



Ecological Appraisal Survey Report

Land at Lamb Roe – Barrow, Clitheroe

January 2013

Control sheet

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1. Introduction

- 1.1 Bowland Ecology Ltd was commissioned by Janet Dixon Town Planners Ltd to undertake an extended Phase 1 habitat survey and desk study of a site at Lamb Roe, Barrow, Clitheroe (NGR: SD 73537 437859). Planning permission is being sought for the development of the site.
- 1.2 The site currently comprises an undeveloped area of land adjacent to Clitheroe Rd. The habitats present include semi-improved grasslands, tall ruderal vegetation, hedgerows, scrub, trees and running water. The site is bordered by hard standing (roads), poor semi improved grassland, residential properties, and broadleaved woodland.
- 1.3 The purpose of the survey was to: 1) identify and map all habitats occurring within the survey area, 2) identify the presence of (or potential for) wildlife interests with particular reference to the need for further surveys and legal requirements, and 3) provide an ecological assessment and recommendations pertaining to the proposed development.
- 1.4 The ecological survey methodology followed that of an extended Phase 1 habitat survey. It also included a desk study to search for designated wildlife sites and protected species records. This report includes a description of survey methods and results; provides recommendations for further survey; and outlines recommendations to provide protection and enhancements for biodiversity and protected species. This report should be read in conjunction with the Phase 1 plan (Appendix B) and the target notes (1-8) as listed in Appendix A.

2. Methodology

- 2.1 The desk study, survey and appraisal follow the Guidelines for Preliminary Ecological Appraisal (IEEM, 2012) and the Guidelines for Baseline Ecological Assessment (IEA, 1995)

Desk Study

- 2.2 The aim of the desk study was to identify the presence of statutory wildlife sites, non-statutory sites and any legally protected and notable species records for the area.
- 2.3 Online resources were searched for records of protected species. The Multi-Agency Geographic Information for the Countryside (MAGIC) website (www.defra.magic.gov.uk), and Natural England's Nature on the Map (www.natureonthemap.org.uk) were reviewed for information on locally, nationally and internationally designated sites of nature conservation importance (statutory sites only) within 1 km of the site boundary. The UK and Local (Lancashire) Biodiversity Action Plans were also consulted.
- 2.4 Ordnance Survey maps and aerial photos were used to identify the presence of water bodies and notable habitats such as hedgerows and woodland within 500 m, in order to establish if the land could be used as aquatic or terrestrial habitat for great crested newts. This species can use suitable terrestrial habitat up to 500 m from a breeding pond. Research suggests that newts are likely to travel no more than 250 m from ponds where suitable habitats for foraging and hibernation exist within that distance around the pond. A 250 m search radius was considered appropriate in this instance due to the small scale and localised nature of the effects of the scheme.
- 2.5 Lancashire Environment Record Network (LeRN) were contacted in September 2012 for information relating to non-statutory designated sites of nature conservation importance within 1 km of the site boundary and legally protected and notable species records within 1.5 km of the site boundary.
- 2.6 Aerial photographs were reviewed online at <http://maps.google.co.uk/maps>, to help identify any continuous habitat and any other notable habitats within the surrounding area.

Walkover Survey

- 2.7 An ecological walkover survey was undertaken on 11th January 2013 broadly following the 'extended Phase 1' methodology (JNCC, 1993 (as amended) and IEA, 1995). The survey included all land within the site boundary plus a buffer zone of 50 m. All features of ecological significance were target noted and the location of target notes are shown in Appendix B. A colour coded map of the habitats on site is produced, with corresponding target notes of ecologically interesting features (Appendix A).
- 2.8 The ecological survey was carried out by Jack Kellett BSc (Hons). The weather was cold and clear.
- 2.9 This survey method records information on the habitats together with any evidence of and potential for legally protected and notable fauna, in particular:

