

Rushmon Limited

**Parker Collins House
Portsmouth Road
Ripley**

Ecological Report

**Job No: 233336
December 2023**



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1.0 INTRODUCTION

Overview

1.1 AA Environmental Limited (AAe) has been commissioned by Rushmon Limited to carry out an ecological survey of the development proposals at Parker Collins House, Ripley. The aims of the survey were to:

- provide a description of the existing habitat types;
- determine the existence and location of any ecologically valuable areas; and
- identify the presence of any protected species.

1.2 This information will serve to assess the ecological impact of the proposals and identify any ecological constraints and/or mitigation measures required and also identify any enhancement measures that may be available.

1.3 The proposals are to construct nine residential dwellings with garages and associated hard and soft landscaping, requiring the demolition of the existing property and outbuildings and clearance of some garden vegetation. The majority of the established trees and boundary vegetation will be retained and protected during the works. An ecological buffer zone will be provided alongside the stream to be sensitively designed and managed for the benefit of wildlife.

Site Description

1.4 The site is located off Portsmouth Road in Ripley, Surrey, centred at National Grid Reference: TQ 042552 and covers approximately 0.39 of a hectare. The site comprised the existing property and outbuildings, associated hardstanding, garden and stream. The site is bordered by Send Marsh Road to the north, Portsmouth Road to the east, woodland to the south and residential dwellings and associated gardens to the west (Figure 1).

2.0 METHODOLOGY

General

2.1 The study comprised two key phases: a desk-top study; and a walk-over field survey. The study was undertaken with reference to the Institute of Environmental Assessment's '*Guidelines for Baseline Ecological Assessment*' (1995), Chartered Institute of Ecology and Environmental Management (CIEEM) '*Guidelines for Preliminary Ecological Appraisal*' (2017) and BS 42020: 2013 '*Biodiversity - Code of practice for planning and development*'.

Desk-top Study

2.2 Surrey Biodiversity Information Centre (SBIC) was consulted in order to obtain baseline data held for the site and the surrounding 2 km area.

2.3 In addition, as certain baseline data is now readily available on the internet, the Multi-agency website (<http://magic.defra.gov.uk/>) was consulted to determine whether any part of the site or nearby habitats have been statutorily or otherwise designated and a review of Google Earth's satellite imagery (http://www.google.co.uk/intl/en_uk/earth/index.html) was completed to determine past land uses of the site and surrounding land.

Field Survey

2.4 It was necessary to supplement the information obtained from the desk-top study with a walk-over field survey, in order to:

ascertain whether, while the site itself or nearby habitats might not be covered by any ecological designations, they could be of ecological interest and/or contain protected species; and
establish the ecological value of the site in order for the overall disturbance to ecosystems within the area to be fully evaluated.

- 2.5 An ecological walk-over survey of the site was carried out on Thursday 23 November 2023. The dominant plant species were recorded, and habitats classified according to their vegetation types and presented in the standard UK Habitat Classification System (*UK Hab Ltd, 2023*). The weather conditions at the time of survey were: 80% cloud cover; wind speed 3 (Beaufort scale); temperature 15°C; and no precipitation.

Habitat Evaluation

- 2.6 By applying recognised criteria produced by Ratcliffe (1977), the following seven-point scale was used to rank the importance of the habitat types and species they support. The value of each habitat was ranked according to its importance in a local context (a summary of the Ratcliffe criteria is attached at Appendix A):

low value;
low to intermediate value;
intermediate value;
intermediate to high value;
high value (Local/District importance);
very high value (County importance e.g. Site of Nature Conservation Importance (SNCI), County Wildlife Site); and
exceptional value (National importance e.g. Site of Special Scientific Interest (SSSI)).

Fauna

- 2.7 Particular attention was paid to record the presence of/ or suitable habitat for badgers, bats, herpetofauna (amphibians and reptiles), otters and water voles that may be present on the site or within adjacent habitats, in accordance with the following survey methodologies:

Badgers

- 2.8 Badgers (*Meles meles*) and their setts are protected by *The Protection of Badgers Act 1992*, under which it is an offence to harm badgers or their setts. A sett is defined as “*any structure or place which displays signs indicating current use by a badger*”. Natural England has provided the following guidance on the interpretation of current use:

A sett is defined as such (and thus protected) as long as signs indicative of ‘current use’ are present. Thus, a sett remains protected by the Act until such times as the signs (i.e. ‘field signs’) have deteriorated or decayed to such an extent that they indicate that the sett is no longer in ‘current use’.

- 2.9 A thorough survey of the whole site and adjacent habitats, where access was available, was carried out. Particular attention was paid to dense areas of vegetation to check for any evidence of badger activity, which is usually detected by any one or more of the following signs:

presence of holes with evidence of badger such as footprints, discarded hair, etc.;
presence of dung pits and latrines;
presence of well used runs with subsidiary evidence of badger activity; and
presence of other indications of badger activity, such as signs of foraging and footprints.

Bats

- 2.10 Currently there are 17 species of bat known to breed in the UK. All species and their roosts are protected under Regulation 41 of *The Conservation of Habitats and Species Regulations 2010 (as amended)*. As a signatory to the *Bonn Convention (Agreement on the Conservation of Bats*

in Europe) the UK is also required to protect their habitats. This legislation makes it illegal to kill, injure, capture or disturb bats or to obstruct access to, damage or destroy bat roosts. Under the law, a roost is any structure or place used for shelter or protection.

2.11 A visual survey of the site was completed to record any evidence of bats or features that could provide potential roosting opportunities. The survey was carried out following the guidelines provided by the Bat Conservation Trust¹ and by an experienced and licensed ecologist². A thorough internal and external examination of the existing buildings was carried out, with any potential access points inspected for evidence of bats. All internal roof voids/spaces, where present, were accessed to check for any evidence of bats.

2.12 In addition, a careful inspection of each tree within the vicinity of the works was carried out to identify those features that are important for roosting bats. Surveying trees presents particular problems at any time of the year as bats will use a wide variety of roost sites in cavities, splits, cracks, knotholes and under loose bark, many of which are not easily detected from the ground. Each tree was assessed in accordance with the following criteria:

NONE – Either no PRF's in the tree or highly unlikely to be any.

FAR – Further assessment required to establish if PRFs are present in the tree.

