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Figure 1 – Extended Phase 1 Habitat Survey

1 INTRODUCTION

1.1 Project Background

1.1.1 Marches Ecology was commissioned by Mr Nigel Darlington to undertake an Extended Phase 1 Habitat Survey of land at Lower Honkley Farm, Stringer's Lane, nr Rossett, Wrexham (approximate OS Grid Ref. SJ 341 593). This report is provided as supporting information to a planning application for residential development.

1.1.2 This survey report has three principal aims:

- to provide an initial appraisal of the ecological value of the site and local ecological resource;
- to detail further surveys that may be required; and
- to identify potential development constraints relating to ecology and outline potential mitigation measures where possible.

1.1.3 This report was produced by Tom Knight of Marches Ecology. Tom Knight is an ecologist with over eighteen years of consultancy experience and has undertaken Extended Phase 1 Habitat Surveys on a wide range of sites. His relevant academic qualifications and professional memberships are as follows:

- Chartered Environmentalist (Society for the Environment).
- Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM).
- PgDip Conservation Management.
- BSc (Hons) Environmental Studies.
- C&G Biological Surveying.

1.2 The Proposal

1.2.1 The proposal concerns a small residential development including internal access road. The proposed development is presented on a d2 Architects plan entitled '*Proposed Site Plan with Existing Planning Permission*', Dwg no. 5371 106A, dated 07/11/16. This plan shows five dwelling units with an internal access road off Stringer's Lane. Consent has previously been granted for the construction of three dwellings at this site.

1.2.2 The location of the proposed development site is presented on a d2 Architects plan entitled '*Location Plan*', Dwg no. 5371 100A, dated 04/11/16. This plan shows the red line boundary. The proposed development site extends to approximately 0.4 hectares.

1.2.3 No further detailed information regarding the proposed development has been provided.

1.3 Planning Policy

Introduction

- 1.3.1 This section provides a brief summary of key national and local planning policies. It is not a comprehensive review of all such planning policy, the intention being to identify those considered to be of most relevance to ecology and provide context for the proposal.

Wales

Planning Policy Wales

- 1.3.2 Planning Policy Wales (PPW) sets out national land use planning policies (Welsh Government 2016). Chapter 5 is of particular relevance and is entitled 'Conserving and Improving Natural Heritage and the Coast'. With specific reference to development proposals the following key statements are made:
- *'Biodiversity and landscape considerations must be taken into account in determining individual applications and contributing to the implementation of specific projects. The effect of a development proposal on the wildlife or landscape of any area can be a material consideration'.*
 - *'When considering any development proposal... local planning authorities should consider environmental impact, so as to avoid, wherever possible, adverse effects on the environment'.*
- 1.3.3 Chapter 5 further covers statutory designations, protected species and specific habitats/ areas. National policy statements are listed at the end of the Chapter and cross-referenced to paragraphs.
- Technical Advice Note 5*
- 1.3.4 PPW is supplemented by a series of Technical Advice Notes (TAN). TAN 5 covers 'Nature Conservation and Planning' (Welsh Government 2009). It provides advice to local planning authorities on how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. It includes chapters covering the key principles of planning for nature conservation; the preparation and review of development plans; nature conservation in development control procedures; the conservation of internationally and nationally designated sites, habitats and local sites; and the conservation of protected and priority habitats and species.
- 1.3.5 In paragraph 2.4 it states that *'...when deciding planning applications that may affect nature conservation, local planning authorities should:*
- *pay particular attention to the principles of sustainable development, including respect for environmental limits, applying the precautionary principle, using scientific knowledge to aid decision making and taking account of the full range of costs and benefits in a long term perspective (PPW 2.2.1¹);*
 - *contribute to the protection and improvement of the environment, so as to improve the quality of life and protect local and global ecosystems, seeking to avoid irreversible harmful effects on the natural environment (PPW 2.3.2);*
 - *promote the conservation and enhancement of statutorily designated areas and undeveloped coast (PPW 2.3.2);*

¹ References to the relevant part of PPW.

- *ensure that appropriate weight is attached to designated sites of international, national and local importance (PPW 5.3.2);*
- *protect wildlife and natural features in the wider environment, with appropriate weight attached to priority habitats and species in Biodiversity Action Plans (PPW 5.2);*
- *ensure that all material considerations are taken into account and decisions are informed by adequate information about the potential effects of development on nature conservation (PPW paragraphs 5.5.1 and 5.5.2);*
- *ensure that the range and population of protected species is sustained (PPW 5.2.3, 5.5.11 and 5.5.12);*
- *adopt a step-wise approach to avoid harm to nature conservation, minimise unavoidable harm by mitigation measures, offset residual harm by compensation measures and look for new opportunities to enhance nature conservation; where there may be significant harmful effects local planning authorities will need to be satisfied that any reasonable alternative sites that would result in less or no harm have been fully considered (PPW 5.2.2, 5.2.7 and 5.5.2).*

Wrexham

- 1.3.6 Local planning authorities will consider biodiversity/ nature conservation issues in accordance with adopted policies and plans. The following are considered of particular relevance to the proposal.

Wrexham Unitary Development Plan

- 1.3.7 The Wrexham Unitary Development Plan (UDP) was adopted in February 2005. It will be replaced (currently scheduled for adoption in 2018) by the Local Development Plan. The UDP '*...provides a framework for local decision making and the reconciliation of development and conservation interests...*'.

Relevant strategic and general development policies include:

- *Policy PS2. Development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment.*
- *Policy PS11. Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves where the nature conservation and landscape interest of the land will be protected and enhanced.*
- *Policy GDP1f). Ensure the safety and amenity of the public and safeguard the environment from the adverse effects of pollution of water, land or air, hazards from industry and quarrying, and associated noise, odour or vibration arising from development.*
- *Policy GDP1h). Safeguard sites and areas of nature conservation and wildlife interest, and to provide new habitats where there is an unavoidable loss of existing habitats and areas of wildlife interest.*

Section 5 of the UDP concerns 'Environment and Conservation'. The relevant policies listed are as follows:

- *Policy EC1. Within Green Barriers, development will only be granted planning permission if it is for agriculture, forestry, essential facilities for outdoor sport and recreation, cemeteries and other uses of land which maintain the openness of the Green Barrier and do not conflict with the purpose of including land within it.*

- *Policy EC2. Development on agricultural land of grades 1, 2 or 3a will only be permitted if it does not lead to the irreversible loss of that land.*
- *Policy EC4. Development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape and townscape. Development which results in the loss or significant damage to valuable trees, important hedgerows or ancient woodland sites will not be permitted.*
- *Policy EC6. Development either within or close to sites of biodiversity interest will only be permitted where it can be clearly demonstrated that the need for the development outweighs the need to safeguard the intrinsic nature conservation value of the site. Where such development is permitted, damage should be kept to a minimum, and compensatory measures should be provided. Measures to improve the biodiversity value of sites and enhance their natural conservation interest and landscape quality including the establishment of local nature reserves, will be supported.*
- *Policy EC13. Development which would result in an unacceptable adverse impact on the water environment due to additional surface water run-off will not be permitted.*
- *Policy EC14. Development which would have an unacceptable adverse impact upon the capacity, flow, quality or availability of controlled waters and associated land will not be permitted.*

Local Planning Guidance

- 1.3.8 Wrexham County Borough Council (WCBC) has produced a series of supplementary planning guidance documents which set out detailed advice on the way in which Development Plan policies will be applied. Supplementary planning guidance is a material consideration in the determination of planning applications for development. The following Local Planning Guidance (LPG) notes are of particular relevance:
- LPG 17 Trees and Development. Adopted September 2000, Updated December 2012. Provides further advice in relation to UDP policy EC4.
 - LPG 32 Biodiversity and Development. Adopted March 2011.
Provides further advice in relation to UDP policies PS2, PS11, EC4 and EC6. Of particular importance it details the requirements for ecological survey and reporting.
- 1.3.9 The Wrexham Biodiversity Action Plan (WBAP) is also listed as supplementary planning guidance on the WCBC website. However this reference is out-of-date, the WBAP has been archived and is no longer available.