- potential roosting sites for bats within trees and structures (identification of suitable cracks and crevices – survey undertaken from ground only and around exterior of buildings only);
 - assessing the potential of water bodies and land within the survey area to support great crested newts (no access was gained to land outside of the site boundary to assess water bodies within 250 m);
 - searching for signs of badger activity including setts, tracks, snuffle holes and latrines within the site boundary and within 30 m of that, where access was available (no access was gained to land outside of the site boundary to assess land within 30 m.
 - assessing the suitability of habitats for other notable and protected species such as nesting birds (including any nests active or disused), reptiles, water vole, otter, white-clawed crayfish, dormice and invertebrates. No suitable habitat was present for reptiles, water vole, otter, white clawed crayfish or dormice.
 - checking for the most common invasive plant species subject to strict legal control (Japanese knotweed, giant knotweed, hybrid knotweed, giant hogweed, rhododendron and Himalayan balsam) within the survey area.
- 2.10 The potential for a tree, structure or building to support bats was assessed according to the categories given in Tables 1 & 2 below.
- Survey Limitations
- 2.11 Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. Therefore the survey of this site has not produced a complete list of plants and animals and the absence of evidence of any particular species should not be taken as conclusive proof that the species is not present or that it will not be present in the future
- 2.12 The water body search was undertaken by using Ordnance Survey plans and aerial photographs only. These sources may not show all ponds and or water bodies within 250 m of the site boundary and therefore some water bodies may not have been identified.
- 2.13 The list of invasive plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) is extensive and these plants are found in a range of different habitats, including aquatic habitats. The extended Phase 1 survey checked, in particular, for the presence of Japanese knotweed, giant knotweed, hybrid knotweed, giant hogweed, rhododendron and Himalayan balsam. There may be other invasive plant species present on the site which were not recorded, but it is considered that this survey is sufficient to identify any significant constraints posed by invasive plants. It should be noted that January is not an optimum month for identifying these species (as many die back in winter).
- 2.14 The timing of the survey was outside the optimum period for completing such a survey, however the conditions were suitable and the whole of the site was accessible. As a result, a valid assessment of the habitats present and their potential to support legally protected species was undertaken.

- 2.15 The results of this ecological survey have allowed an evaluation of the likely use of the site by protected and controlled species, the need for any additional survey work and the requirement for any mitigation works.

Table 1: Bat Potential Category Descriptions for Trees

Category (Potential to support roosting bats)	Description (Categories for Trees)
Negligible potential	Tree contains no suitable features for roosting bats. These can include young trees without ivy and without loose bark and obvious cracks / fissures. Usually saplings, semi-mature specimens with a small girth or mature trees which do not tend to form fissures as readily such as beech.
Low potential	Tree contains limited features suitable for roosting bats. Usually young (sapling or semi-mature) trees with some dense ivy or loose bark but no obvious deep cracks or fissures. No evidence of bats found (e.g. droppings / staining).
Moderate potential	Tree contains some features suitable for roosting bats. Trees with some cracks or fissures (of depth over 50 mm) and/or large amounts of ivy / loose bark. Usually semi-mature or mature specimens. Trees tend not to have large splits, hollow trunks or woodpecker holes. No evidence of bats found.
High potential	Tree contains features that are highly desirable for roosting bats. Trees with woodpecker holes / large cracks and/or crevices. Often with a hollow trunk. May support very dense ivy. No evidence of bats found.
Confirmed roost	Bats discovered roosting within the tree, or recorded emerging from / entering a tree at dawn and / or dusk. Trees found to contain conclusive evidence of occupation by bats, such as bat droppings. A confirmed roost record (as supplied by an established source such as the local bat group) would also fall into this category.

Table 2: Bat Potential Category Descriptions for Buildings

Category (Potential to support roosting bats)	Description (Categories for Buildings)
Negligible potential	Buildings with no features capable of supporting roosting bats. Often these buildings are of a 'sound' well-sealed nature, or have a single skin and no roof void. They tend to have high interior light-levels, and little or no insulation. Buildings without any roofs may also fall into this category.
Low potential	Buildings with limited features for roosting bats (e.g. shallow crevices where mortar is missing between building blocks/bricks). They may have open locations which may be subject to large temperature fluctuations and bat-access points may be constrained. No evidence of bats found (e.g. droppings / staining). Buildings may be surrounded by poor or sub-optimal bat foraging habitat. No evidence of bats found.
Moderate potential	Buildings with some features suitable for roosting bats. Buildings usually of brick or stone construction with a small number of features of potential value to roosting bats e.g. loose roof / ridge tiles, gaps in brickwork, gaps under fascia boards, and/or warm sealed roof-spaces with under-felt. These buildings may be used as occasional or transient roosts in the summer, but are unsuitable for large colonies. No evidence of bats found.
High potential	Buildings with a large number of features or extensive areas of obvious potential for roosting bats. Generally they have sheltered locations, with a stable temperature regime and suitable bat-access points. Could be suitable for a maternity roost. No evidence of bats found.
Confirmed roost	Bats discovered roosting within the building, or recorded emerging / entering the building at dusk / dawn. Building found to contain conclusive evidence of occupation by bats, such as bat droppings. A confirmed record (as supplied by an established source such as the local bat group) would also apply to this category.