PRF – A tree with at least one PRF present.

2.13 The surrounding habitat was also surveyed to identify any important features such as mature trees with suitable features for roosting bats and any established lines of vegetation that might provide important flightlines.

2.14 Evidence of bats is usually detected by any one or more of the following signs:

the presence of bat droppings, which tend to accumulate under established roost sites or at roost entrances;

the accumulation of large numbers of moth wings, which have been discarded by feeding bats;

areas of staining by urine or from fur rubbing; and

the presence of bats themselves or their corpses.

2.15 The visual survey was facilitated by the use of binoculars, ladders, powerful torches (1M candlepower) and a Ridgid Micro CA-350 Inspection Camera endoscope.

Herpetofauna

Amphibians

2.16 All amphibian species have some level of protection under *The Wildlife and Countryside Act 1981 (as amended)*. Great crested newts (*Triturus cristatus*) are protected under *The Wildlife and Countryside Act 1981 (as amended)* and *The Conservation of Habitats and Species Regulations 2010 (as amended)*. The intentional or reckless killing, injury or taking, and intentional or reckless disturbance of great crested newts whilst occupying a 'place used for shelter or protection', is prohibited, as is the destruction of these places.

Reptiles

2.17 All reptile species are protected at some level under Schedule 5 of the *Wildlife and Countryside Act 1981 (as amended)* and *The Conservation of Habitats and Species Regulations 2010 (as amended)*. The more common species of reptiles, which include slow-worm (*Anguis fragilis*), common or viviparous lizard (*Zootoca vivipara*), adder (*Vipera berus*) and grass snake (*Natrix helvetica*) are protected by the *Wildlife and Countryside Act 1981 (as amended)* by part of

¹ Collins, J. (ed) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edition). The Bat Conservation Trust, London.

² Lead surveyor was Alan Beaumont, BSc. (Hons), MSc, MCIEEM.

Section 9(1) and all of Section 9(5). This means that they are protected against intentional or reckless killing and injuring (but not 'taking') and against sale and transporting for sale.

- 2.18 An assessment of the site was carried out to determine its suitability for herpetofauna by recording the habitats present. In addition, any natural/artificial refugia present on the site was lifted to check for any sheltering animals or evidence of animals, such as sloughs (shed skins)³.
- 2.19 A Habitat Suitability Index (HSI) score for the on-site pond was calculated. HSI scores, developed by Oldham *et al.* (2000), are used to assess the potential for a waterbody to contain great crested newts and Natural England provides a working template on document WML-A14-2. A HSI score defines a pond's suitability GCNs on a categorical scale where:

<0.5 = poor;
0.5 – 0.59 = below average;
0.6 – 0.69 = average;
0.7 – 0.79 = good; and
>0.8 = excellent.

Otters

- 2.20 Otters are protected under the *Wildlife and Countryside Act 1981* (as amended) and *The Conservation of Habitats and Species Regulations 2010* (as amended). Under this legislation it is an offence to intentionally kill, injure or take (capture) an otter; intentionally or recklessly damage, destroy or obstruct access to any structure or place which otters use for shelter or protection, or to disturb an animal while it is occupying a structure or place which it uses for that purpose.
- 2.21 The survey was undertaken with reference to *Monitoring Otter (Life in UK Rivers)*, the *Design Manual for Roads and Bridges: Volume 10, Section 4, Part 4* (Highways Agency, 2001) and *The New Rivers and Wildlife Handbook* (RSPB, NRA and RSNC, 1995). A detailed inspection of the banks of the stream to record any signs of otters, as well as assessing any areas that could provide lying up/resting places for otters, was carried out. Field signs for otters include:

footprints and slides (where otters regularly enter water);
spraints; and
feeding remains.

Water Voles

- 2.22 The water vole (*Arvicola amphibious*) is fully protected under Section 9 of the *Wildlife and Countryside Act 1981 (England and Wales) (Amendment) Regulations 2004*. Under this legislation it is an offence to intentionally kill, injure or take (capture) a water vole; intentionally or recklessly damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection, or to disturb an animal while it is occupying a structure or place which it uses for that purpose.
- 2.23 The survey for water voles was undertaken with reference to the *Water Vole Conservation Handbook* (Strachan, Moorhouse and Gelling 2011) and an assessment of the site and stream was carried to determine suitability for water voles. A detailed search of the bankside was carried out searching for signs of water vole which include:

latrines and individual droppings;
feeding stations and other signs of feeding;
burrows and nests;
footprints and runs through vegetation; and
water voles themselves.

³ Although considered 'out of season' when reptiles will not be active, certain species can still be found hibernating under refugia.

Other Species

- 2.24 In accordance with good practice, the site was checked for any evidence of other protected species or species of particular note.

3.0 RESULTS

Desk-top Study

- 3.1 A summary of the baseline data obtained from SBIC has been provided and detailed in Table 1; please note, due to sensitivity/copyright, a copy of the report cannot be reproduced but can be requested by the Local Planning Authority⁴.
- 3.2 There are no statutory designated ecological sites located on or adjacent to the site. The nearest statutory designated site is Papercourt Site of Special Scientific Interest (SSSI), located 0.6 km to the north-north-west of the site. The nearest non-statutory designated site is Oldlands Copse Site of Nature Conservation Importance (SNCI), located 0.5 km to the south-east of the site. Full details of the designated sites located within the 2 km search area are provided in Table 1.
- 3.3 There were no records of protected species located on or adjacent to the site. There are a number of records of protected species within the 2 km study area, the majority of which were supplied with specific 6-figure grid references allowing a high-resolution indication of their locations. Further details of protected species recorded within 2 km of the site are provided in Table 1.
- 3.4 According to the Multi-agency website, there was a narrow strip of Deciduous Woodland (a Habitat of Principal Importance), located along the south-western boundary of the site, with a proportion of the garden area noted in the National Forest Inventory⁵. The site is also located within Network Enhancement Zone 2⁶.
- 3.5 Google Earth Imagery shows that the site has remained largely unchanged since 1999. However, the yard area at the front of the site was used as a commercial enterprise until around 2013.