1.4 Legislation

Introduction

- 1.4.1 This sub-section provides a brief summary of key legislation relevant to ecology/ nature conservation and the proposal. It should not be considered a comprehensive review and is not meant to be so. It is provided here for information only and is not intended to replace specialised legal advice. It does not replace the text of the legislation, but summarises the salient points. Further information on how this legislation affects the protection of particular species is provided in *Appendix 1*.

The Conservation of Habitats and Species Regulations 2010, as amended (The Regulations)

- 1.4.2 Transposes the *EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992* into UK law. The Regulations provide for the protection of sites in the UK that support habitats and species of European importance (e.g. Special Protection Areas (SPAs) and Special Areas of Conservation (SACs)). The Regulations also provide full protection for certain species which are frequently referred to as European Protected Species (EPS). EPS of potential relevance to the site include bats and Great Crested Newts (*Triturus cristatus*).

The Wildlife and Countryside Act 1981, as amended (WCA)

- 1.4.3 The WCA strengthened protection for nature conservation sites of at least national importance, and provides varying levels of protection for a number of species within the UK. This protection may include prohibition of some or all of: killing, injuring, disturbing, taking, sale/barter or possession of species and also protection of breeding/ sheltering places. The following species/ species groups that receive some level of protection under the WCA and are of potential relevance to the proposal include Badger (*Meles meles*), bats, Great Crested Newts, reptiles and birds. The WCA also prohibits the spread of certain non-native invasive species.

The Countryside and Rights of Way Act 2000 (The CRoW Act)

- 1.4.4 The CRoW Act includes legislation in relation to the Biodiversity Action Plan; more stringent management, protection and consenting measures for SSSIs; greater penalties for wildlife crime; and greater protection for species listed in the WCA. Some of this legislation was superseded by the NERC Act.

The Natural Environment and Rural Communities Act 2006 (The NERC Act)

- 1.4.5 *Sections 40 to 42* of the NERC Act replace *Section 74* of the CRoW Act. *Section 40* of the NERC Act extends to all public authorities (including local planning authorities) the existing *Section 74* duty to have regard to biodiversity as far as is consistent with the proper exercise of their functions. In addition, *Sections 41* (England) and *42* (Wales) provide a list of species and habitats of principal importance for conservation of biological diversity. Government has a statutory duty to promote steps "to further the conservation" of habitats and species listed in *Sections 41* and *42*.

Environment (Wales) Act 2016

- 1.4.6 The Environment Act enhances and replaces the current NERC Act (*Section 40*) duty to require all public authorities, when carrying out their functions in Wales, to seek to 'maintain and enhance biodiversity' where it is within the proper exercise of their functions. In doing so, public authorities must also seek to 'promote the resilience of ecosystems'. *Section 7* of the Environment Act provides a list of the living organisms and habitats of principal importance for the purpose of maintaining and enhancing biodiversity in Wales. This list replaces that previously provided in *Section 42* of the NERC Act.

The Protection of Badgers Act 1992 (The Badgers Act)

- 1.4.7 The Badgers Act provides for the protection of Badgers and their setts. This legal protection is provided for welfare rather than the conservation value of the species.

2 METHODOLOGY

2.1 Field Survey

Extended Phase 1 Habitat Survey

- 2.1.1 The Extended Phase 1 Habitat Survey was carried out on 5th January 2017 by Tom Knight of Marches Ecology. The Extended Phase 1 Habitat plan is provided as *Figure 1*. The survey focussed on land within the site boundary (henceforth referred to as the 'survey site', refer to *Figure 1*). Immediately adjacent habitat was considered where deemed appropriate and viewed from the survey site boundary where possible. The weather during the survey was cold (initially with a ground frost) but sunny with no cloud and a light breeze.
- 2.1.2 The standard initial habitat survey method is Phase 1 Habitat Survey. It involves identifying areas or features of particular interest either in terms of their botanical interest, and/or habitat potential for protected or other notable species.
- 2.1.3 The Phase 1 Habitat Survey has been adapted in this instance as an 'extended' Phase 1 Habitat Survey, where more information has been obtained to inform site assessment. The methods used centre on the Phase 1 Habitat Survey approach (JNCC 2010) as extended for use in Environmental Impact Assessment (Institute of Environmental Assessment 1995). Extended Phase 1 Habitat Survey is necessarily a more holistic approach than Phase 1 Habitat Survey and provides an understanding of habitat use by faunal groups (IEEM 2005). This involves the following elements:
- Habitat mapping using a set of standard colour codes to indicate habitat types on a Phase 1 Habitat map.
 - Description of features of ecological or nature conservation interest in notes relating to numbered locations on the Phase 1 Habitat map, called target notes. Target notes are recorded for habitat and features of possible botanical interest and features relating to animals including protected/ notable vertebrates that are likely to occur in the region and within the survey site. Evidence of activity was noted when encountered. The Target Notes are provided in *Section 5* and shown on *Figure 1*.
- 2.1.4 In addition to the habitat map and target notes, a plant species list was compiled (provided in *Table 1, Section 7*). Plant nomenclature in this report follows Stace (2010). January is outside the accepted survey period for Extended Phase 1 Habitat Surveys and some flowering species would not be evident at this time. It is unrealistic to suppose that walk-through surveys can generate completely exhaustive species lists at any time of year. It is considered that the list in this report indicates the character of the vegetation and the ecological value of the area inspected.
- 2.1.5 Further information describing the assessment conducted during the Extended Phase 1 Habitat Survey for particular species is provided briefly below:
- Badger. Areas within the survey site that might be used by Badger for foraging and sett building were assessed. Incidental foraging signs, tree scratching, paths, latrines and setts were recorded if found (Harris *et al.*, 1989).
 - Bats. The potential value of the habitat for foraging/ commuting and roosting was assessed in accordance with *Table 4.1* provided in Collins (2016).
 - Great Crested Newts. The quality of terrestrial habitat for Great Crested Newts was assessed.

- Reptiles. A qualitative assessment of the habitat for reptiles was undertaken. The survey involved identifying potential basking areas, hibernation sites and foraging habitat. English Nature (2004) provides information on the distribution and ecology of the four widespread species. Habitat requirements differ between species but are summarised in Edgar *et al.* (2010).
- Birds. The habitat within the survey site was assessed for its potential value for breeding birds based on guidance provided in e.g. JNCC (2004).

2.2 Survey Constraints

2.2.1 The following may be considered survey constraints:

- The Extended Phase 1 Habitat Survey was undertaken outside the accepted optimal period for such surveys.
- No background data search has been undertaken to inform the survey and this report.
- The ground was frozen during the survey visit. This may have obscured some signs of protected species.