3. Results

Statutory and Non-Statutory Wildlife Sites

- 3.1 There are three Biological Heritage Sites (BHS) within 1 km of the proposed area. The closest, Barrow Brook Field, is just over 450 m from the planning application boundary and is 1.3 ha in size. The BHS is designated for its damp, species rich, semi natural MG4 grassland. A second BHS, Hard Hill Common is located on the other side of the railway line approximately 600 m from the planning application site. The common is 27 ha and is designated for its swamp and fen habitats including purple moor grass/rush pasture and flushes. The third BHS is the Calderstones Hospital Woodland/Railway Line. This site is 4.2 ha in size and is designated for its artificial habitats. It lies approximately 750 m from the planning application area.
- 3.2 No other statutory or non-statutory wildlife sites are present on or within 1 km of the site.
- 3.3 Since all of these protected sites are designated for their habitats rather than faunal species and are all over 450 m from the planning application site it is not considered that the proposed development will have any impact upon them. They are therefore not considered further within this report.

Protected Species and Habitats Records

- 3.4 The LeRN provided numerous records within 1 km of the site. Of particular relevance are the following Lancashire BAP species which have been recorded within 1.5 km of the site and therefore may be present if suitable habitats are found on site;
- Mammals; water vole, brown hare and common pipistrelle bat
 - Amphibians; common toad and great crested newt
 - Birds; curlew, reed bunting, skylark, lapwing, house sparrow, common sandpiper, meadow pipit, swift, grey heron, linnet, house martin, kestrel, oyster catcher, swallow, willow warbler, dunnoek, sand martin, starling and song thrush
 - Invertebrates; *Helophorus minutus* beetle, *Ilybius guttiger* beetle, small heath butterfly, lunar hornet moth
 - Fish; eel, bullhead
 - Flowering plants; barberry, black poplar, small pondweed, mossy saxifrage, horsetail
 - Moss; slender stubble moss, dotted thyme moss
- 3.5 The locations of Lancashire BAP records are shown in Appendix C.
- 3.6 Online resources found a number of BAP species records for the grid square SD81 and therefore these species could potentially be present if suitable habitats are found on site;
- Amphibian; great crested newt and common toad.
 - Birds; common cuckoo, common grasshopper warbler, Eurasian curlew, Eurasian tree sparrow, grey partridge, house sparrow, lesser redpoll, northern lapwing, reed bunting, ring ouzel, spotted flycatcher, tree pipit, yellowhammer and wood warbler.
 - Flowering plants; cornflower and lesser butterfly orchid.

- Invertebrates; wall, small heath and white letter hairstreak butterflies, Autumnal rustic, broom, buff ermine, cinnabar, dark brocade, dusky brocade, ear moth, flounced chestnut, ghost, grey dagger, knot grass, mouse, small phoenix, small square spot and white ermine moths
- Terrestrial mammals; otter
- Fish; Atlantic salmon, brown sea trout, European eel and sea lamprey
- Lichen; river jelly lichen and *Toninia sedifolia*

3.7 The Multi Agency Geographical Information Centre (www.defra.magic.gov.uk), found three areas of UKBAP habitats, within 1 km of the proposed development area. These are purple moor grass and rush pasture located within the Hard Hill Common BHS and lowland calcareous grassland and lowland meadow located within the Barrow Brook Field BHS. All of these habitats were more than 450 m from the site and it is not considered that the proposed development will have any impact upon them. They are therefore not considered further within this report.

Walkover Survey

3.8 Target notes summarising key interest features for wildlife recorded during the Extended Phase 1 survey are included as Appendix A. The Phase 1 habitat plan for the study site is presented as Appendix B which includes dominant species codes for the habitats present and the locations of the target notes.