Table 1: Summary of Data Search Results (SBIC)

Statutory Designated Sites		
Description	Protection/designation	Distance/direction
Papercourt	SSSI	0.6 km to the NNW
Non-Statutory Designated Sites		
Description	Protection/designation	Distance/direction
Oldlands Copse	SNCI	0.5 km to the SE
Land Adjacent to Papercourt Marsh	SNCI	0.97 km to the NW
Bramblerde Copse & Robrow Wood	SNCI	1.55 km to the E
Ripley Green	SNCI	1.63 km to the NE
Broadmead Cut and Wey Navigation at Send	SNCI	1.71 km to the NW
East Clandon Common	SNCI	1.81 km to the SE
Roundbridge Farm	SNCI	1.96 km to the NW
River Wey – Woking	SNCI	1.96 km to the NW
Protected/notable Species (Specific Grid References)		
Description	Protection/designation	Distance/direction
Bechstein's Bat (<i>Myotis bechsteinii</i>)	European Protected Species, Protected Species & Priority Species	0.07 km to the SE

⁴ SBIC data cannot be passed on to any third parties (excluding local authorities), without express written permission.

⁵ This is considered inaccurate as the site is managed as a residential property with associated well-maintained garden area and has been for a number of years.

⁶ Land connecting existing patches of primary and associated habitats which is less likely to be suitable for creation of the primary habitat.

Soprano Pipistrelle (<i>Pipistrellus pygmaeus</i>)	European Protected Species, Protected Species & Priority Species	0.07 km to the SE
Red Kite (<i>Milvus milvus</i>)	Protected Species	0.13 km to the N
Bluebell (<i>Hyacinthoides non-scripta</i>)	Protected Species	0.16 km to the NW
Copse-bindweed (<i>Fallopia dumetorum</i>)	Priority Species	0.17 km to the NNE
Brown Long-eared Bat (<i>Plecotus auritus</i>)	European Protected Species, Protected Species & Priority Species	0.19 km to the SSW
Common Pipistrelle (<i>Pipistrellus pipistrellus</i>)	European Protected Species & Protected Species	0.19 km to the SSW
Natterer's Bat (<i>Myotis nattereri</i>)	European Protected Species & Protected Species	0.19 km to the SSW
Whiskered Bat (<i>Myotis mystacinus</i>)	European Protected Species & Protected Species	0.19 km to the SSW
Daubenton's Bat (<i>Myotis daubentonii</i>)	European Protected Species & Protected Species	0.21 km to the ESE
Brandt's Bat (<i>Myotis brandtii</i>)	European Protected Species & Protected Species	0.22 km to the E
Stag Beetle (<i>Lucanus cervus</i>)	European Protected Species, Protected Species (against sale) & Priority Species	0.4 km to the WSW
Brown Hairstreak (<i>Thecla betulae</i>)	Protected Species & Priority Species	0.5 km to the SW
Duncock (<i>Prunella modularis</i>)	Priority Species	0.62 km to the SE
Song Thrush (<i>Turdus philomelos</i>)	Priority Species	0.62 km to the SE
Divided Sedge (<i>Carex divisa</i>)	Priority Species	0.8 km to the NW
Great Crested Newt (<i>Triturus cristatus</i>)	European Protected Species, Protected Species & Priority Species	0.93 km to the W
Knot Grass (<i>Acronicta rumicis</i>)	Priority Species	0.96 km to the NW
Greylag Goose (<i>Anser anser</i>)	Protected Species	1.05 km to the NNW
West European Hedgehog (<i>Erinaceus europaeus</i>)	Priority Species	1.09 km to the SSW
Bittern (<i>Botaurus stellaris</i>)	Protected Species & Priority Species	1.22 km to the NW
Bullfinch (<i>Pyrrhula pyrrhula</i>)	Priority Species	1.22 km to the NW
Redwing (<i>Turdus iliacus</i>)	Protected Species	1.22 km to the NW
Reed Bunting (<i>Emberiza schoeniclus</i>)	Priority Species	1.22 km to the NW
Cetti's Warbler (<i>Cettia cetti</i>)	Protected Species	1.29 km to the NW
Cuckoo (<i>Cuculus canorus</i>)	Priority Species	1.29 km to the NW
House Sparrow (<i>Passer domesticus</i>)	Priority Species	1.29 km to the NW
Lapwing (<i>Vanellus vanellus</i>)	Priority Species	1.29 km to the NW
Starling (<i>Sturnus vulgaris</i>)	Priority Species	1.29 km to the NW
Blood-vein (<i>Timandra comae</i>)	Priority Species	1.3 km to the NW
Brindled Beauty (<i>Lycia hirtaria</i>)	Priority Species	1.3 km to the NW
Centre-barred Sallow (<i>Atethmia centrago</i>)	Priority Species	1.3 km to the NW
Cinnabar (<i>Tyria jacobaeae</i>)	Priority Species	1.3 km to the NW
Common Lizard (<i>Zootoca vivipara</i>)	Protected Species & Priority Species	1.3 km to the NW
Common Toad (<i>Bufo bufo</i>)	Protected Species (against sale) & Priority Species	1.3 km to the NW
Dark Spinach (<i>Pelurga comitata</i>)	Priority Species	1.3 km to the NW
Dusky Thorn (<i>Ennomos fuscantaria</i>)	Priority Species	1.3 km to the NW
Grass Snake (<i>Natrix helvetica</i>)	Protected Species & Priority Species	1.3 km to the NW
Hobby (<i>Falco subbuteo</i>)	Protected Species	1.3 km to the NW
Kingfisher (<i>Alcedo atthis</i>)	Protected Species	1.3 km to the NW
Large Wainscot (<i>Rhizedra lutosa</i>)	Priority Species	1.3 km to the NW
Minor Shoulder-knot (<i>Brachylomia viminalis</i>)	Priority Species	1.3 km to the NW
Mottled Rustic (<i>Caradrina morpheus</i>)	Priority Species	1.3 km to the NW
Oak Hook-tip (<i>Watsonalla binaria</i>)	Priority Species	1.3 km to the NW
Powdered Quaker (<i>Orthosia gracilis</i>)	Priority Species	1.3 km to the NW
Rosy Rustic (<i>Hydraecia micacea</i>)	Priority Species	1.3 km to the NW
Rustic (<i>Hoplodrina blanda</i>)	Priority Species	1.3 km to the NW
September Thorn (<i>Ennomos erosaria</i>)	Priority Species	1.3 km to the NW
Shaded Broad-bar (<i>Scotopteryx chenopodiata</i>)	Priority Species	1.3 km to the NW
Skylark (<i>Alauda arvensis</i>)	Priority Species	1.3 km to the NW