3 BASELINE ECOLOGICAL CONDITIONS

3.1 Habitats and Flora

Context

- 3.1.1 The survey site extends to approximately 0.4 hectares of land and is located approximately 3.5 km northwest of Rossett, Wrexham. The survey site comprises a more-or-less level area of ground that supports patches of grassland, ephemeral vegetation and bare ground with scattered scrub and tall ruderal vegetation. The site boundaries are formed on two sides by existing hedges that contain mature trees. The southwestern and southern boundaries are largely formed by a new brick wall and fencing. There is no boundary marked on the southeast side.
- 3.1.2 The survey site is bordered to the northwest and northeast by a large arable field. A further arable field is located to the southeast. Stringer's Lane is aligned along part of the southern boundary. To the southwest there is a brick/ stone dwelling house (Lower Honkley Farm) that is currently being renovated.

Site Description

Introduction

- 3.1.3 The Extended Phase 1 Habitat map is provided as *Figure 1*. The Target Notes (numbered 1 to 11) are provided in *Section 5* and shown on *Figure 1*.

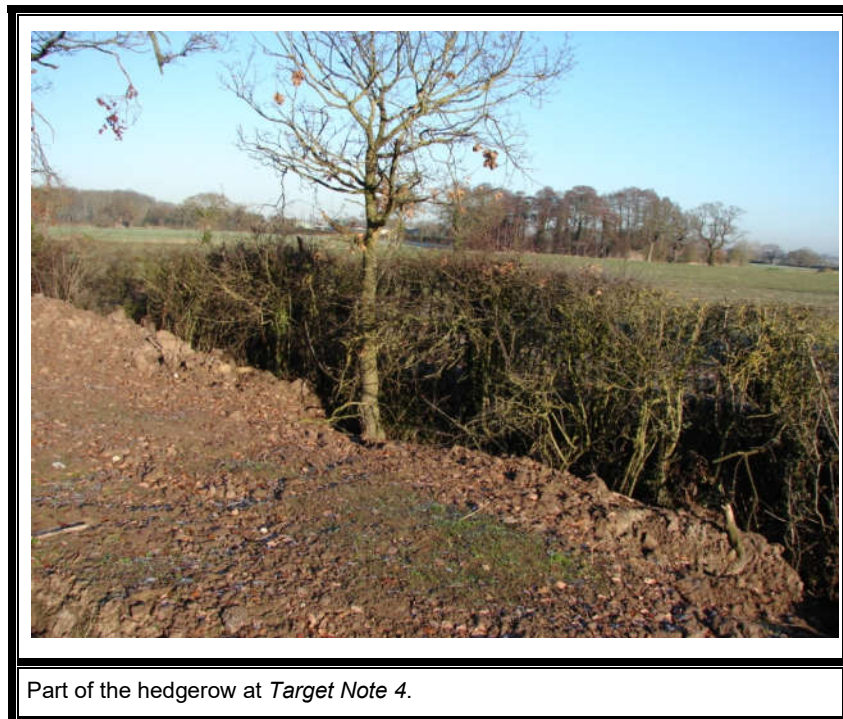
Trees and Scrub

- 3.1.4 Scattered scrub is largely young and is located towards the northwestern and northeastern boundaries (e.g. *Target Notes 2 and 2a*) with a small amount around the built structure at *Target Note 11*. The scrub at *Target Notes 2 and 2a* is largely low-growing *Rubus fruticosus* agg. (Bramble) and young Willow seedlings.
- 3.1.5 At *Target Note 2b* there are a number of apparently self-sown young trees and shrubs. These include *Quercus robur* (Pedunculate Oak), *Acer pseudoplatanus* (Sycamore) and *Fraxinus excelsior* (Ash) saplings with some multi-stemmed semi-mature *Salix caprea* (Goat Willow) and *Crataegus monogyna* (Hawthorn).
- 3.1.6 Other trees located within the survey site are contained within the boundary hedgerows (*Target Notes 4 and 10*). There are two large mature Pedunculate Oak trees (*Target Notes 5a and 5b*) within the hedge at *Target Note 4*. The hedge at *Target Note 10* includes a large mature Pedunculate Oak (*Target Note 8*), a multi-stemmed, previously coppiced Ash (*Target Note 9a*) and a number of young trees (*Target Note 9*).



Hedgerows

- 3.1.7 A hedgerow forms the northeastern site boundary (*Target Note 4*). It is managed to approximately 1.7 m high and 1 m wide. It is dominated by Hawthorn with occasional *Prunus spinosa* (Blackthorn) and lesser amounts of *Rosa canina* agg. (Dog-rose) and *Cornus sanguinea* (Dogwood). It includes three Pedunculate Oak trees and is located on a ditch bank. The base is dominated by *Hedera helix* (Ivy) with occasional *Galium aparine* (Cleavers) and Bramble.



- 3.1.8 The hedgerow at *Target Note 10* is discontinuous/ gappy and appears to be partly managed on the sides only. It is approximately 1-1.5 m wide and the height varies. It contains abundant Hawthorn with frequent Ash and small amounts of Blackthorn, *Rosa arvensis* (Field-rose) and *Malus* sp. (Apple). It includes a large mature Oak tree and a large Ash

coppice bole. A small amount of the woody climber *Clematis vitalba* (Traveller's-joy) is present. The base is dominated by Ivy with frequent Cleavers and Bramble.



Grassland/ Ephemeral Vegetation/ Bare Ground Mosaic

- 3.1.9 Most of the survey site is characterised by disturbed bare ground (due to ongoing clearance/ building work) and ephemeral vegetation with some small patches of species-poor semi-improved neutral grassland (*Target Note 2*). There are some small areas of concrete hard-standing associated with the previous use of the site. Towards the southwest side of the site there are various piles of building materials including bricks, sand, stone-blocks, *etc* with some rubble and piles of soil (*e.g. Target Notes 1 and 6*).
- 3.1.10 The semi-improved neutral grassland is fairly species-poor and is likely to have been subject to disturbance in the relatively recent past. It is dominated by *Agrostis capillaris* (Common Bent) with locally frequent *Agrostis stolonifera* (Creeping Bent), *Juncus inflexus* (Hard-rush), occasional *Ranunculus repens* (Creeping Buttercup) and *Trifolium repens* (White Clover).



- 3.1.11 Towards the northwest boundary there is a small patch of more established species-poor semi-improved neutral grassland dominated by *Dactylis glomerata* (Cock's-foot) and *Arrhenatherum elatius* (False Oat-grass) with scattered young *Salix* sp. (Willow) and Bramble (*Target Note 2a*). It also includes small stands of tall herbs such as *Cirsium vulgare* (Spear Thistle), *Chamerion angustifolium* (Rosebay Willowherb) and *Heracleum sphondylium* (Hogweed).
- 3.1.12 A narrow band of species-poor unimproved neutral grassland is located on the verge adjacent to Stringer's Lane.

Other Habitat

- 3.1.13 A ditch was previously aligned along the northeastern site boundary (*Target Note 3*). It has recently been enclosed within a 12 inch twin-wall pipe so there is no open water. It appears to receive a small but perceptible flow from field drains, etc approximately 7 m upstream of the survey site boundary. It flows approximately from southeast to northwest. The pipe has partly been covered over with soil though approximately two-thirds remain exposed in the base of the excavated ditch.
- 3.1.14 At *Target Note 3a* there is a similar ditch feature to that described at *Target Note 3* that has also been diverted through a pipe. This ditch is located immediately outside the survey site.