3.9 The proposed site is situated between the villages of Whalley and Barrow in Lancashire. The site itself comprises semi-improved grassland, species poor hedgerows, trees, scrub, tall ruderal vegetation and running water. The surrounding landscape is generally one of rural villages, agricultural fields and hedgerows. The site is immediately surrounded by a small stand of woodland, fields, hard standing (roads), residential properties, and commercial properties.

Habitats

Semi-improved grassland

3.10 The site is mostly made up of a semi improved grassland field (TN1). Species present include cock's foot (*Dactylis glomerata*), Yorkshire fog (*Holcus lanatus*), red fescue (*Festuca rubra*), soft rush (*Juncus effusus*), creeping buttercup (*Ranunculus repens*), lesser celandine (*Ranunculus ficaria*), meadow buttercup (*Ranunculus acris*), dandelion (*Taraxacum officinale*), black knapweed (*Centaurea nigra*), common sorrel (*Rumex acetosa*), broad-leaved dock (*Rumex obtusifolius*).

Running water

3.11 A small stream runs along the southern boundary and enters the site for approximately 5 m to the southern corner of the site (TN8). The stream then flows out of the site again towards the south following the fence line. The stream is approximately 1 m wide and 20 cm deep with muddy banks and a gravelly substrate. It is likely to dry up occasionally.

Species poor hedgerow with tall ruderal vegetation

3.12 A species poor hedgerow is present in the north west corner of the western boundary (TN2). Dominant species include hawthorn (*Crataegus monogyna*) and hazel (*Corylus avellana*). Tall ruderals were noted along the base of the hedge including common hogweed (*Heracleum sphondylium*), common nettle (*Urtica dioica*), greater willowherb (*Epilobium hirsutum*), umbellifer sp and

false oat grass (*Arrhenatherum elatius*). Bramble (*Rubus fruticosus*) and ivy (*Hedera helix*) were also noted within the hedge. The ground flora was dominated by dog's mercury (*Mercurialis perennis*).

- 3.13 A species poor hedgerow (TN3) creates the boundary to the north west of the site. This is a well maintained hedge comprising of introduced garden sp. including laurel and conifer sp.
- 3.14 A species poor hedgerow (TN4) makes up the northern boundary of the site, becoming defunct towards the eastern end. Hawthorn is the dominant species with some elder (*Sambucus nigra*) also present. There is one semi mature oak tree (*Quercus* sp.) within the hedge. A row of ten trees lies behind the hedge just outside of the site boundary, five oak and five poplar sp. (*Populus* sp.). Some of the branches over hang the site.
- 3.15 The eastern boundary of the site (TN7) consists of a defunct species poor hedgerow of hawthorn and some elder with a fence line behind. Eight mature poplar sp. were noted in a row running parallel with the hedge.

Scrub

- 3.16 There is an area of dense scrub (TN5) in the north east corner of the site. This comprises mainly of blackthorn (*Prunus spinosa*) with some hawthorn.

Other habitats

- 3.17 Bare ground is present along the access road. Fence lines are located along the northern, eastern and western boundaries of the site. There is a small section of stone wall to the west of the site; whilst bare ground and stone walls have the potential to be colonised by pioneer plants, they are of little intrinsic ecological value. No buildings are present on the site.

Faunal species

- 3.18 A range of habitats are present within the site boundary including; grassland, hedgerows, tall ruderal vegetation, trees, scrub and running water, which can provide a number of opportunities for fauna to inhabit the site.

Small and medium mammals

- 3.19 The grassland and hedgerows provide opportunities for small mammals such as mice, field voles and shrews. No badger setts or field signs were observed to be present at the time of survey. The stream is not considered to be suitable for water vole due to its shallow depth and muddy banks.

Birds

- 3.20 There is potential for common ground nesting and nesting birds to be present throughout the site, particularly within the hedgerows, scrub and trees onsite (TN's 1, 2, 3, 4, 5, 6 and 7). These habitats are also likely to provide foraging habitat and connectivity for birds within nearby woodland habitats.

Bats

- 3.21 There are two mature trees an ash and an alder located towards the eastern edge of the site (TN6), which have features which could provide roosting habitat for bats including rot holes and broken limbs. These trees are considered to have medium potential as roosts. There are also a number of hedgerows and trees on site and just outside the boundary and a small area of semi mature broadleaved woodland adjacent to the southern boundary. Whilst this woodland, the grassland habitats and the linear features, including the hedgerows around the site, are likely to provide foraging opportunities for

a range of bat species there is no shortage of similar habitat in the surrounding landscape.

