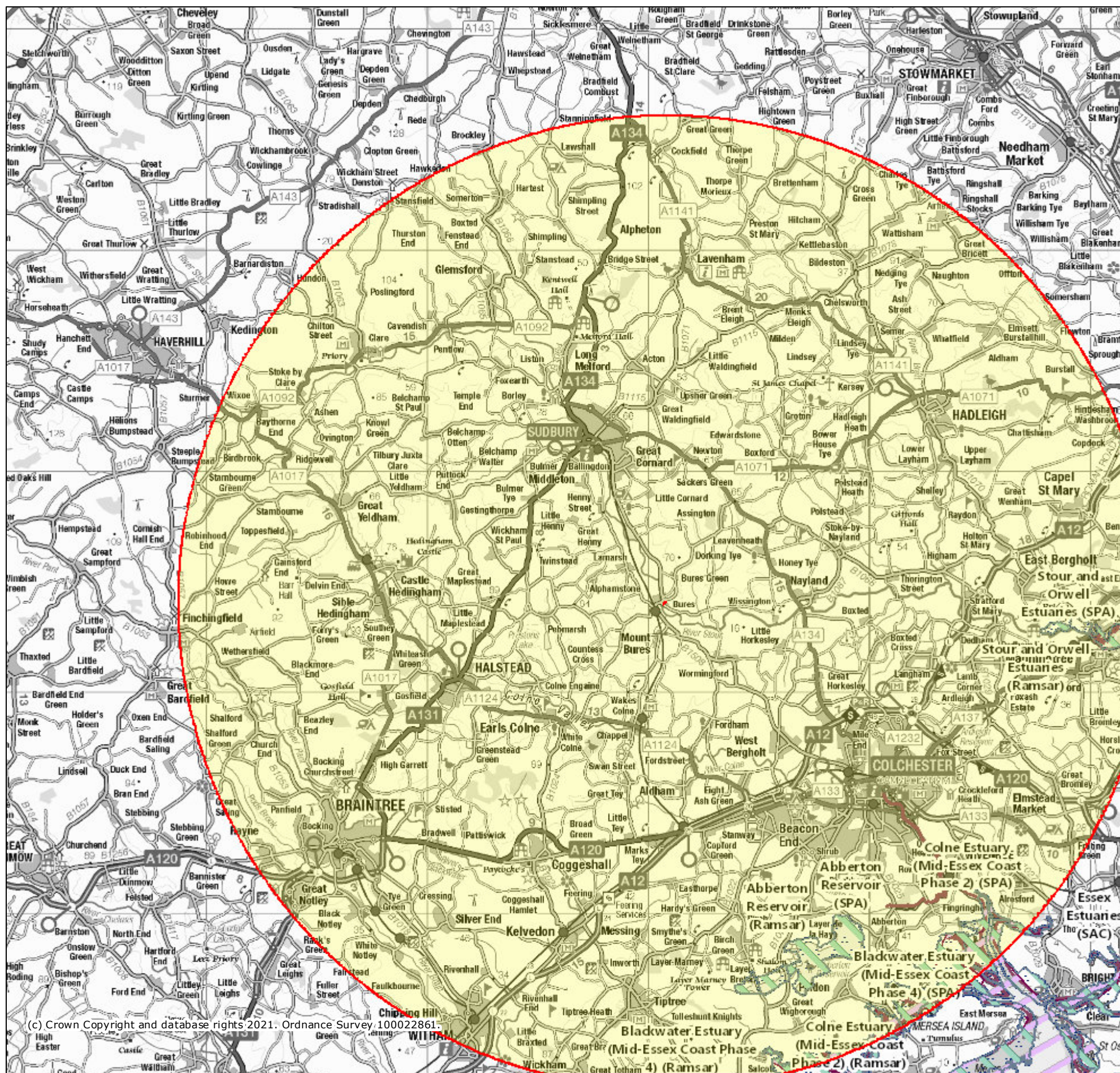
Name	ABBERTON RESERVOIR
Reference	UK9009141
Hectares	718.31

Special Protection Areas (England)




Name	ABBERTON RESERVOIR
Reference	UK9009141
Hectares	718.31
Name	BLACKWATER ESTUARY (MID-ESSEX COAST PHASE 4)
Reference	UK9009245
Hectares	4403.41
Name	COLNE ESTUARY (MID-ESSEX COAST PHASE 2)
Reference	UK9009243
Hectares	2719.93
Name	STOUR AND ORWELL ESTUARIES
Reference	UK9009121
Hectares	3672.57