- 3.1.15 There are two built structures within the survey site at *Target Notes 7* and *11*. These are described further below with regards bats.

3.2 Species/ Species Groups

Badger

- 3.2.1 No setts were recorded within the survey site. Opportunities for sett excavation within the survey site are presented by remaining ditch-sides and the hedge bases though these are considered sub-optimal.
- 3.2.2 No evidence of Badger activity was recorded within the survey site. As most of the survey site is characterised by heavily disturbed grassland/ ephemeral vegetation with various piles of building materials potential foraging opportunities are likely to be limited.

Bats

- 3.2.3 There are two built structures within the survey site. The single-storey corrugated metal sheet building at *Target Note 7* is constructed with a steel frame and contains no windows. It is located on a concrete pad. It is used for storage of various building materials; access to all areas was not possible. It has a pitched roof of corrugated metal as are all of the walls. There is no insulation and no roof space. There are possible gaps above the door and between the roof and wall tops that bats could use to access the inside of the building. This building contains no features of potential value for roosting bats.



The building at *Target Note 7*.

- 3.2.4 There is two joined dilapidated old portacabins and a single-storey brick structure at *Target Note 11*. The central brick structure has rendered walls. It has a flat roof that is covered with bitumen felt though the roof has rotted and partly collapsed. The flat roofs in the portacabins are in a similar condition. Most of the windows are open or have been smashed. These structures are of no potential value for roosting bats.



The built structure at *Target Note 11*.

- 3.2.5 Trees within the survey site are described at *Target Notes 2b, 5a, 5b, 8, 9 and 9a*. The trees at *Target Notes 2b* and *9* are young/ thin and are of no potential value for roosting bats. The stems of the old Ash at *Target Note 9a* are similarly thin and offer no potential value. While the Pedunculate Oak at *Target Note 5a* has an approximate diameter at breast height (dbh) of 1.2 m it contains no obvious features of potential value for roosting bats.

- 3.2.6 The Pedunculate Oak at *Target Note 5b* has an approximate dbh of 1 m. It contains some small cracks in minor limbs. It is of low potential value for roosting bats at most.
- 3.2.7 The Pedunculate Oak at *Target Note 8* has an approximate dbh of 1 m. It contains some dead wood in minor limbs and small splits in the bark. It is of low potential value for roosting bats at most.
- 3.2.8 The disturbed grassland/ ephemeral vegetation/ bare ground mosaic that characterises most of the survey site may be of low potential value for foraging bats. The hedges/ tree lines at *Target Notes 4* and *10* may be of greater potential value particularly as they are linked to a wider network of hedges.

Water Vole

- 3.2.9 The ditches at *Target Notes 3* and *3a* have been enclosed within pipes. There is no suitable habitat for this species either within the survey site or directly adjacent to it. This species will not be considered further in this report.

Great Crested Newts

- 3.2.10 There is no aquatic habitat within the survey site of potential value for Great Crested Newts.
- 3.2.11 An initial review of the OS map 1:25, 000 scale and relevant internet-based mapping including aerial photography² indicates that there may be six waterbodies within approximately 500 m of the survey site (all located to the north/ northeast). The closest of these to the survey site is located approximately 215 m to the northeast and is part of a cluster of three waterbodies. No detailed pond scoping exercise has been undertaken.
- 3.2.12 The survey site is largely characterised by a disturbed grassland/ ephemeral vegetation/ bare ground mosaic. This terrestrial habitat is generally of low potential value for Great Crested Newts. There are features including the hedges that may be considered to be of high potential value. Similarly there are a number of features that could provide refugia/ hibernacula including small mammal holes, large grass tussocks, around tree/ shrub roots and piles of building materials.

Reptiles

- 3.2.13 The disturbed grassland/ ephemeral vegetation/ bare ground mosaic that dominates the site is unlikely to be of potential value for reptiles. The small fragments of more established grassland (e.g. *Target Note 2a*) may be considered to be of potential low quality for various species of reptile. However due to the negligible value of the habitat and as it is surrounded by arable fields and therefore isolated, the likelihood that reptiles might use this site is considered to be negligible. The Wales Online Amphibian and Reptile Atlas³ provides no records for the 1 km square within which the site is located (and none for all of the surrounding 1 km squares). As such this species group will not be considered further in this report.

² <https://www.google.co.uk/maps/place/Burton+Green,+Rossett,+Wrexham/@53.1267554,-2.9830892,667m/data=!3m1!1e3!4m5!3m4!1s0x487ac46c1252aa55:0x14da9a68d53d711f!8m2!3d53.1191285!4d-2.9793611>

³ <http://arc.cofnod.org.uk/>

Birds

- 3.2.14 Eleven species of bird were recorded during the Extended Phase 1 Habitat Survey either within the survey site or flying over it. The House Sparrow (*Passer domesticus*) is included on *Section 7* of the *Environment (Wales) Act 2016*⁴ and on the Red List of Birds of Conservation Concern (Eaton *et al.* 2015). The Dunnock (*Prunella modularis*) and the Bullfinch (*Pyrrhula pyrrhula*) are included on *Section 7* and the Amber List. Both the Dunnock and House Sparrow could nest within the survey site though the latter is more likely to nest in nearby buildings outside the survey site. The scrub is unlikely to be sufficiently dense for Bullfinch to nest. The survey site provides nesting opportunities for species of bird associated with hedges, shrubs and trees.
- 3.2.15 One of the portacabins at *Target Note 11* contained a single old Swallow (*Hirundo rustica*) nest. The potential value of these structures for nesting may have decreased as the roofs have partly collapsed.

⁴ Species listed on *Section 7* of the *Environment (Wales) Act 2016* are identified as the living organisms of principal importance for the purpose of maintaining and enhancing biodiversity in Wales.

4 EVALUATION, RECOMMENDATIONS AND CONCLUSIONS

4.1 Introduction

4.1.1 Brief details regarding the proposal are provided in *Section 1.2*. An assessment of ecological issues based on the information provided is detailed below and considers:

- further survey requirements; and
- potential development constraints and associated mitigation requirements.

These are dealt with in turn for habitats and flora, and specific species groups in the section below.

4.1.2 For non-mobile ecological resources potential ecological issues are only considered where such resources might be directly or indirectly impacted where possible, e.g. they are located within or directly adjacent to the survey site. Resources that would not be impacted are generally not considered.

4.1.3 No further detailed information regarding the proposal has been provided. In the absence of such information potential impacts have been considered with reference to the plan/ information provided only. Potential impacts/ reasonable avoidance/ mitigation/ enhancement measures detailed below may need further consideration once the proposal has been confirmed.

4.2 Evaluation and Recommendations

Habitat

4.2.1 The survey site includes the following habitat resources:

- Mosaic of disturbed semi-improved neutral grassland/ ephemeral vegetation/ bare ground (*Target Note 2*);
- Unimproved/ semi-improved neutral grassland (*Target Note 2a*);
- Scattered scrub/ tree saplings (*Target Notes 2, 2a and 2b*);
- A ditch that has been enclosed within a pipe (*Target Note 3*);
- Two hedgerows (*Target Notes 4 and 10*);
- A number of trees within the hedgerows including mature specimens (*Target Notes 5a, 5b, 8, 9 and 9a*);
- Small stands of tall ruderals; and
- Two built structures (*Target Notes 7 and 11*).