Slow-worm (<i>Anguis fragilis</i>)	Protected Species & Priority Species	1.3 km to the NW
Small Phoenix (<i>Ecliptopera silaceata</i>)	Priority Species	1.3 km to the NW
Black-tailed Godwit (<i>Limosa limosa</i>)	Protected Species & Priority Species	1.36 km to the NW
Brambling (<i>Fringilla montifringilla</i>)	Protected Species	1.36 km to the NW
Green Sandpiper (<i>Tringa ochropus</i>)	Protected Species	1.36 km to the NW
Greenshank (<i>Tringa nebularia</i>)	Protected Species	1.36 km to the NW
Linnet (<i>Linaria cannabina</i>)	Priority Species	1.36 km to the NW
Little Gull (<i>Hydrocoloeus minutus</i>)	Protected Species	1.36 km to the NW
Little Ringed Plover (<i>Charadrius dubius</i>)	Protected Species	1.36 km to the NW
Pintail (<i>Anas acuta</i>)	Protected Species	1.36 km to the NW
Ruff (<i>Calidris pugnax</i>)	Protected Species	1.36 km to the NW
Spotted Flycatcher (<i>Muscicapa striata</i>)	Priority Species	1.36 km to the NW
Turtle Dove (<i>Streptopelia turtur</i>)	Priority Species	1.36 km to the NW
Wood Sandpiper (<i>Tringa glareola</i>)	Protected Species	1.36 km to the NW
White-letter Hairstreak (<i>Satyrium w-album</i>)	Protected Species & Priority Species	1.68 km to the S
Fieldfare (<i>Turdus pilaris</i>)	Protected Species	1.74 km to the NW
Firecrest (<i>Regulus ignicapilla</i>)	Protected Species	1.74 km to the NW
Marsh Stitchwort (<i>Stellaria palustris</i>)	Priority Species	1.74 km to the NW
Noctule Bat (<i>Nyctalus noctula</i>)	European Protected Species, Protected Species & Priority Species	1.74 km to the NW
Peregrine (<i>Falco peregrinus</i>)	Protected Species	1.74 km to the NW
Tubular Water-dropwort (<i>Oenanthe fistulosa</i>)	Priority Species	1.74 km to the NW
Serotine (<i>Eptesicus serotinus</i>)	European Protected Species & Protected Species	1.78 km to the WSW
European Water Vole (<i>Arvicola amphibius</i>)	Protected Species & Priority Species	1.8 km to the SSW
Scaup (<i>Aythya marila</i>)	Protected Species & Priority Species	1.81 km to the NW
Pipistrelle (<i>Pipistrellus pipistrellus</i>)	European Protected Species & Protected Species	1.98 km to the SE
Common Frog (<i>Rana temporaria</i>)	Protected Species (against sale)	2.09 km to the W
Protected/notable Species (Coarse Resolution Records)		
Description	Protection/designation	Record Accuracy
Large Tortoiseshell (<i>Nymphalis polychloros</i>)	Protected Species	1 km
White Admiral (<i>Limenitis camilla</i>)	Priority Species	1 km
Roman Snail (<i>Helix (Helix) pomatia</i>)	Protected Species	10 km

NB: All distances are calculated from the centre of the site, National Grid Reference: TQ 042552.

SSSI = Site of Special Scientific Interest; SSSI = Site of Nature Conservation Importance.

European Protected Species = species listed under *The Habitats Directive Annexes II and IV*.

Protected Species = species listed under the *Wildlife and Countryside Act 1981 (as amended)* Schedules 1, 5 and 8.

Priority Species = species listed under the *Natural Environment and Rural Communities (NERC) Act 2006* Section 41.

Field Survey

Introduction

- 3.6 The results of the survey are presented as a series of habitat descriptions for each of the areas on the site. The Existing Habitat Plan is shown on Figure 2 and the habitat descriptions should be read in conjunction with this Plan. An indicative plant species list is attached at Appendix B (nomenclature follows Stace, 2019) and a series of site photographs attached at Appendix C.

Habitat Types and Evaluation

Vegetated Garden

- 3.7 Lawns dominated the garden areas, with some ornamental planting also present. Species recorded in the lawns included perennial rye-grass (*Lolium perenne*), Yorkshire-fog (*Holcus lanatus*), ribwort plantain (*Plantago lanceolata*), yarrow (*Achillea millefolium*), white clover (*Trifolium repens*), red clover (*Trifolium pratense*), ragwort (*Senecio sp.*), daisy (*Bellis perennis*),

creeping cinquefoil (*Potentilla reptans*), cat's-ear (*Hypochaeris radicata*) and buttercup (*Ranunculus sp.*). Ornamental species included butterfly-bush (*Buddleja davidii*), Portugal laurel (*Prunus lusitanica*), cherry laurel (*Prunus laurocerasus*), hazel (*Corylus avellana*), rhododendron (*Rhododendron ponticum*), rose (*Rosa sp.*), holly (*Ilex aquifolium*), bay (*Laurus nobilis*) and maple (*Acer sp.*).

- 3.8 The garden due to its management regime of regular mowing and maintenance provided limited foraging and sheltering opportunities for wildlife.

Habitat value: Low

Developed Land/Sealed Surface

- 3.9 The property was a two-storey masonry constructed residential dwelling, with a multi-pitched and hipped engineered tiled roof. There was a single-storey extension on the side of the property of similar construction as the property. Plastic soffits/fascias were present, which were in good condition and well-sealed. There were two small areas of tile hanging at the front of the property and an area at the side, all of which appeared well-aligned. There was a single roof space which had been converted into additional storage with the floor boarded out and the roof lined with a modern breathable membrane. There was a timber framed and clad storage shed/garage with two wooden doors and a shallow single-pitched bitumen felt roof. The storage shed/garage lacked a separate roof space/void. There was a small timber shed located behind the garage, with a pitched bitumen based felt roof and no separate roof space. Hardstanding areas included the driveway and patio areas.

- 3.10 The buildings and hardstanding areas provided limited value for any wildlife.