Special Areas of Conservation (England) - points

No Features found



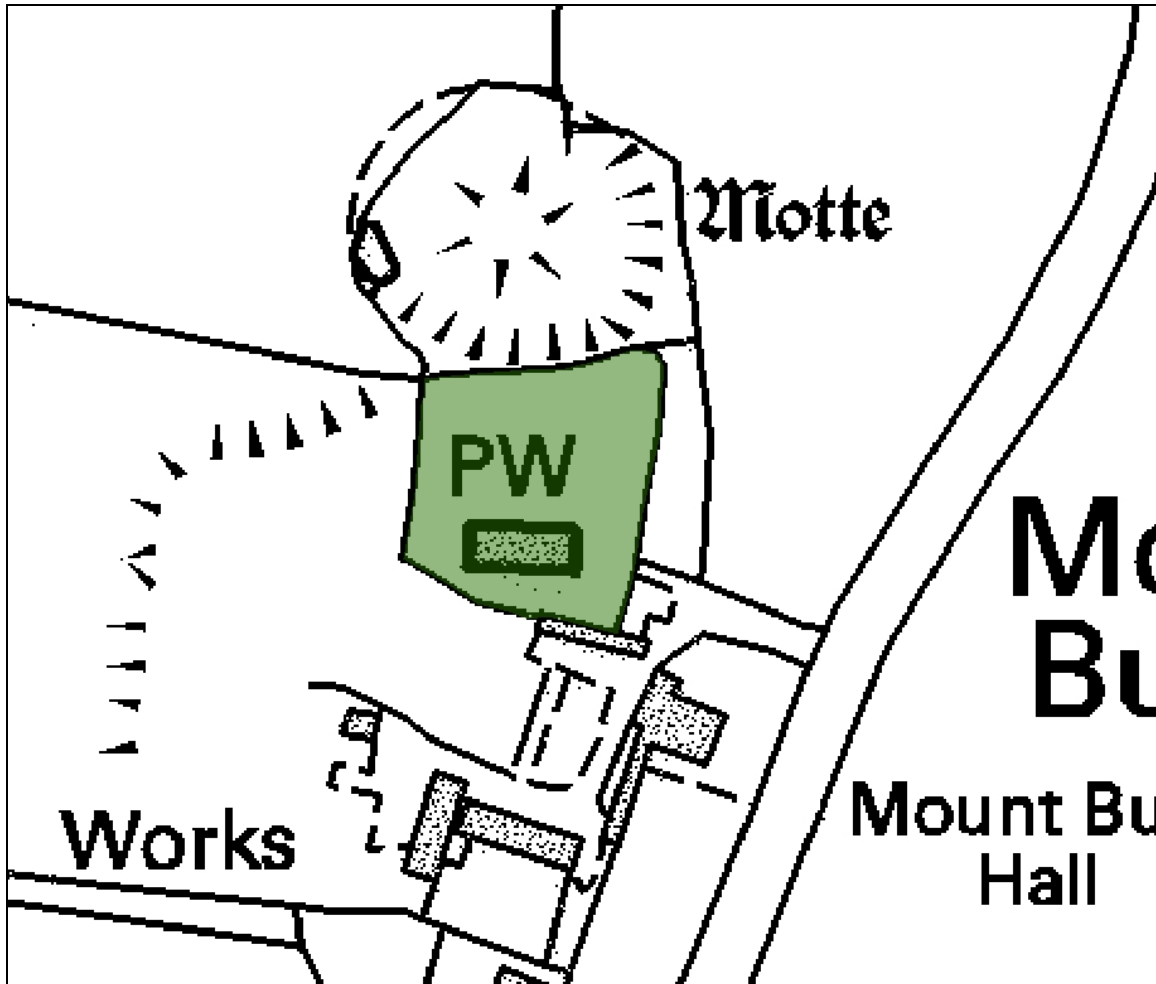
Legend

-  Ramsar Sites (England)
-  Special Areas of Conservation (England)
-  Special Protection Areas (England)

Projection = OSGB36
xmin = 537600
ymin = 212100
xmax = 635000
ymax = 261600

Map produced by MAGIC on 12 August, 2021.
Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGIC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.

LOCAL WILDLIFE SITES
COLCHESTER DISTRICT
Co24 Mount Bures Churchyard



Reproduced by permission of Ordnance Survey on behalf of HMSO © Crown Copyright and database right 2009. All rights reserved. Ordnance Survey Licence number 100025798