The habitats outside the survey site have not been assessed here as it is assumed that they would not be impacted by the proposal subject to the implementation of the avoidance/ mitigation measures detailed below.

4.2.2 Due to the size, quality and geographical location of the habitat resources listed above they are considered to be of no more than site value⁵ with the exception of the following:

- The two hedgerows (*Target Notes 4 and 10*); and
- Four mature/ large trees (*Target Notes 5a, 5b, 8 and 9a*).

⁵ CIEEM (2016) recommends the use of geographical context as a frame of reference for identifying the importance (value) of ecological features. The frame of reference has the following categories: International/ European - National - Regional - Metropolitan/County/Vice-county/ other local-authority wide area - Local. Within this report Local is defined as relating to district or parish; less than local refers to features of value at a Site level.

- 4.2.3 'Hedgerows' is a priority habitat listed on *Section 7*. This priority habitat covers all hedgerows consisting predominantly (*i.e.* 80% or more cover) of at least one woody UK species (Biodiversity Reporting & Information Group, 2011). The two hedges within the survey site are in relatively poor condition, have been damaged in places, often contain gaps and are not particularly species-rich. However they are a part of a network of hedges in the wider area and are therefore considered to be of local value.
- 4.2.4 Large/ mature trees are not specifically recognised in the *Section 7* list. The trees at *Target Notes 5a, 5b, 8 and 9a* may be of considerable age and again form a constituent part of the many mature (mainly Oak) trees scattered throughout the local landscape. As they are also contained within the hedgerows they are considered to be of local value.
- 4.2.5 No further survey of the habitat within the survey site is currently considered necessary.
- 4.2.6 It is assumed that the proposal would directly impact all of the existing habitat/ vegetation within the survey site (with the exception of the two boundary hedgerows). Due to the inherent value of this resource no particular mitigation/ compensation measures are proposed (with the exception of the avoidance measures described below).
- 4.2.7 Due to the proximity of the hedgerows at *Target Notes 4 and 10*, and the trees at *Target Notes 5a, 5b, 8 and 9a* to parts of the built development it is possible that these features could be inadvertently impacted. It is recommended that all of these features are retained and should be protected from any potential damage throughout the site clearance/ construction phase. Tree protection should be installed in accordance with LPG 17. This fence should remain in-situ until the completion of the construction work. General best practice measures should also be implemented during the construction phase to avoid any indirect impacts (*e.g.* dust, diffuse and water-borne pollution, *etc*) on retained/ adjacent habitat.
- 4.2.8 It is recommended that all gaps in the existing hedges are planted with a species composition to reflect the existing. Planting should ideally be as a staggered, double row with five to six plants per metre. Any planting should utilise native species of certified British origin and local provenance.
- 4.2.9 Technical Advice Note 5: Nature Conservation and Planning (Welsh Assembly Government 2009) seeks development to achieve net biodiversity gain. The areas of soft landscaping associated with the scheme present an opportunity to incorporate locally native species/ priority habitat where possible. This could include patches of native scrub to provide opportunities for nesting birds such as the Dunnock.

Flora

- 4.2.10 No species of plant listed in categories (above Least Concern) in the most recent Vascular Plant Red Data List for Wales (Dines 2008) was recorded from the site. No further survey of the flora within the site and no specific mitigation measures are currently considered necessary.

Fauna

Badgers

- 4.2.11 As a consequence of the legal protection afforded to Badgers and their setts, work that could disturb Badgers is illegal without a licence. The Countryside Council for Wales (now Natural Resources Wales) has produced guidelines (CCW 2011) on the types of activity that it considers should be licensed within certain distances of sett entrances. For example, using

very heavy machinery (usually tracked vehicles) within 30 m of an entrance to an active Badger sett, lighter machinery (generally wheeled vehicles) within 20 m, and light work such as hand digging or scrub clearance within 10 m, may require a licence. In addition, CCW (2011) states that some activities (e.g. explosives or pile-driving) may cause disturbance at greater distances (usually 100 m) than those listed above.

- 4.2.12 No setts were recorded within the survey site; some limited potential sett excavation opportunities are provided by the base of the hedgerows. A sett could be excavated subsequent to the completion of this survey. No evidence of Badger activity was recorded during the Extended Phase 1 Habitat Survey and the habitat is of limited potential value as a foraging resource.
- 4.2.13 As no evidence of Badger activity was recorded no mitigation measures are proposed. If site clearance/ construction work is not implemented within 12 months of the Extended Phase 1 Habitat Survey then the site should be re-surveyed by a suitably qualified ecologist to check for any setts.

Bats

- 4.2.14 There are two built structures within the survey site (*Target Notes 7 and 11*). It is assumed that both of these structures would be demolished due to the proposal. As neither is considered to provide potential value for roosting bats no further survey is considered necessary and no mitigation measures are proposed.
- 4.2.15 The hedgerows at *Target Notes 4 and 10* contain a small number of large/ mature trees. The Pedunculate Oaks at *Target Notes 5b and 8* are considered to be of low potential value for roosting bats at most. Subject to the installation and maintenance of the tree protection measures recommended above this does not have any implications for the proposal and no further survey would be necessary. No mitigation measures are proposed as it is assumed that the tree protection measures would prevent any potential disturbance of bats that might use these trees for roosting.
- 4.2.16 Should this situation change and these two trees be directly impacted (e.g. subject to pruning or felled) for any reason they would require a detailed daytime inspection by a suitably experienced and licensed bat surveyor and or tree-climber in order to determine whether they are used by roosting bats. If bats or evidence of a roost were present, decisions on mitigation/ compensation measures could be taken at that time. Should the day-time inspection conclude that further detailed (emergence) surveys are required these can only be conducted between the months of May and September.
- 4.2.17 Most of the habitat within the survey site is considered to be of low potential value for foraging/ commuting bats. Features of greater value are likely to be limited to the hedgerows/ tree-lines at *Target Notes 4 and 10* which are recommended for retention. The loss of a small area of low value potential habitat is unlikely to result in a significant impact on the foraging resource available for the local bat populations. As such no particular mitigation/ compensation measures are proposed.
- 4.2.18 Once established the gardens associated with the proposed residential properties and the soft landscaping may provide opportunities for foraging/ commuting bats and would offset any loss of habitat to some extent.
- 4.2.19 No information has been provided on lighting with regards the proposed development. The potential impact of lighting (both during construction and operation) on bats that may use the survey site should be considered. Lighting at the proposed development site should follow

guidance provided by The Bat Conservation Trust (2014) and Institution of Lighting Engineers (2011). In particular the hedgerows at *Target Notes 4* and *10* should be kept as dark as possible. Lighting that reduces vertical and horizontal light spillage should be used. Measures to avoid/ minimise light spillage should include:

- 'Warm white' LED lamps should be used;
- All luminaires used will be fully directional (e.g. LED using variable aim luminaires) and should point straight down to where the light is required;
- The number of poles/ lamps installed should be kept to a minimum;
- The brightness of all lamps should be as low as legally possible. Low wattage lamps (<70W) should be used; and
- The lighting should only be turned on when the area is in use wherever possible.