4 Evaluation and Identification of Potential Effects

4.1 Nature conservation evaluation of ecological features and a preliminary assessment of the potential impacts of the proposed development have been carried out generally following the guidance set out by IEEM (2006):

- International importance (Special Areas of Conservation, Special Protection Areas, Ramsar sites);
- UK importance (ie within England, Scotland, Wales and Northern Ireland);
- National importance (Sites of Special Scientific Interest);
- Regional/county importance (Local Nature Reserves, Sites of Importance for Nature Conservation, ancient woodlands);
- Local (parish) importance (significant ecological features such as old hedges, woodlands, ponds);
- The site and immediate environs e.g. habitat mosaic of grassland and scrub;
- Negligible importance would usually be applied to areas of built development, active mineral extraction, or intensively farmed agricultural land

4.2 Further detailed ecological surveys may be required in order to fully assess the nature conservation value of features and the impacts of the development upon these features.

4.3 An assessment of effects on ecological features has been made using the available design and survey information and the professional judgement of the ecologist. This includes a consideration of the relevant legislation and planning guidance. If there are changes to the proposals, such as a change to the proposed development design or to the construction method and programme, the assessment would need to be reviewed.

Scheme Proposal

4.4 The scheme involves the development of the site for residential accommodation. The development may lead to the loss or disturbance of semi-improved grassland, running water, scrub and species poor hedgerows.

Habitats

4.5 The proposed development may have the greatest impact upon semi-improved grassland within the boundary of the proposed development and result in the loss of the majority of this habitat. It may also result in the loss of species-poor hedgerow, tall ruderal vegetation, and scrub. All of these habitats are commonly occurring and also of limited ecological value. Due to the low value of these habitats, it is considered that the development is not likely to have any significant impacts in respect of habitat types.

Birds

4.6 Where hedgerows, trees, scrub and other potential bird nesting habitat, are removed as a result of the proposed works, it is recommended that the works should take place outside the breeding bird season which runs from late

February until September, in order to prevent any impacts upon breeding birds.

- 4.7 Any vegetation clearance work that must be carried out within the bird breeding season will be subject to a pre-clearance bird survey carried out by a suitably experienced ecologist. No vegetation clearance will be carried out within 5 m of an identified nest until the young have fledged and are no longer returning to the nest site. Vegetation will only be cleared once a scheme ecologist has declared the nest to be no longer in use. Mitigation for the loss of breeding bird habitat should include the planting of native species of trees and shrubs and the provision of alternative nesting opportunities in the form of nest boxes within the new development.

Bats

- 4.1 If during the works it is necessary to remove either of the two trees with medium potential to support bats, it is recommended that a method of soft felling is adopted. The limbs and the main trunk of the trees should be left undisturbed after felling for a recommended 24 hours in order to allow any bats present to emerge
- 4.2 Although there is no known bat roost present within the trees, a procedure should be in place should bats be found or suspected at any time during construction activities. If bats are found or suspected, as a legal requirement, work in that area should cease immediately until further advice has been sought from Natural England and/or the scheme ecologist. The scheme ecologist, Natural England or their agents in the Lancashire area will be able to locate a licensed bat worker to remove any bats present which might be harmed during the works. If bats are exposed during the works and are vulnerable to harm, gloves or a container should be used to move them to a dark and quiet area, until a bat worker has been contacted.

Running Water

- 4.8 The stream is not thought to be suitable for water vole due to its shallow nature and lack of vegetation on the banks. If works are required in the proximity of the watercourse the contractor must provide a method statement to ensure any silt or other pollutants including hydrocarbons are not released into the water feature. Extra vigilance must be considered during period of wet weather or high flows. Any dewatering works must pass through adequate silt removal apparatus prior to returning to the watercourse. All works within the vicinity any watercourse should be in accordance with the Environment Agency Pollution Prevention Guidelines (PPG5).
- 4.9 No significant effects upon species or overall significant effects of the development upon ecology are predicted.