Habitat value: Low

Standing Water

- 3.11 There was an ornamental pond recorded within the garden area. Aquatic/marginal vegetation recorded included pendulous sedge (*Carex pendula*), willow (*Salix sp.*) and hard rush (*Juncus inflexus*).

- 3.12 Although the pond provided an alternative habitat, its restricted size and location within a garden area reduces its ecological value.

Habitat value: Intermediate

Hedgerows

- 3.13 Leyland cypress (*Cuprocyparis x leylandii*) hedgerows formed the eastern boundary of the site.

- 3.14 Although the hedgerows provide some sheltering and bird nesting opportunities, the monoculture of Leyland cypress reduces their ecological value.

Habitat value: Low

Stream

- 3.15 A shallow stream with steep sides and relatively fast flowing water formed the western boundary of the site. The stream lacked any aquatic/emergent vegetation with only pendulous sedge and hart's-tongue (*Asplenium scolopendrium*) recorded along the banks.

- 3.16 Although the stream provides an alternative habitat, its steep sides and lack of established vegetation reduces its ecological value.

Habitat value: Intermediate

Urban Trees

- 3.17 A number of individual trees were recorded on site and at the site boundaries. Species included mature and semi-mature oak (*Quercus sp.*), ash (*Fraxinus excelsior*) and cypress (*Cupressaceae spp.*) trees.
- 3.18 The trees provide sheltering and foraging opportunities for a range of wildlife and provide some bird nesting habitat. The mature oak tree was of some ecological value.

Habitat value: Intermediate to high

Fauna

Badgers

- 3.19 No evidence of badgers or their setts was recorded on or adjacent to the site, with no records for badgers returned by SBIC within the study area. A fox (*Vulpes vulpes*) was disturbed from the western corner of the site during the survey.

Bats

- 3.20 No evidence of bats was found during the careful internal and external inspection of the property and outbuildings recorded on the site. The masonry and mortar were in good condition and the roof tiles well-aligned and tightly sealed, with no obvious access points recorded. The engineered tile hanging was thoroughly inspected, getting up close using ladders, and found to be in good condition and well-aligned with any restricted gaps filled with cobwebs and/or general debris. The soffits/fascias and areas of lead flashing were all tightly sealed. The attic was fully accessed and found to be well sealed. The storage shed/garage and garden shed were assessed to provide **negligible** roosting opportunities for bats.
- 3.21 The site, being a residential plot, provided only limited foraging opportunities for bats. The majority of trees on site were assessed to be under the characterisation **NONE**, due to their age, size and lack of any obvious PRF's. The mature oak was assessed to be under the characterisation **PRF**, due to the presence of rot holes.

Herpetofauna

- 3.22 There was an ornamental garden pond, which was assessed to provide **poor** suitability to support great crested newts, with a HSI score of 0.49 (Table 2) due to its limited size. The site, being a managed residential plot within a residential area, does not provide suitable terrestrial habitat for any species. Despite a careful search of the site, no species of herpetofauna were seen or found sheltering under any refugia lifted during the survey. In addition, there are no nearby records of any herpetofauna, with the nearest great crested newt record located approximately 0.93 km from the site and reptile located approximately 1.3 km from the site.

Table 2: HSI Score for the on-site ornamental pond

Factor	Pond
S11 - Location	1.00
S12 - Pond area	0.05
S13 - Pond drying	0.90
S14 - Water quality	0.33
S15 - Shade	1.00
S16 - Fowl	1.00
S17 - Fish	0.67
S18 - Ponds	0.49
S19 - Terrestrial habitat	0.33
S110 - Macrophytes	0.50
HSI	0.49

Otters

- 3.23 No evidence of otters was recorded on the site, with no records returned within the 2 km study area.

Water voles

- 3.24 No evidence of water voles was recorded during the survey, the lack of established bankside vegetation, which water voles need for shelter and as a food resource, does not provide suitable habitat for water voles. In addition, the nearest record provided by SBIC was located at some distance away (approximately 1.8 km from the site).

Other Wildlife

- 3.25 Apart from the fox previously mentioned and a few common species of birds, either recorded on the site or flying overhead, no other species of any note were recorded.

4.0 DISCUSSION AND RECOMMENDATIONS

- 4.1 The proposals are to construct nine residential dwellings with garages and associated hard and soft landscaping, requiring the demolition of the existing property and outbuildings and clearance of some garden vegetation. The majority of the established trees and boundary vegetation will be retained and protected during the works. An ecological buffer zone will be provided alongside the stream to be sensitively designed and managed for the benefit of wildlife.
- 4.2 There are no habitats of international, national, county or local importance that would be directly affected by the proposals. The site is of overall low ecological value, with the species recorded described as common or abundant and are found in similar places across much of Britain, with no evidence of protected species recorded.
- 4.3 Although there are considered to be no ecological constraints to the redevelopment proposals, a series of generic mitigation measures, as detailed below, could be implemented to reduce any impact the development proposals may have on local wildlife. There is also an opportunity to implement some enhancement measures to increase the nature conservation value of the site in the long term in accordance with Government guidance as set out in National Planning Policy Framework (NPPF) 2023⁷.
- 4.4 A thorough internal and external examination of the existing buildings was completed. The attic space was fully accessed and not complex allowing a thorough inspection. Although no evidence of bats was recorded and no further surveys are considered necessary, it is recommended as a precaution that the areas of restricted tile hanging on the property should be soft stripped under the supervision of a licensed bat worker, with the following controls implemented:

All site operatives should be given a toolbox talk on the possibility of encountering bats and the legal protection they and their roosts are afforded (copy of a toolbox talk has been attached at Appendix D for reference).

Initial works will be carried out with great care, with the areas of tile hanging removed by hand, lifting each tile clear with two hands rather than lifting the front and rolling the tile backwards which may crush any bats beneath.

Tiles will also be checked underneath before being stacked or discarded as bats sometimes cling to the underside of tiles.

- 4.5 In the unlikely event that any evidence of bats is encountered, works will cease immediately and Natural England contacted so that appropriate advice can be provided (**N.B. a European Protected Species Licence may then be required to permit the works to continue**).

⁷ Ministry of Housing, Communities and Local Government (2023). *National Planning Policy Framework*. London.