Great Crested Newts

- 4.2.20 There is no aquatic habitat (suitable for Great Crested Newts) within the survey site. The terrestrial habitat throughout most of the survey site is of low potential value for Great Crested Newts with some features of high value. The potential presence of Great Crested Newts in terrestrial habitat is governed more by the proximity of a suitable breeding pond than by the quality of the terrestrial habitat.
- 4.2.21 The closest waterbody to the survey site is approximately 215 m away in a straight line. This route would require crossing of at least one arable field, habitat that may be considered 'hostile' to Great Crested Newts. As there are no direct habitat linkages between this waterbody and the survey site, the habitat within the survey site is generally of low quality and there are no further waterbodies to the west of the survey site (to which animals might disperse) the risk that Great Crested Newts might be found on the site is considered to be negligible. As such no further survey is considered necessary and no mitigation measures are proposed.

Birds

- 4.2.22 The proposed development would result in the loss of some small areas of scrub, young trees and two built structures that may be used by a small number of nesting birds. Nesting birds that could use this habitat may include some species of conservation interest. It is assumed that the hedgerows at *Target Notes 4* and *10* including all of the large/ mature trees within them would be retained. Due to the small size and limited value of the habitat to be lost no particular mitigation measures are proposed. The planting of gaps in the existing hedges along with any soft landscaping are likely to offset any potential loss of habitat.
- 4.2.23 However the proposal does present an opportunity to enhance the site for a species of conservation interest; the House Sparrow. Five nest-boxes specifically designed for this species (e.g. Schwegler Brick Box No.24⁶ or EcoSurv Sparrow⁷ nest-boxes) should be built into some of the new houses on the north-east and or east elevations. The Brick-box No.24/ EcoSurv box should be installed within the wall. Full instructions for their installation are provided in Gunnell, Murphy & Williams (2013). These nest-boxes should ideally be installed at soffit/ eaves level (more than 2 m above ground level) and at least 1 m apart.
- 4.2.24 No further survey for birds is deemed necessary (other than a pre-work check should work be undertaken during the nesting season as detailed below).

⁶ <http://www.nhbs.com/title/173236/schwegler-brick-nest-boxes>

⁷ <http://www.ecosurv.co.uk/product/bird-box-range>

- 4.2.25 The destruction of any bird nests that are in use is illegal. The simplest option to avoid issues arising from the presence of nesting birds is to schedule work that affects nesting habitat (e.g. removal of vegetation and clearance of trees/ shrubs, demolition of buildings) outside the nesting period (March to August inclusive). Such work should seek to ensure that, as far as is possible, all areas within the footprint of the proposed development remain unattractive to breeding birds for the duration of the work. Should any occupied nests be found during the construction phase, a buffer zone (determined on the basis of the species concerned and the location of the nest in the context of the surrounding vegetation, but no less than 5 m) would be retained until it can be ascertained that the chicks have left the nest. The buffer zone will be appropriately fenced and signed.
- 4.2.26 If it is not possible to clear vegetation/ fell/ prune trees/ demolish buildings outside the nesting season all such areas should be checked by a suitably qualified ecologist prior to commencement of works. If any active nests are found at this time a buffer zone as detailed above would be provided.

5 TARGET NOTES

Target Note 1. Various piles of soil with some rubble mixed in.

Target Note 2. Most of the site is characterised by disturbed bare ground (due to ongoing clearance/building work) and ephemeral vegetation with some small patches of species-poor semi-improved neutral grassland. There are some small areas of concrete hard-standing associated with the previous use of the site. There is scattered, mainly *Rubus fruticosus* agg. (Bramble), scrub around the edges. Towards the northeast margin there are a small number of scattered sapling trees. Towards the southwest side of the site there are various piles of building materials including bricks, sand, stone-blocks, etc with some rubble and piles of soil.

The semi-improved neutral grassland is fairly species-poor and is likely to have been subject to disturbance in the relatively recent past. It is dominated by *Agrostis capillaris* (Common Bent) with locally frequent *Agrostis stolonifera* (Creeping Bent), *Juncus inflexus* (Hard-rush), occasional *Ranunculus repens* (Creeping Buttercup) and *Trifolium repens* (White Clover).

Target Note 2a. Towards the northwest boundary there is a small patch of more established species-poor semi-improved neutral grassland dominated by *Dactylis glomerata* (Cock's-foot) and *Arrhenatherum elatius* (False Oat-grass) with scattered young *Salix* sp. (Willow) and *Rubus fruticosus* agg. (Bramble). It also includes small stands of tall herbs such as *Cirsium vulgare* (Spear Thistle), *Chamerion angustifolium* (Rosebay Willowherb) and *Heracleum sphondylium* (Hogweed).

Target Note 2b. Scattered young *Quercus robur* (Pedunculate Oak), *Acer pseudoplatanus* (Sycamore) and *Fraxinus excelsior* (Ash) saplings with some multi-stemmed semi-mature *Salix caprea* (Goat Willow). The largest of the saplings is a multi-stemmed *Acer pseudoplatanus* (Sycamore); the largest stem has an approximate diameter at breast height (dbh) of 0.2 m. The largest stem of the *Salix caprea* (Goat Willow) also has an approximate dbh of 0.2 m. None of these trees/shrubs contains any features of potential value for bats. There are also a few scattered *Crataegus monogyna* (Hawthorn) shrubs.

Target Note 3. A ditch that has recently been enclosed within a 12 inch twin-wall pipe so there is no open water. It is located along the northeast boundary of the survey site. It appears to receive a small but perceptible flow from field drains, etc approximately 7 m upstream of the survey site boundary. It flows approximately from southeast to northwest. The pipe has partly been covered over with soil though approximately two-thirds remain exposed in the base of the excavated ditch.

Target Note 3a. A similar ditch to that described at *Target Note 3* that has also been diverted through a pipe. This ditch is located immediately outside the survey site.

Target Note 4. A hedge managed to approximately 1.7 m high and 1 m wide. It is dominated by *Crataegus monogyna* (Hawthorn) with occasional *Prunus spinosa* (Blackthorn) and lesser amounts of *Rosa canina* agg. (Dog-rose) and *Cornus sanguinea* (Dogwood). It includes three *Quercus robur* (Pedunculate Oak) trees and is located on the ditch bank. The base is dominated by *Hedera helix* (Ivy) with occasional *Galium aparine* (Cleavers) and *Rubus fruticosus* agg. (Bramble).

Target Note 5a. A mature *Quercus robur* (Pedunculate Oak) tree with an approximate dbh of 1.2 m. It is located within the hedge described at *Target Note 4*. There is a small amount of *Hedera helix* (Ivy) on the trunk. There are no obvious features of potential value for roosting bats. Recent damage to some of the lower limbs has created some small but shallow crevices.

Target Note 5b. A mature *Quercus robur* (Pedunculate Oak) tree with an approximate dbh of 1 m. It contains some small cracks in minor limbs. It is of low potential value for roosting bats at most.

Target Note 6. A number of low piles of soil.

Target Note 7. A single-storey corrugated metal sheet building constructed with a steel frame and contains no windows. It is located on a concrete pad. It is used for storage of various building

materials; access to all areas was not possible. It has a pitched roof of corrugated metal as are all of the walls. There is no insulation and no roof space. There are possible gaps above the door and between the roof and wall tops that bats could use to access the inside of the building.