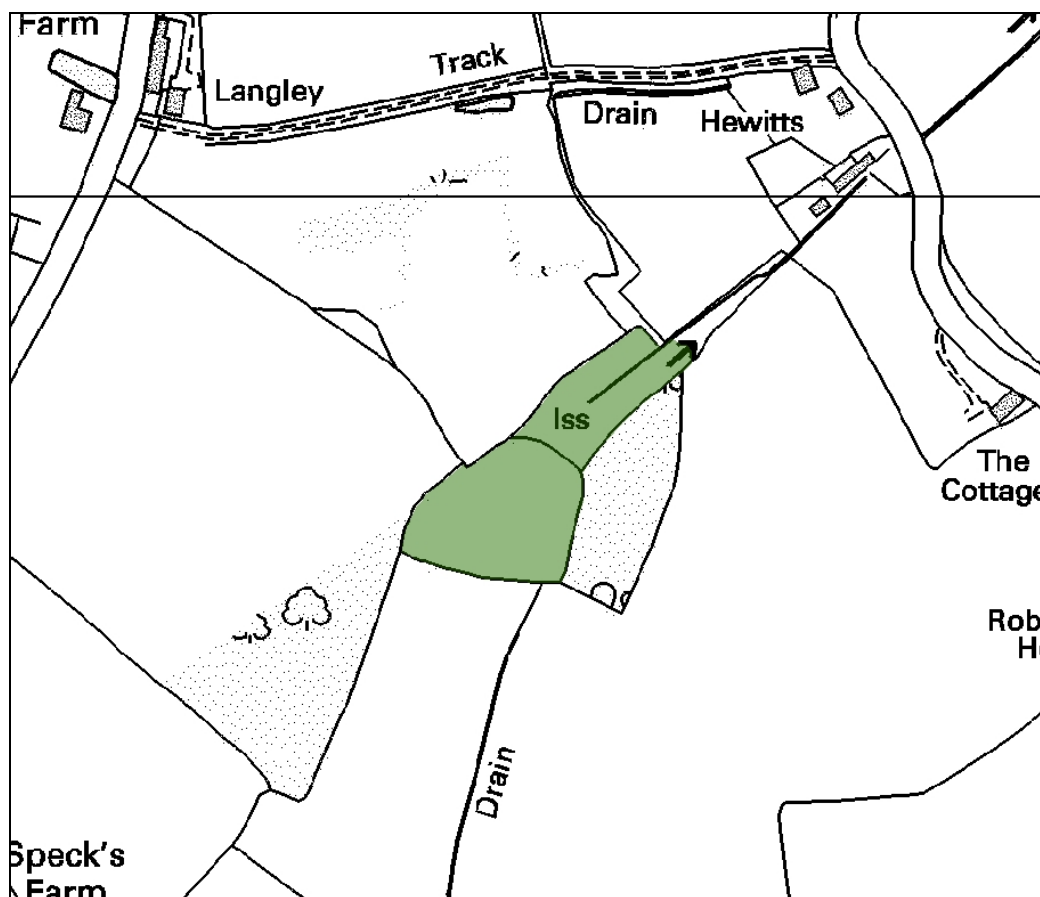
Co24 Mount Bures Churchyard (0.3ha) TL 904325

This churchyard supports a wide variety of grass species including Sweet Vernal-grass (*Anthoxanthum odoratum*), Yellow Oat-grass (*Trisetum flavescens*), Red Fescue (*Festuca rubra*) and Bent-grasses (*Agrostis* spp.). Field Wood-rush (*Luzula campestris*) is frequent throughout the churchyard and is generally an indicator of infertile grassland. In addition, a species-rich and diverse herb flora thrives including Common Knapweed (*Centaurea nigra*), Barren Strawberry (*Potentilla sterilis*), Burnet Saxifrage (*Pimpinella saxifraga*), Pignut (*Conopodium majus*) and Lesser Calamint (*Clinopodium calamintha*). Harebell (*Campanula rotundifolia*) is also frequent in the vicinity of the church and is of particular interest as it has declined considerably in its county distribution during recent decades. Both Harebell and Lesser Calamint are Essex Red Data List species.

Selection criteria: HCr10, SCr15

BAP Priority Habitats: Lowland Dry Acid Grassland (UK); Lowland Grassland (Essex)

**LOCAL WILDLIFE SITES
BRAINTREE DISTRICT
Bra249 Shrubs Farm**



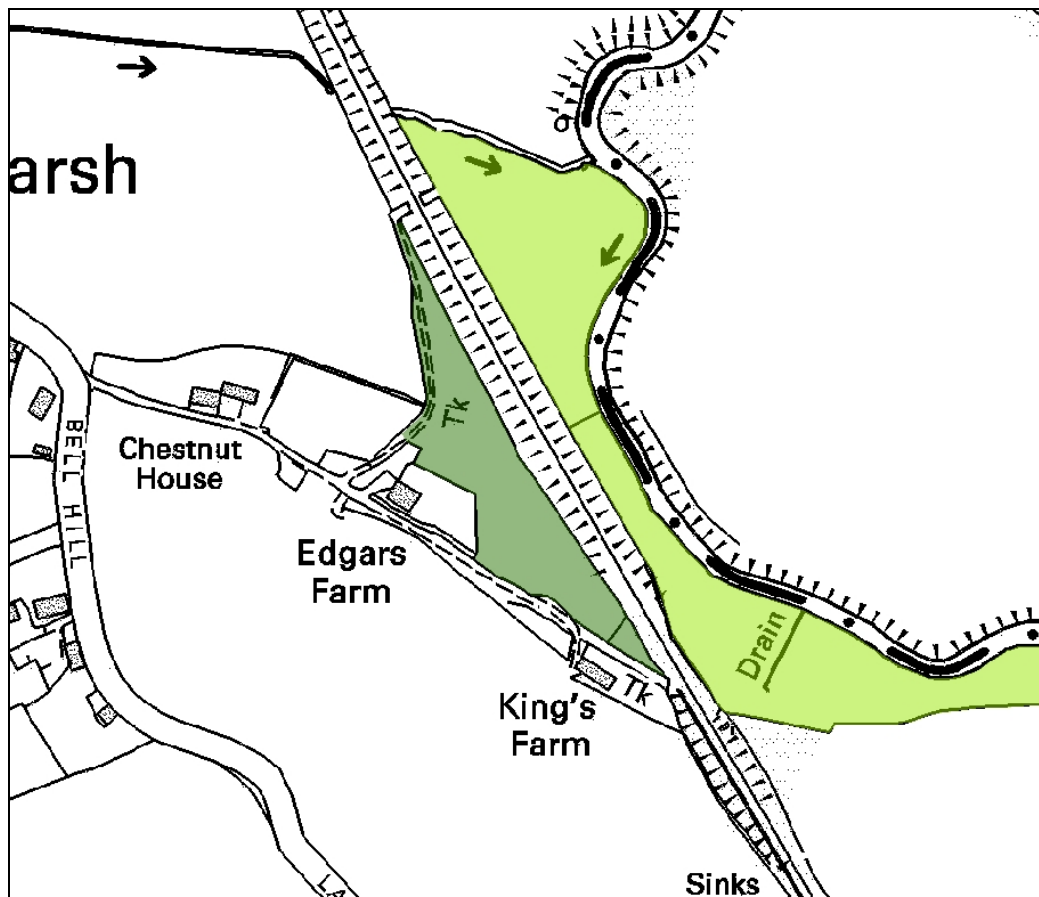
Reproduced by permission of Ordnance Survey on behalf of HMSO © Crown Copyright and database right 2009. All rights reserved. Ordnance Survey Licence number 100025798