- 4.6 Although none of the established trees are scheduled to be felled to facilitate the works, in the event that any trees need to be removed then a further assessment will be required to determine presence or likely absence of bats. The findings of which will determine any restrictions and control measures to be adopted in order to comply with current legislation protecting bats and their roosts.
- 4.7 Although, the pond was assessed to be of **poor** suitability to support great crested newts and therefore no follow-up surveys are recommended, care should be taken during works, with all site operatives made aware of the legislation protecting great crested newts. In the unlikely event of encountering any great crested newts then works should stop immediately and Natural England or AAe contacted so that appropriate advice can be provided.
- 4.8 It should be noted that all species of wild bird and their nests are protected under the *Wildlife and Countryside Act 1981 (as amended)*. Therefore, site clearance should be timed to avoid the main bird nesting season, which, in general, runs from March to August inclusive. If this is not possible, a check should be carried out prior to any clearance works to ensure there are no active nests present.
- 4.9 In order to protect any vegetation to be retained, suitable fencing may be required at certain locations to reduce the possibility of any damage that could be caused during the works. To minimise accidental damage, any overhanging branches should be pruned back to suitable live growth points. All works should be undertaken by a suitably qualified and experienced specialist contractor and should conform to current industry best practice, i.e. BS 3998: 2010 '*Tree Work - Recommendations*'. The retention of these features will maintain existing commuting/foraging routes currently utilised by local wildlife.
- 4.10 As part of the proposals, soft landscaping will be carried out. Where any new planting is proposed it should aim to use native species, but where this is not practicable then species of known value for wildlife can be used. In particular, flowering plants will be of benefit to invertebrate species and shrubs and trees may provide nesting opportunities for birds once they become established.
- 4.11 Any new boundary treatment should be designed to promote permeability of the site to minimise fragmentation and allow free movement of wildlife throughout the site, for example by strengthening/enhancing the existing boundary vegetation, planting up a series of new hedgerows and/or installing post and rail fences. If close boarded fences are required for security reasons these should be minimised and raised slightly off the ground (c. 150-200 mm) to allow animals to pass underneath.
- 4.12 The ecological buffer alongside the stream will be sensitively designed with existing vegetation supplemented with native species of local provenance only with the species mix agreed by the appointed landscape contractor. An Advisory Note for planting near watercourses is attached at Appendix E. Once established, this buffer zone will provide an important resource for a variety of wildlife, as well as protecting the river in the long-term.
- 4.13 The site could be further enhanced by providing roosting, nesting and sheltering opportunities for a range of species and the creation of new wildlife habitats, such as some of those recommended by the Chartered Institute of Ecology Environment and Management's published Biodiversity Net Gain Good Practice Guidance, and listed below:
- Nest boxes
 - Bug hotels
 - Bat boxes
 - Hedgehog houses
 - Pollinator nest sites
 - Planting wildflowers
- 4.14 The effects of lighting on plants and animals are difficult to assess, but it is thought that lighting can adversely affect invertebrates, birds and bats. Although the site is currently well-lit by on-site sources and neighbouring developments, in accordance with best practice, a sensitive

lighting scheme will be designed to minimise light spillage and pollution and not directed onto any wildlife boxes installed or onto the boundary vegetation.

5.0 CONCLUSIONS

- 5.1 The proposals are to construct nine residential dwellings with garages and associated hard and soft landscaping, requiring the demolition of the existing property and outbuildings and clearance of some garden vegetation. The majority of the established trees and boundary vegetation will be retained and protected during the works. An ecological buffer zone will be provided alongside the stream to be sensitively designed and managed for the benefit of wildlife.
- 5.2 An ecological survey has been carried out, supplemented by obtaining available baseline data from Surrey Biodiversity Information Centre. The findings from the survey and review of baseline data have provided information to assess the impact of the proposals on species and/or features of ecological/biodiversity value.
- 5.3 There are no habitats of international, national, county or local importance that would be directly affected by the proposals. The site is of overall low ecological value, with the species recorded described as common or abundant and are found in similar places across much of Britain, with no evidence of protected species recorded.
- 5.4 Overall the findings of this ecological appraisal would indicate that there are no ecological constraints to the redevelopment proposals to preclude planning permission being granted. A range of generic mitigation/enhancement measures have been suggested and, if implemented effectively, would reduce the impact of the works on local wildlife, avoid contravention of current legislation.

233336/ARB

AA Environmental Limited

December 2023

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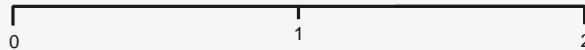
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Figures



Scale (km)



KEY	
Site Boundary:	
2 km Study Area:	
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UK Location:	

Rev.	Details	Drawn Chkd.	Date
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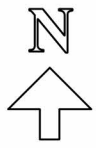


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Project
233336
Parker Collins House
Ripley

Title
Site Location Plan

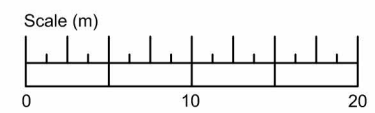
Scale	Date	Drawn	Chkd.	Dr. No.	Rev.
As shown	21.12.23	NAB	ARB	Figure 1	




UK HABS KEY

-  Site Boundary*
-  Vegetated Garden
-  Developed Land/Sealed Surface
-  Stream
-  Ponds (Non-Priority)
-  Hedgerow
-  Urban Tree

* Indicative Location



Rev.	Details	Drawn Chkd.	Date
Project 233336 Parker Collins House Ripley			
Title Existing Habitats Plan			
		AA Environmental Ltd Units 4-8 Cholswell Court Shippon Abingdon Oxon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-ltd.co.uk www.aae-ltd.co.uk	
Scale	Date 21.12.23	Drwg. No.	Rev.
As shown	Drawn NAB	Chkd. ARB	Figure 2

Appendix A

Summary of Ratcliffe Criteria

Fragility – some habitats, communities and species are particularly sensitive to environmental change and as such tend to be rare.

Rarity – the threat of loss of a particular habitat or species lends value to the organism and the site it occupies. Whether a species has rarity value is largely dependent upon the context, as a species or habitat can be internationally rare, but relatively common locally or nationally. Likewise, a nationally rare species can in some circumstances be more common at internationally level.

Size (area or extent) – size does play an important part in determining the ecological interest of an area, but is also a relative concept. For example, a 30 acre woodland or a one acre meadow could have a similar degree of nature conservation importance.