Enhancement

- 4.10 A key element of the National Planning Policy Framework is to minimise impacts to biodiversity and provide enhancements. Paragraph 109 states that 'The planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible'. It also states in Paragraph 118 that 'when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by encouraging opportunities to incorporate biodiversity in and around developments'.
- 4.11 Measures to enhance the biodiversity of the site include:

- a) Seeking the advice of a professionally/suitably qualified ecologist throughout the progress of the development in order to maximise ecological and biodiversity gains at each stage.
- b) Planting of scattered trees around the proposed new buildings. Species that should be used should include hawthorn, ash, oak and rowan. Specimens should be sourced locally, they should be planted at an appropriate time of year (Oct – Feb, when there is no ground frost) and protected from grazing by rabbits and deer.
- c) Installation of bird nesting boxes on the properties adjacent to woodland areas.
- d) Any planting within the new development would provide foraging habitat for bats, and therefore have the potential to increase the value of the site. Nectar rich plants that attract insects would be recommended as they would enhance foraging opportunities for bats in the local area.
- e) Placement of bat boxes on mature trees can provide suitable roosting sites for crevice dwelling bats. This would provide an alternative roost site to any bats present within the medium risk bat trees on site (TN6) should they require removal through soft felling. If the trees do require removal, it is recommended that three boxes be put up on nearby mature trees prior to the commencement of soft felling in order to provide alternative roost sites and somewhere safe to put any bats that might be found during the works.

Resurvey of the Site

- 4.12 If no works are undertaken on site within 12 months of this survey or if any changes to the proposals are made, a further ecological survey may be necessary (because of the mobility of animals and the potential for colonisation of the site).

References

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Legal Information

This report provides guidance of potential offences as part of the impact assessment. This report does not provide detailed legal advice and for full details of potential offences against protected species the relevant acts should be consulted in their original forms i.e. The Wildlife and Countryside Act, 1981, as amended, The Countryside and Rights of Way Act 2000, The Natural Environment and Rural Communities Act, 2006 and The Conservation of Habitats and Species Regulations 2010.

Bats

All **bats** in the UK are listed on Schedule 5 of the Wildlife and Countryside Act (WCA) (1981, as amended), updated by the Countryside and Rights of Way Act (2000). It is therefore subject to provision 9 of the WCA which makes it an offence to;

- Intentionally kill, injure or take any wild bat,
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by any wild bat
- Intentionally or recklessly disturb any wild bat while it is occupying a structure or place which it uses for that purpose.
- Possess or control any live or dead specimen or anything derived from a UK bat species.

The Countryside and Rights of Way Act 2000 amends the Wildlife and Countryside Act to also make it an offence to intentionally or recklessly damage, destroy or obstruct a place that bats use for shelter or protection. The term 'reckless' is defined by the case of Regina v Caldwell 1982. The prosecution has to show that a person either deliberately took an unacceptable risk, or failed to notice or consider an obvious risk.

The Conservation of Habitats and Species Regulations 2010 which make provision implementing Council Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna (the Habitats Directive). These give additional protection to bats, which are listed on Schedule 2 of the Regulations. Under Regulation 39 a person commits an offence if he;

- Deliberately captures, injures or kills any wild animal of a European protected species.
- Deliberately disturbs wild animals of any such species in such a way as to be likely significantly to affect the ability of any significant group of animals of that species to:
 - i) to survive, to breed or to reproduce or to rear or nurture their young or
 - ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate or the local distribution or abundance of that species
 - iii) Damage or destroy a breeding site or resting place used by a bat

A bat roost has been interpreted by Natural England to mean any structure or place which is used for shelter or protection whether or not bats are present at the time.

Breeding Birds

Breeding birds are protected by Section 1 of the Wildlife and Countryside Act (1981, as amended). All birds, their nests and eggs are protected by law and it is thus an offence, with certain exceptions, to intentionally;

- Kill, injure or take any wild bird,
- Take, damage or destroy the nest of any wild bird while it is in use or being built,
- Take or destroy the egg of any wild bird.

Birds listed on Schedule 1 of the Wildlife and Countryside Act (1981, as amended) are subject to increased protection through a penalty system. For species listed on this Schedule it is also an offence to intentionally or recklessly;

- Disturb any Schedule 1 bird while it is building a nest or is in or near a nest containing eggs or young,
- Disturb dependent young of any Schedule 1 bird.