Bra249. Shrubs Farm (1.0 ha) TL 893349

This small field comprises predominantly open grassland with a small area of scrub. This site displays a diverse mix of grasses, such as Red Fescue (*Festuca rubra*), Quaking Grass (*Briza media*), Sweet Vernal Grass (*Anthoxanthum odoratum*), Crested Dog's-tail (*Cynosurus cristatus*), Yellow Oat-grass (*Trisetum flavescens*) and Yorkshire Fog (*Holcus lanatus*). Other typical species include Lady's Bedstraw (*Galium verum*), Common Centaury (*Centaureum erythraea*), Field Wood-rush (*Luzula campestris*) and Primrose (*Primula vulgaris*).

Selection Criteria: HCr10

**LOCAL WILDLIFE SITES
BRAINTREE DISTRICT
Bra250 Edgars Farm Meadow**



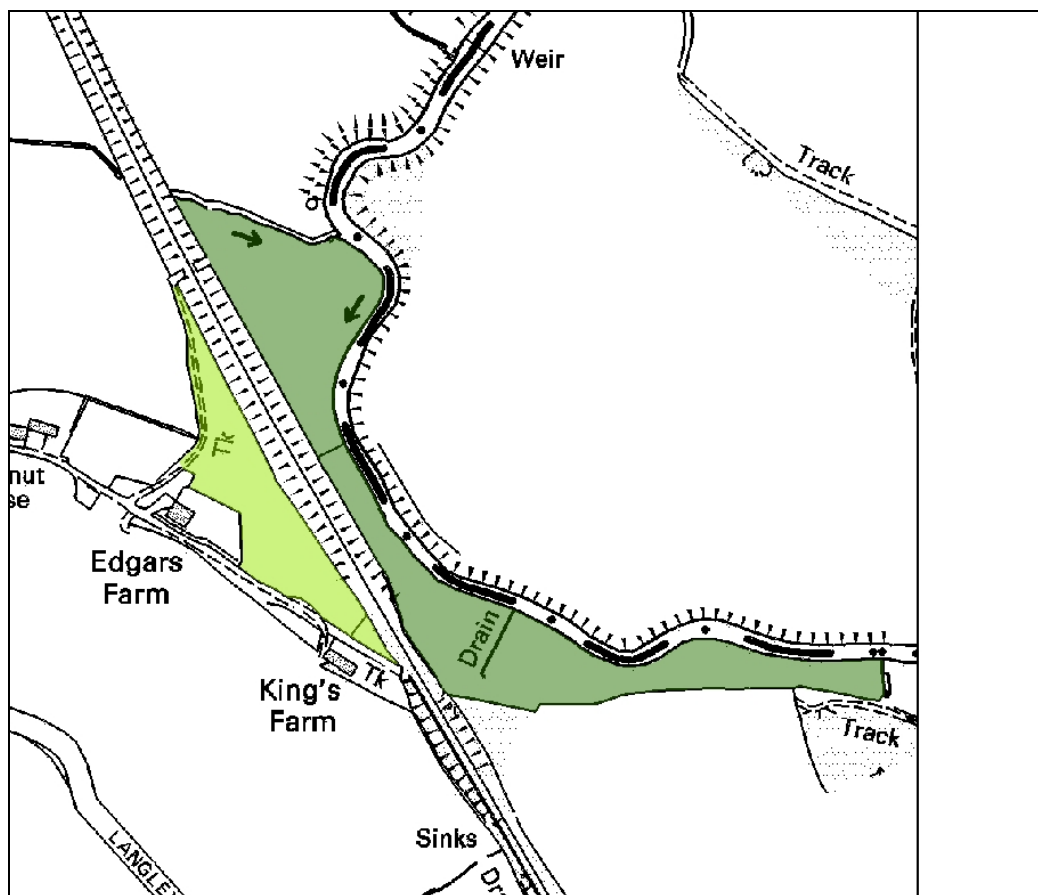
Reproduced by permission of Ordnance Survey on behalf of HMSO © Crown Copyright and database right 2009. All rights reserved. Ordnance Survey Licence number 100025798

Bra250. Edgars Farm Meadow (0.9 ha) TL 895354

This wet grassland and marsh site supports a very rich flora, including many species of restricted distribution. Species of note include Velvet Bent-grass (*Agrostis canina*), Cuckooflower (*Cardamine pratensis*), Marsh Bedstraw (*Galium palustre*), Ragged Robin (*Lychnis flos-cuculi*) and Creeping Jenny (*Lysimachia nummularia*). Carnation Sedge (*Carex panicea*) and Marsh Arrowgrass (*Triglochin palustris*) have also been recorded.