Diversity – the diversity of a site can be expressed in a number of ways and both low and high diversity can have a high nature conservation value under different circumstances.

Potential value – some sites have the potential to provide greater nature conservation interest than presently exists.

Position within the Ecological/Geographical Unit – a site which is near or adjacent to other similar habitats may have a higher nature conservation value than an isolated one because the range of fauna can be greater.

Typicalness – certain habitats have become important as they are good examples of what is, or has historically been, typical of the area. Efforts have been made to safeguard representative areas to prevent what was once common becoming fragmented or rare.

Recorded history – a well-documented site with detailed biological and/or natural history records presents a valuable insight into the ecology of a site. Such information is important for current and future management.

Naturalness – this is a measure of the degree to which an area has been modified by human activity. In England unmodified habitats are extremely rare being restricted to remote, inaccessible areas such as cliffs, and some saltmarshes. The bulk is either semi-improved, improved or artificial.

Intrinsic Appeal – this refers to value in a popular rather than ecological sense, and highlights the fact that value is also derived from society's preferences for landscape and other aesthetic features and is not just based on ecological considerations.

Appendix B

PLANT SPECIES LIST

<i>Acer sp.</i>	Maple
<i>Achillea millefolium</i>	Yarrow
<i>Asplenium scolopendrium</i>	Hart's-tongue
<i>Bellis perennis</i>	Daisy
<i>Buddleja davidii</i>	Butterfly-bush
<i>Carex pendula</i>	Pendulous sedge
<i>Corylus avellana</i>	Hazel
<i>Cupressaceae spp.</i>	Cypress
<i>Cuprocyparis x leylandii</i>	Leyland cypress
<i>Fraxinus excelsior</i>	Ash
<i>Holcus lanatus</i>	Yorkshire-fog
<i>Hypochaeris radicata</i>	Cat's-ear
<i>Ilex aquifolium</i>	Holly
<i>Juncus inflexus</i>	Hard rush
<i>Laurus nobilis</i>	Bay
<i>Lolium perenne</i>	Perennial rye-grass
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Potentilla reptans</i>	Creeping cinquefoil
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Prunus lusitanica</i>	Portugal laurel
<i>Quercus sp.</i>	Oak
<i>Ranunculus sp.</i>	Buttercup
<i>Rhododendron ponticum</i>	Rhododendron
<i>Rosa sp.</i>	Rose
<i>Salix sp.</i>	Willow
<i>Senecio sp.</i>	Ragwort
<i>Trifolium pratense</i>	Red clover
<i>Trifolium repens</i>	White clover

Appendix C



Photograph 1: Showing the front of the property and driveway.



Photograph 2: Showing the close inspection of the well-sealed tile hanging.



Photograph 3: Showing the stream along the western boundary of the site.



Photograph 4: Showing the ornamental pond within the garden area, assessed to provide **poor** suitability for great crested newts.

Rev.	Details	Drawn Chkd.	Date
PROJECT 233336 Parker Collins House Ripley			
TITLE Photograph Record Sheet			
		AA Environmental Ltd Units 4-8 Chotswell Court Shippon Abingdon Oxon OX13 6HX T: 01235 536042 F: 01235 523849 info@aae-ltd.co.uk www.aae-ltd.co.uk	
Scale	Date 21.12.23	Drg No.	Rev.
NTS	Drawn NAB	Chkd. ARB	Appendix C

Appendix D

TOOLBOX TALK: BATS

Did you know?

- Bats are the world's only flying mammal.
- There are 17 species of bat known to be breeding in the UK, 6 of which are endangered or rare and 6 are classed as vulnerable.
- Bats can be found across the country in urban and rural locations.
- They are often sighted at dusk as they leave their roost, flying around hedgerows, woodland and waterbodies, feeding on insects.
- Throughout the year bats will often change their roost, depending upon the season.
- Usually a pregnant female will only have one baby a year, this makes colonies vulnerable to population decline.
- During the winter bats hibernate and may not wake up, even if disturbed. Therefore it's important not to work on sites with bats during these months.
- Bats may not use the same roost throughout the year, however they are legally protected with or without a bat occupying them.

Identification

- You may find bats in any number of places, they tend to prefer dark, quiet spots with good shelter, such as holes and cracks in trees, roofs and walls of buildings, under bridges, old tunnels and in caves.
- Signs of bat presence include discarded moth wings, staining around crevices and small mouse-like droppings which crumble easily.

Legislation

- All bats and their roosts are protected by UK and European Law. This makes it **illegal to kill, injure, capture or disturb bats** or obstruct access to, damage or destroy their roosts and protects important feeding areas from damage or disturbance.
- Under law, a roost is any structure or place used for shelter or protection.

Site Controls

- There is always a **risk** that bats, as they move between different roost sites and occupy new roosts, could be encountered during site works.
- **If any bats are encountered during work the following controls must be applied to avoid breaking the law:**
 1. If bats are discovered/suspected work must stop **immediately** with any bat left in-situ and AAe immediately contacted (contact details above).
 2. If any injured bats are found during the work AAe would care for them and where possible be released in the same location once recovered.
 3. During work staff must wear gloves in case of accidental contact with bats.
 4. Any roof tiles will be lifted straight up, rather than being rolled over, minimising the risk of harming bats which may be sheltering underneath.
 5. Areas must be fully checked for any bats or their evidence prior to filling any gaps and repointing any brickwork.
 6. Any lighting must be installed to avoid illuminating vegetation and or bat boxes/access points.

These controls have been put in place to protect all site operatives from breaking the law. You're not expected to be able to identify bats or their presence so remember, **if in doubt shout and contact the relevant person.**

Key Contacts

AA Environmental Ltd, Units 4-8 Cholswell Court, Shippon, Oxfordshire, OX13 6HX

Tel: 01235 536042



Brown long-eared bat.



Lesser horseshoe bat in rail tunnel.



Common pipistrelle bat.

Appendix E

Planting near watercourses



Water-crowfoot

Peter Creed

This Advisory Note aims to encourage good practice when landowners and land managers are planning to plant near or in rivers, streams and ditches, and ponds that are not in gardens.

It applies to all sorts of plants, whether trees, shrubs, wild flowers, ferns, marginal plants or 'true' aquatics which grow in water all through the year.