Outside there is a small area of hard-standing where there are various piles of building materials including floor tiles, bricks, stones, slabs, plywood, old timbers, *etc.*

Target Note 8. A mature *Quercus robur* (Pedunculate Oak) tree with an approximate dbh of 1 m. It is located in the hedge described at *Target Note 10*. There is a small amount of *Hedera helix* (Ivy) on the trunk. It contains some dead wood in minor limbs and small splits in the bark. It is of low potential value for roosting bats at most.

Target Note 9. A small number of young trees contained within a grown-out hedge. These trees are mostly *Fraxinus excelsior* (Ash) with *Quercus robur* (Pedunculate Oak) and one semi-mature *Malus* sp. (Apple). The largest stems of these trees have an approximate dbh of 0.2-0.3 m. None contained any features of potential value for roosting bats.

Target Note 9a. This *Fraxinus excelsior* (Ash) is a large, old, previously coppiced and therefore multi-stemmed specimen. The bole is approximately 1.5 m wide.

Target Note 10. A hedge that is discontinuous/ gappy and appears to be partly managed on the sides only. It is approximately 1-1.5 m wide and the height varies. It contains abundant *Crataegus monogyna* (Hawthorn) with frequent *Fraxinus excelsior* (Ash) and small amounts of *Prunus spinosa* (Blackthorn), *Rosa arvensis* (Field-rose) and *Malus* sp. (Apple). A small amount of the woody climber *Clematis vitalba* (Traveller's-joy) is present. The base is dominated by *Hedera helix* (Ivy) with frequent *Galium aparine* (Cleavers) and *Rubus fruticosus* agg. (Bramble).

Target Note 11. Two joined dilapidated old portacabins and a single-storey brick structure. The central brick structure has rendered walls. It has a flat roof that is covered with bitumen felt though the roof has rotted and partly collapsed. The flat roofs in the portacabins are in a similar condition. Most of the windows are open or have been smashed. One of the portacabins contained a single old Swallow (*Hirundo rustica*) nest. These structures are of no potential value for roosting bats.

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7 DATA*Table 1 – Vascular plant species recorded within the survey site*

Plant Species	<i>Geranium molle</i> (Dove's-foot Crane's-bill)
<i>Acer pseudoplatanus</i> (Sycamore)	<i>Geranium robertianum</i> (Herb-robert)
<i>Betula pubescens</i> (Downy Birch)	<i>Geum urbanum</i> (Wood Avens)
<i>Cornus sanguinea</i> (Dogwood)	<i>Hedera helix</i> (Ivy)
<i>Crataegus monogyna</i> (Hawthorn)	<i>Helminthotheca echinoides</i> (Bristly Oxtongue)
<i>Fraxinus excelsior</i> (Ash)	<i>Heracleum sphondylium</i> (Hogweed)
<i>Malus</i> sp. (Apple)	<i>Holcus lanatus</i> (Yorkshire-fog)
<i>Prunus spinosa</i> (Blackthorn)	<i>Hypericum perforatum</i> (Perforate St. John's-wort)
<i>Rosa arvensis</i> (Field-rose)	<i>Hypochaeris radicata</i> (Cat's-ear)
<i>Rosa canina</i> agg. (Dog-rose)	<i>Juncus effusus</i> (Soft-rush)
<i>Quercus robur</i> (Pedunculate Oak)	<i>Juncus inflexus</i> (Hard Rush)
<i>Salix caprea</i> (Goat Willow)	<i>Lamium purpureum</i> (Red Dead-nettle)
<i>Salix cinerea</i> (Grey Willow)	<i>Lapsana communis</i> (Nipplewort)
<i>Sambucus nigra</i> (Elder)	<i>Lolium perenne</i> (Perennial Rye-grass)
	<i>Medicago lupulina</i> (Black Medick)
<i>Agrostis capillaris</i> (Common Bent)	<i>Mercurialis perennis</i> (Dog's Mercury)
<i>Agrostis stolonifera</i> (Creeping Bent)	<i>Plantago lanceolata</i> (Ribwort Plantain)
<i>Alliaria petiolata</i> (Garlic Mustard)	<i>Plantago major</i> (Greater Plantain)
<i>Anagallis arvensis</i> (Scarlet Pimpernel)	<i>Potentilla reptans</i> (Creeping Cinquefoil)
<i>Anthriscus sylvestris</i> (Cow Parsley)	<i>Prunella vulgaris</i> (Selfheal)
<i>Arrhenatherum elatius</i> (False Oat-grass)	<i>Ranunculus repens</i> (Creeping Buttercup)
<i>Artemisia vulgaris</i> (Mugwort)	<i>Ranunculus sceleratus</i> (Celery-leaved Buttercup)
<i>Bellis perennis</i> (Daisy)	<i>Rubus fruticosus</i> agg. (Bramble)
<i>Cardamine hirsuta</i> (Hairy Bitter-cress)	<i>Rumex crispus</i> (Curled Dock)
<i>Centaurea nigra</i> (Common Knapweed)	<i>Rumex obtusifolius</i> (Broad-leaved Dock)
<i>Cerastium fontanum</i> (Common Mouse-ear)	<i>Senecio jacobaea</i> (Common Ragwort)
<i>Chamerion angustifolium</i> (Rosebay Willow-herb)	<i>Senecio vulgaris</i> (Groundsel)
<i>Cirsium arvense</i> (Creeping Thistle)	<i>Silene dioica</i> (Red Campion)
<i>Cirsium vulgare</i> (Spear Thistle)	<i>Sisymbrium officinale</i> (Hedge Mustard)
<i>Clematis vitalba</i> (Traveller's-joy)	<i>Sonchus oleraceus</i> (Smooth Sow-thistle)
<i>Coronopus squamatus</i> (Swine-cress)	<i>Stellaria media</i> (Common Chickweed)
<i>Cynosurus cristatus</i> (Crested Dog's-tail)	<i>Tamus communis</i> (Black Bryony)
<i>Dactylis glomerata</i> (Cock's-foot)	<i>Taraxacum officinale</i> (Common Dandelion)
<i>Digitalis purpurea</i> (Foxglove)	<i>Trifolium repens</i> (White Clover)
<i>Dryopteris filix-mas</i> (Male-fern)	<i>Tripleurospermum inodorum</i> (Scentless Mayweed)

<i>Elytrigia repens</i> (Common Couch)	<i>Tussilago farfara</i> (Colt's-foot)
<i>Epilobium hirsutum</i> (Great Willowherb)	<i>Urtica dioica</i> (Common Nettle)
<i>Epilobium montanum</i> (Broad-leaved Willowherb)	<i>Veronica persica</i> (Common Field-speedwell)
<i>Fumaria officinalis</i> (Common Fumitory)	<i>Vicia sativa</i> (Common Vetch)
<i>Galium aparine</i> (Cleavers)	

8 APPENDIX 1 - SPECIES-SPECIFIC LEGISLATION

8.1 Introduction

- 8.1.1 The species-specific legislation below is presented here due either to the actual or suspected/ possible presence of each species on the site or within the zone of influence and is therefore considered to be relevant for this study.
- 8.1.2 This sub-section provides a brief summary of key relevant species legislation. It should not be considered a comprehensive review and is not meant to be so. It is provided here for information only and is not intended to replace specialised legal advice. It does not replace the text of the legislation, but summarises the salient points.