Selection Criteria: HCr10

**LOCAL WILDLIFE SITES
BRAINTREE DISTRICT
Bra251 Edgars Farm East Meadow**



Reproduced by permission of Ordnance Survey on behalf of HMSO © Crown Copyright and database right 2009. All rights reserved. Ordnance Survey Licence number 100025798

Bra251. Edgars Farm East Meadow (2.7 ha) TL 897353

This site comprises damp and marshy grassland within the River Stour flood plain. The sward is characterised by Meadow Foxtail (*Alopecurus pratensis*), Sweet Vernal Grass (*Anthoxanthum odoratum*), Creeping Bent-grass (*Agrostis stolonifera*) and Crested Dog's-tail (*Cynosurus cristatus*), whilst wet areas support Ragged Robin (*Lychnis flos-cuculi*), Bog Stitchwort (*Stellaria alsine*), Cuckooflower (*Cardamine pratensis*) and many other species associated with wetlands.

Selection Criteria: HCr10

Site Check Report Report generated on Thu Aug 12 2021
You selected the location: Centroid Grid Ref: TL90743408
The following features have been found in your search area:

Areas of Outstanding Natural Beauty (England)

Reference	9
Name	Dedham Vale
Date Designated	May-70
Hyperlink	http://www.landscapesforlife.org.uk/about-aonbs/visit-aonbs/dedham-vale-aonb
Statutory Area in Sq.km	90.58

Local Nature Reserves (England) - points
No Features found

Local Nature Reserves (England)
No Features found

National Nature Reserves (England) - points
No Features found

National Nature Reserves (England)
No Features found

National Parks (England)
No Features found

Ramsar Sites (England) - points
No Features found

Ramsar Sites (England)
No Features found

Proposed Ramsar Sites (England) - points
No Features found

Proposed Ramsar Sites (England)
No Features found

Sites of Special Scientific Interest Units (England) - points
No Features found

Sites of Special Scientific Interest Units (England)

No Features found

Special Areas of Conservation (England) - points

No Features found

Special Areas of Conservation (England)