Wild plants and river banks

Wild plants are very important along river banks:

- ✿ Their roots hold banks in place and prevent soil washing away, especially during flood events.
- ✿ They provide food and shelter for wildlife, including fish, insects such as damselflies and water beetles, and threatened mammals including otter and water vole.
- ✿ They often form locally distinctive plant communities of wild flowers, sedges, rushes and grasses.

The character of individual watercourses can be very different. Catchment geology, water chemistry, biology, flow, management, bank profile and land use are all important factors that will determine which wild plants and animals occur in the water and along the water margins.

Planting near watercourses



To plant or not to plant

Wild plants will usually colonise water margins of their own accord if the conditions are suitable. There are many successful river restoration projects where wild plants have returned after excluding grazing livestock by fencing, or where environmentally-friendly bank profiles have been created.

Within rivers themselves, simple works such as placing wooden stakes to deflect flow on over-widened watercourses can create conditions suitable for plants to re-establish. The local Environment Agency¹ ecologist can provide advice based on experience from other projects and will advise on whether planting is either necessary or desirable and, if so, what species can be established. Case studies can also be found on the River Restoration Centre's website.

Some wild plants associated with rivers and water margins:

- ✿ **Common reed** (water edge/shallow water)
- ✿ **Branched bur-reed** (water margins)
- ✿ **Purple-loosestrife** (shallow margins that dry out in summer)
- ✿ **Water-crowfoot** an aquatic plant of fast-flowing clean rivers
- ✿ **Valerian** (muddy margins exposed in summer).

Remember –these plants will not be suitable for every location.



Purple-loosestrife



Common reed



Valerian



Branched bur-reed

1. The Scottish Environment Protection Authority (SEPA) in Scotland.

Obtaining wetland and aquatic plants

If it is essential to introduce plants: first consider obtaining plants from natural watercourses in the local areas; for example, where there is a surfeit of plants or where cuttings can be taken without harming existing plant or animal life. Surplus plants may be available after routine ditch or pond dredging. Permission from the landowner or farm tenant will be required.

Many riverbank and aquatic species can be propagated vegetatively or grown very easily from seed. For large projects, consider approaching a specialist grower of British wild plants (see *Flora localis*'s website) to contract-collect material and propagate this for you.

Always find out first which wild plants grow in similar habitats in the



Wild plants have arrived of their own accord in this pond, which is less than 10 years old.

locality. With this knowledge, select suitable species for your project.

Pond and river plants from general aquarists and garden centres are often garden varieties. They are suitable for gardens but not for establishing in the wild. If there is no alternative but to purchase plants, it is recommended to use a specialist grower of British wild plants. Always

ask for details of origin (the wild location of the original stock used for propagation).

Before planting always wash soil off roots away from drains, ponds and watercourses. This will reduce the risk of introducing unwanted 'hitch-hikers', whether other plants or invertebrates such as exotic flatworms or snails.

Garden plants and introduced species

Please do not introduce garden plants, especially varieties of aquatic plants or those associated with water margins. Less visible 'invaders' can also be unwittingly introduced, such as non-native insects and other invertebrates, which may be present in soil on the roots of purchased plants. These may create risks to our native wildlife in the future.

Some introduced species that are now common in ponds and streams:
Least duckweed,
Water fern,
Orange balsam,
New Zealand stonecrop,
Himalayan balsam, bladder snails (*Physa* spp.), the water shrimp *Crangonyx pseudogracilis*, introduced flatworms.

In many cases the introduced species occur in greater numbers or quantity than the wild plants and animals which should occur.

Buddleja has smothered bankside wild flora on the Kennet and Avon Canal near Newbury, Berkshire.



Permission and licences

Any works between eight and ten metres² of a main river (including bank reinforcement, tree planting and any other planting) require permission from the Environment Agency, (in Scotland from the Scottish Environment Protection Agency). Similarly, a consent from the Agency will normally be required to divert any part of a watercourse, and a licence to take water from one (e.g. to make a garden feature). Some rivers and streams are also designated as Sites of Special Scientific Interest. In these areas, permission to carry out any work will need to be obtained from the relevant government agency³. These safeguards are in place because there could be implications for flooding, river levels or other impacts on existing habitats or wildlife.

Japanese knotweed

Advice from the Environment Agency should be sought prior to removing Japanese knotweed, which can reproduce through small severed fragments; the waste and the soil it is growing in are classed as controlled waste and it can only be taken off site for disposal to a licensed site capable of receiving it. Soil from unknown sources, and builders' waste, has helped to introduce and assist the spread of this plant, which can be almost impossible to eradicate once it has established on a river bank.

Owning a river

Anyone owning land crossed or adjacent to a river or other watercourse is usually a 'riparian owner', who is responsible for maintaining it. It is usually the case that riparian owners own half of the river on the same side as the rest of their property. To find out more see the Environment Agency leaflet 'Living on the Edge' or the website.

2. This varies between different regions.

3. Natural England, Countryside Council for Wales, Scottish Natural Heritage, Environment and Heritage Service Northern Ireland.

Further information

- ✿ www.therrc.co.uk
the River Restoration Centre. For case studies and technical information on river restoration methods.
- ✿ www.floralocale.org
Advisory notes: Buying native flora, Reed propagation; list of suppliers of British and Irish wild flora.
- ✿ *River plants: the macrophytic vegetation of watercourses*. (Second edition)
Sylvia Haslam. Pub. University of Cambridge. £25.
- ✿ **Laminated illustrated guide to commoner water plants**
FSC publications. £3.25 from www.field-studies-council.org (tel: 0845 3454071).
- ✿ www.plantlife.org.uk/PlantInvaders/index.asp
Help Plantlife's survey of invasive plants and learn more about them, including control methods.
- ✿ **Environment Agency (EA) and Scottish Environment Protection Agency (SEPA)**
please see your local telephone directory or www.environment-agency.gov.uk and www.sepa.org.uk
- ✿ www.pondstrust.org.uk :
Factsheets on creating and planting ponds from The Ponds Conservation Trust.

September 2006

For further advisory notes, case studies, Guidelines for planting projects in the countryside, training opportunities and suppliers of native flora, go to www.floralocale.org



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Flora locale is a national charity established to promote the wise use of native flora for countryside restoration and other biodiversity projects

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