8.2 Badger

- 8.2.1 The Badger is protected in Britain under the *Protection of Badgers Act 1992* and *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended). The legislation affords protection to Badger and Badger setts, and makes it a criminal offence to:
- wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or attempt to do so;
 - interfere with a sett by damaging or destroying it;
 - to obstruct access to, or any entrance of, a Badger sett; or
 - to disturb a Badger when it is occupying a sett.

8.3 Bats

- 8.3.1 All species of British bat are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. They are also listed as European Protected Species on *Schedule 2* of *The Conservation of Habitats and Species Regulations 2010* (as amended) which gives them full protection under *Regulation 40(1)*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the *CRoW Act 2000*).
- 8.3.2 Under the above legislation it is an offence to intentionally or recklessly:
- kill, injure or take an individual of such a species;
 - possess any part of such species either alive or dead;
 - damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
 - disturb such a species whilst using any place of shelter or protection; or
 - sell or attempt to sell any such species.
- 8.3.3 Several species of bat are included on *Section 7* of the *Environment Act 2016*.
- 8.3.4 All species of British bat are also protected under *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended). This protection relates specifically to trapping and direct pursuit of the species.

8.4 Great Crested Newt

- 8.4.1 Great Crested Newts are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. The 1981 Act was amended by the *CRoW Act 2000* which further extends the protection. It is also listed on *Annexes II* and *IV* of the European Union Directive on Natural Habitats and Wild Fauna and Flora (*Council*

Directive 92/43/EEC), which is implemented in the UK by *The Conservation of Habitats and Species Regulations 2010* (as amended). It is included on *Schedule 2* of the *Habitats Regulations* which gives it full protection under *Regulation 40(1)*. The Great Crested Newt is therefore a so-called European Protected Species. The legislation applies to all life stages of the Great Crested Newt, including eggs, larvae, juveniles and adults.

8.4.2 Under the above legislation it is an offence to intentionally or recklessly:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

8.4.3 The Great Crested Newt is included on *Section 7* of the *Environment Act 2016*.

8.5 Birds

8.5.1 All species of bird are protected under *Section 1* of the *Wildlife and Countryside Act 1981* (as amended). The protection was extended by the *CRoW Act 2000*.

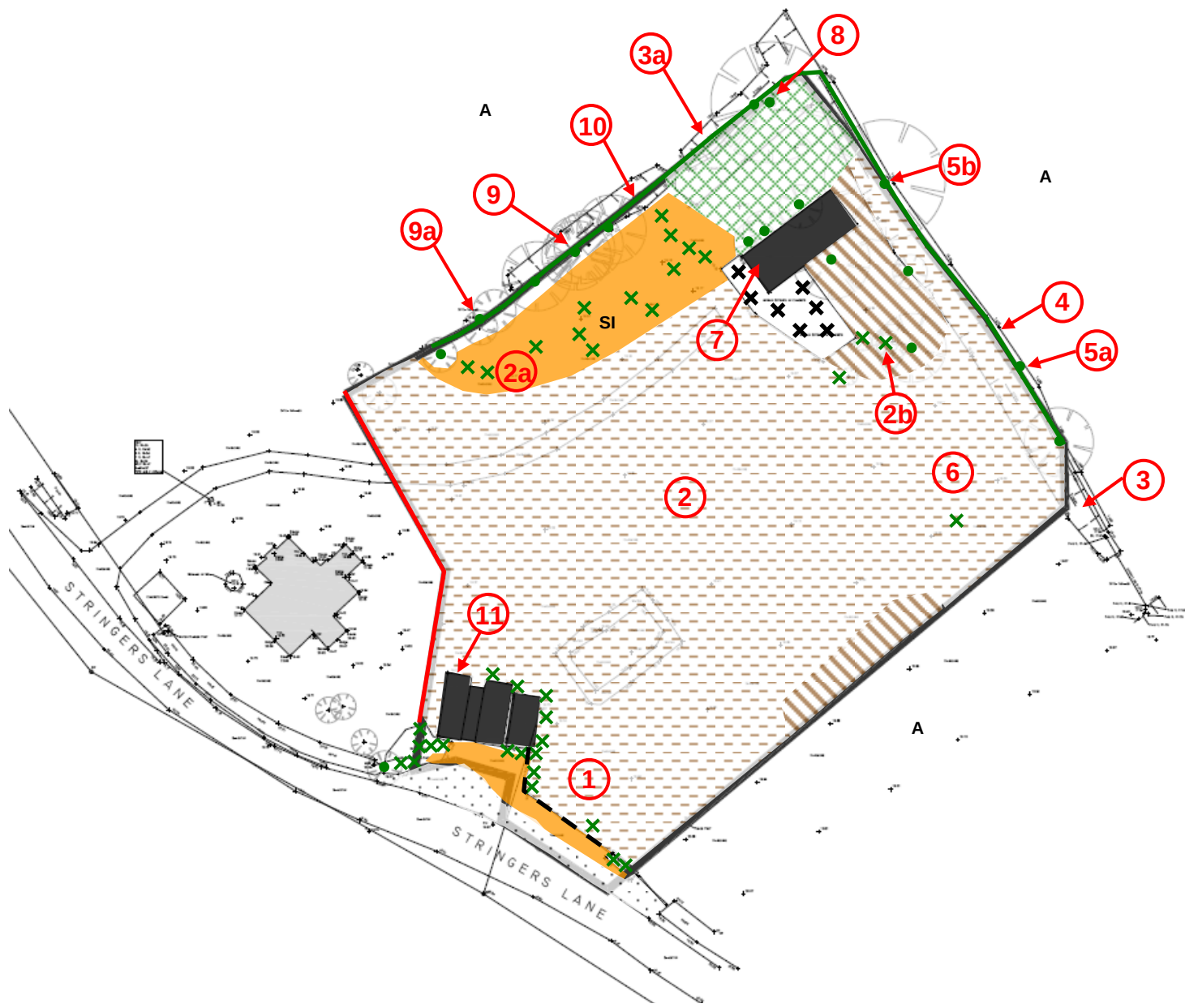
8.5.2 The legislation makes it an offence to intentionally or recklessly:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

8.5.3 Certain species of bird are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981* (as amended) and receive protection under *Sections 1(4)* and *1(5)* of the Act. The legislation confers special penalties where the above mentioned offences are committed for any such bird and also make it an offence to intentionally or recklessly:

- disturb any such bird, whilst building its nest or it is in or near a nest containing dependant young; or
- disturb the dependant young of such a bird.

8.5.4 *Section 7* of the *Environment Act 2016* includes several birds.



↑
N
Not to scale.

Base mapping provided by a D2 Architects plan entitled 'Honkley Farm, Location Plan', drawing no. 5371_100_A.

marches ecology

**C315 Proposed Residential Development
on land at Lower Honkley Farm,
Stringer's Lane, Rossett, Wrexham –
Extended Phase 1 Habitat Survey**

**Figure 1 – Extended Phase 1 Habitat
Survey**

Drawn by: ME
Checked by: TK
Date: 17.01.17

Key

- Continuous scrub
- Individual broad-leaved tree
- Scattered scrub
- Hedgerow
- Semi-improved neutral grassland
- Mosaic of semi-improved neutral grassland/ ephemeral vegetation and bare ground

- Tall-ruderal vegetation
- Ephemeral vegetation
- Arable grassland
- Building
- Hard-standing
- Wall
- Fence
- Target Note