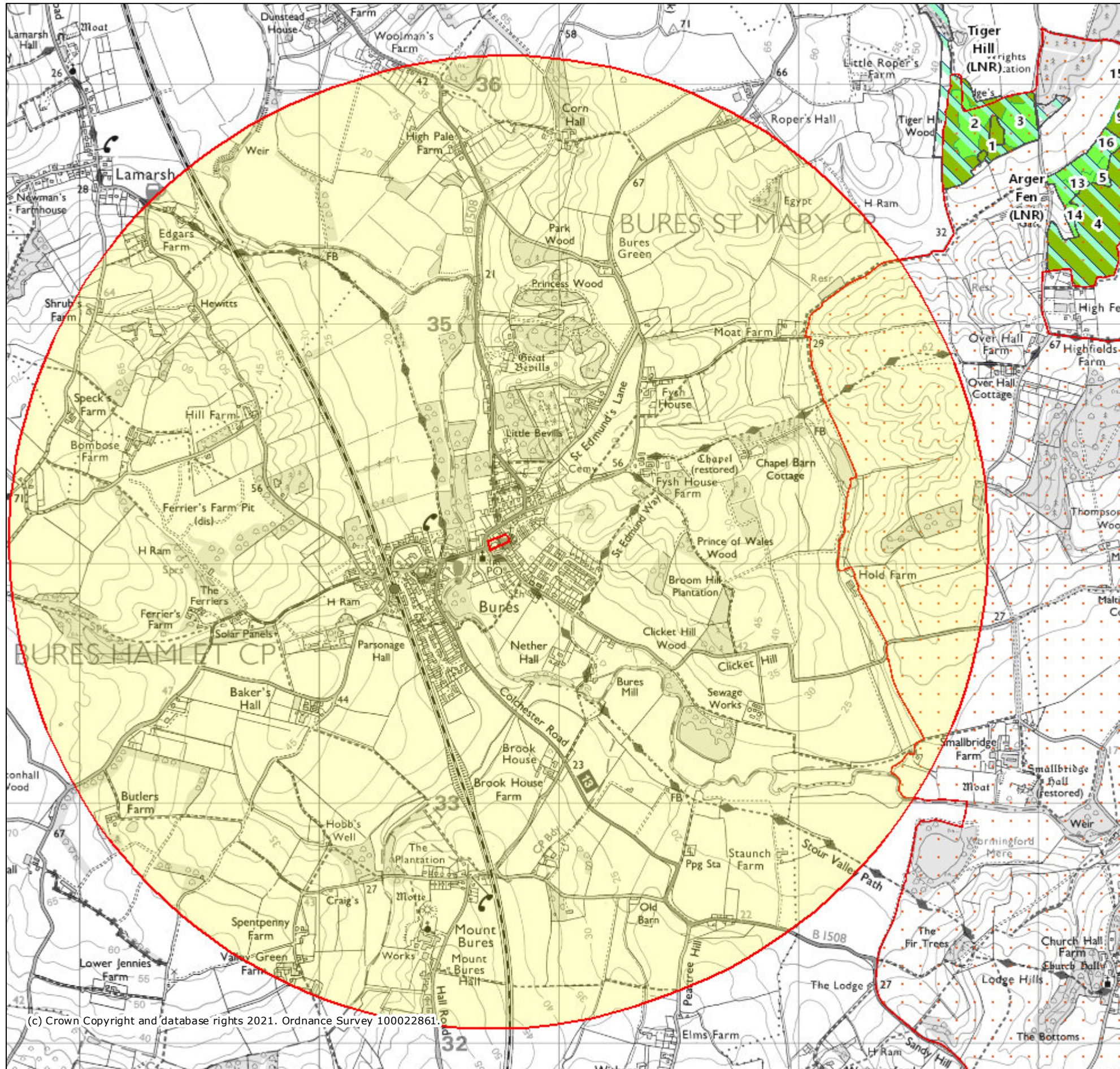
No Features found

Special Protection Areas (England) - points

No Features found

Special Protection Areas (England)

No Features found



Legend

- Areas of Outstanding Natural Beauty (England)
- Local Nature Reserves (England)
- National Nature Reserves (England)
- National Parks (England)
- Ramsar Sites (England)
- Proposed Ramsar Sites (England)
- Sites of Special Scientific Interest Units (England)**
- Favourable Condition
- Unfavourable Recovering
- Unfavourable no change
- Unfavourable Declining
- Part Destroyed
- Destroyed
- Not Assessed
- Special Areas of Conservation (England)
- Special Protection Areas (England)

Projection = OSGB36
 xmin = 586500
 ymin = 231800
 xmax = 595600
 ymax = 236400



Map produced by MAGIC on 12 August, 2021.
 Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGIC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.

Appendix 6 – Target Notes

Target Note 1



Target Note 2



NOTE

Target Note 1
Eastern view of hardstanding

Target Note 2
Species poor defunct hedgerow and tall ruderal boundary

Target Note 3
B6 - inactive black bird nest

Target Note 3



Target Note 4



Target Note 4
Old birds nest on B6

PROJECT
Former Chambers Bus Depot, Bures

PROJECT NUMBER
5823,EC

TITLE
Ecological Target Notes Relating to
Extended Phase 1 Habitat Survey

DATE
18/08/2021

PAGE NO. 1 of 2

Target Note 5



NOTE

Target Note 5

B1 - bat dropping found on brickwork

PROJECT

Former Chambers Bus Depot, Bures

PROJECT NUMBER

5823,EC

TITLE

**Ecological Target Notes Relating to
Extended Phase 1 Habitat Survey**

DATE

18/08/2021

PAGE NO.

1 of 2

Appendix 7 – Bat Scoping Photos

Photograph 1



Photograph 2



DESCRIPTION

Photograph 1

B1 western facing aspect

Photograph 2

B1 southern facing aspect

Photograph 3

B1 eastern facing aspect

Photograph 4

B1 eastern facing aspect

Photograph 3



Photograph 4



PROJECT

Former Chambers Bus Depot, Bures

PROJECT NUMBER

5823,EC

TITLE

**Selected Photographs Relating To
Bat Scoping Survey**

DATE

05/08/2021

PAGE NO.

1 of 7

Photograph 5



Photograph 6



Photograph 7



Photograph 8



DESCRIPTION

Photograph 5

B1- north facing aspect of single story extension/porch

Photograph 6

B1 - southern aspect hole within plaster/brickwall

Photograph 7

B1 - southern aspect missing tiles and gaps between tiles

Photograph 8

B1 - southern facing aspect gaps under tiles

PROJECT

Former Chambers Bus Depot, Bures

PROJECT NUMBER

5823,EC

TITLE

Selected Photographs Relating To Bat Scoping Survey

DATE

05/08/2021

PAGE NO.

2 of 7

Photograph 9



Photograph 10



DESCRIPTION

Photograph 9

B1- southern facing aspect

Photograph 10

B1 - missing soffit on south facing aspect

Photograph 11

B1 - gaps under lead flashing

Photograph 11



Photograph 12



Photograph 12

B2 - western facing aspect

PROJECT

Former Chambers Bus Depot, Bures

PROJECT NUMBER

5823,EC

TITLE

Selected Photographs Relating To Bat Scoping Survey

DATE

05/08/2021

PAGE NO.

3 of 7

Photograph 13



Photograph 14



DESCRIPTION

Photograph 13

B2 - northern facing aspect

Photograph 14

B2 - eastern facing aspect

Photograph 15

B2 - northern facing aspect

Photograph 15



Photograph 16



Photograph 16

B2 - internal view

PROJECT

Former Chambers Bus Depot, Bures

PROJECT NUMBER

5823,EC

TITLE

**Selected Photographs Relating To
Bat Scoping Survey**

DATE

05/08/2021

PAGE NO.

4 of 7

Photograph 17



Photograph 18



Photograph 19



Photograph 20



DESCRIPTION

Photograph 17

B3 - western facing aspect

Photograph 18

B3 - western facing aspect missing bricks

Photograph 19

B3 - northern facing aspect gaps/missing soffit

Photograph 20

B3 - northern facing aspect missing soffit and gaps beneath tiles

PROJECT

Former Chambers Bus Depot, Bures

PROJECT NUMBER

5823,EC

TITLE

Selected Photographs Relating To Bat Scoping Survey

DATE

05/08/2021

PAGE NO.

5 of 7

Photograph 21



Photograph 22



Photograph 23



Photograph 24



DESCRIPTION

Photograph 21

B4 & B5 - negligible bat roost potential.

Photograph 22

B6 - negligible bat roost potential

Photograph 23

B6 - western facing aspect. Multiple inactive feral pigeon/collared dove nests observed on beams.

Photograph 24

Species poor hedgerow along eastern boundary

PROJECT

Former Chambers Bus Depot, Bures

PROJECT NUMBER

5823,EC

TITLE

Selected Photographs Relating To Bat Scoping Survey

DATE

05/08/2021

PAGE NO.

6 of 7

Photograph 25



Photograph 26



DESCRIPTION

Photograph 25

B6 - lean-to attached to eastern aspect of B6

Photograph 26

B7 - southern facing aspect

PROJECT

Former Chambers Bus Depot, Bures

PROJECT NUMBER

5823,EC

TITLE

Selected Photographs Relating To Bat Scoping Survey

DATE

05/08/2021

PAGE NO.

7 of 7

Appendix 8 – Example Enhanced Features

EXAMPLE BAT BRICKS

Integrated Bat Box: Ibstock Enclosed Bat Box 'B'



Large 215 x 290mm



Large Bespoke
215 x 290 mm



Small Red
215 x 215 mm

The Ibstock Enclosed Bat Box 'B' is designed for integration into the wall of new buildings or conservation projects and is intended to provide summer roosting space for pipistrelles specifically. It provides a discrete home for bats, with several roosting chambers to provide zones of differing temperatures within the box. The bats are contained within the box itself and the entrance at the bottom allows droppings to fall out, meaning that the box is maintenance free.

Integrated Bat Box: Standard bat Box



These bat boxes are best positioned in sunlit clusters, at a height of 3-6 metres and ideally facing a variety of aspects as bats will move around a building as the seasons change.

This product makes an ideal bat house for most of the UK's bat species, including Pipistrelles, who will use it for roosting, hibernating and (in maternity roosts) bringing up their young.

The box is self-cleaning. The bat boxes are supplied with a non-removable front as standard.

Please note that once bats have inhabited a roost (integrated or external box) they may only be disturbed by licensed bat workers.

SOURCE

<https://www.nhbs.com/ibstock-enclosed-bat-box-b>

SOURCE

https://www.nhbs.com/ibstock-enclosed-bat-box-c?bkfno=208936&ca_id=1495&qclid=EAIaIQobChMIyb6uou7l6gIVj_bbtCh0iIALOEakYASABEgJWXPD_BwE

TITLE

Example Bat Bricks and Boxes

DATE

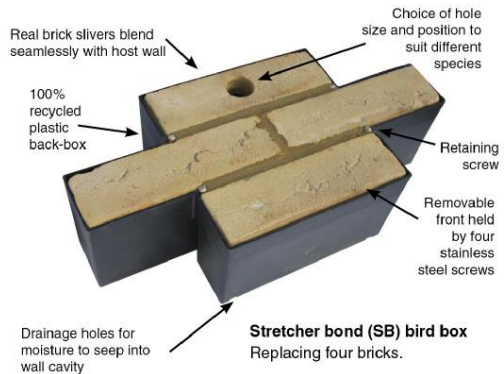
18/08/2021

PAGE NO.

1 of 1

EXAMPLE BIRD BRICKS & BOXES

Integrated Bird Brick House: The Standard Box



This standard nesting box is suitable for House Sparrows and members of the Tit family. The single entrance hole allows the entire internal area to be available for nesting and roosting. The aperture size will vary according to the target species. For example, a 48 mm entrance hole can be produced to accommodate Starlings. The ideal internal depth is 140 mm, however if cavity width is limited, boxes can be manufactured with a reduced depth (minimum 100 mm).

SOURCE

<http://www.birdbrickhouses.co.uk/brick-nesting-boxes/nesting-boxes/>

Integrated Bird Brick House: Sparrow terrace box



This has the same external dimensions as the standard box but has two entrance holes and two separate compartments – ideal for the sociable nature of house sparrows. The terrace box is also suitable for Redstarts, Black Redstarts and Wagtails.

SOURCE

<http://www.birdbrickhouses.co.uk/brick-nesting-boxes/nesting-boxes/>

Integrated Bird Brick House: Swift box



This box has a crescent shaped hole to one side of the box, allowing swifts access but restricting use by starlings. Inside, a rough floor makes it easier for the birds to move around. The centre of the floor has a raised nest cup to assist the birds' nest building. The ideal internal depth of a swift box is 140 mm, however if cavity width is limited, boxes can be manufactured with a reduced depth (minimum 100 mm).

SOURCE

<http://www.birdbrickhouses.co.uk/brick-nesting-boxes/nesting-boxes/>

TITLE

Example Bird Bricks and Boxes

DATE

18/08/2021

External Bird House: 1SP Schwegler Sparrow Terrace



The Sparrow Terrace has been designed to help redress the balance of falling house sparrow numbers. The current UK population of 6 million pairs is half what it was in 1980 and this is thought to be due to habitat destruction and lack of suitable nesting spaces. Sparrows are social birds and like to nest in company. This terrace provides ideal nesting opportunities for three families and will last many decades. It may also occasionally attract tits, redstarts and spotted flycatchers.

The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of houses in built-up areas, and on industrial and agricultural buildings such as barns, sheds and factories. Due to its weight (15kg), it is not suitable for fences or garden sheds. Ideally place the terrace two metres or more above the ground. Cleaning is advisable but not necessary.

SOURCE
<https://www.nhbs.com/1sp-schwegler-sparrow-terrace>

External Bird House: WoodStone Swift Nest Box



The FSC certified WoodStone Swift Nest Box is constructed entirely out of WoodStone meaning it is long lasting and won't rot away like a traditional wooden nest box.

Swift numbers are declining, in part because of the loss of nesting sites. Installing a swift box is a great way to help these birds and to ensure their continued presence in our surroundings. There is an opening at the back of the box for easy cleaning with the nest entrance on the underside of the box.

This type of entrance is preferred by swifts but discourages house sparrows and starlings from occupying the box. This box should be installed at least five metres above the ground, ensuring that there is unobstructed access for birds entering and leaving. If possible, boxes should be sited under the shelter of eaves or overhanging roofs.

SOURCE
<https://www.nhbs.com/woodstone-swift-nest-box>

TITLE
Example Bird Bricks and Boxes

DATE
18/08/2021

PAGE NO. 2 of 3

External Bird House: 1B Schwegler Bird Nest Box (General)



These Woodcrete nest boxes last for at least 20-25 years. Woodcrete is a breathable blend of wood, concrete and clay which will not rot, leak, crack or warp, whilst preventing condensation and maintaining more constant temperatures inside than wooden boxes.

Schwegler bird boxes are backed by conservation organisations, government agencies and forestry experts and experiments have shown that the highest density of bird populations (i.e. breeding pairs per hectare) is achieved with Schwegler nest boxes.

They are carefully designed to provide a stable environment and to mimic natural nest and roost sites with internal brood chamber dimensions that are similar to natural woodpecker cavities. Schwegler have a patented method of installation on trees that prevents the tree trunk from growing over the hanger from which the box is suspended.

SOURCE

<https://www.nhbs.com/1b-schwegler-nest-box>

TITLE

Example Bird Bricks and Boxes

DATE

18/08/2021

PAGE NO.

3 of 3

EXAMPLE ENHANCEMENTS FOR HEDGEHOG

Eco Hedgehog Hole Fence Plate (ref. 1):



Hedgehog numbers have dramatically declined in recent years. Research suggests that this is partly because it is becoming harder for hedgehogs to move freely due to an increase in the number of solid walls and fences being erected around gardens.

This reduces the available foraging area and so restricts the amount of food that they can eat as well as reducing the possibility of meeting a mate. Creating a hole in a garden wall or fence will allow your local hedgehogs to pass through from garden to garden safely.

A hole measuring 13cm by 13cm is the right size for a hedgehog to pass through but too small for most pets. Once you have made your hole in the fence or wall, you can fix the Eco Hedgehog Hole Plate to the fence, ensuring that the hole does not get blocked or stretched.

REFERENCE

1. <https://www.nhbs.com/eco-hedgehog-hole-fence-plate>
2. [Hedgehog Fence Gravel Board for Use With Slotted Posts | Jacksons Fencing \(jacksons-fencing.co.uk\)](https://www.jacksonsfencing.co.uk/hedgehog-fence-gravel-board-for-use-with-slotted-posts)

Hedgehog Gravel Board (ref. Error! Reference source not found.):



Ready made gravel boards are available to allow hedgehogs to pass between gardens. This hedgehog friendly fence gravel board is for use with slotted posts to allow hedgehogs to roam freely between gardens at night. The gravel board is similar to the standard fence panel gravel board, but it has a hole at one end, large enough to allow hedgehogs free passage, with a reinforcing strip along the top of the board to ensure it isn't weakened by the hole.

TITLE
Example Enhancements for Hedgehog

DATE
18/08/2021

PAGE NO. 1 of 1



GEOSPHERE ENVIRONMENTAL

Ec

Ecology.

Fr

Flood Risk.

Ge

Geotechnical.

En

Environmental.

Kw

Knotweed.

GEOSPHERE ENVIRONMENTAL LTD

Brightwell Barns, Ipswich Road, Brightwell, Suffolk, IP10 0BJ

T: 01603 298076 | 01473 353519 | E: info@geosphere-environmental.co.uk | W: geosphere-environmental.co.uk