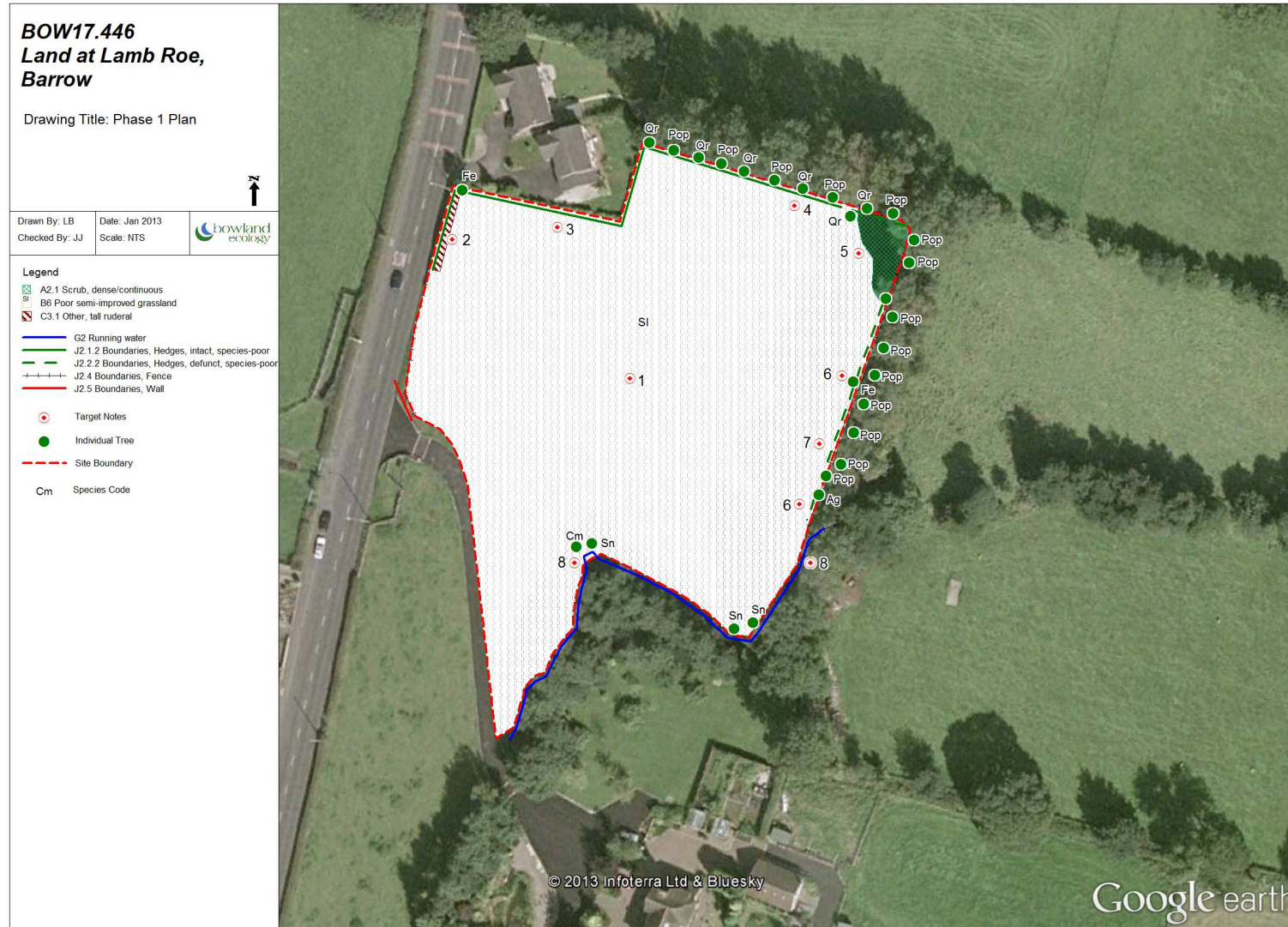
Appendix A – Extended Phase 1 Target Notes

Target Note	Photo	Description
1		A semi-improved grassland field dominates the majority of the site. Species present include cock's foot, Yorkshire fog, red fescue, soft rush, creeping buttercup, lesser celandine, meadow buttercup, dandelion, black knapweed, common sorrel, broad-leaved dock. The grassland will provide habitat for small mammals and has low potential for ground nesting birds.
2		A species poor hedgerow present in the north west corner of the western boundary. Dominant species include hawthorn and hazel. Tall ruderals were noted along the base of the hedge. Common hogweed, common nettle, greater willowherb, umbellifer sp and false oat grass. Bramble and ivy were noted within the hedge. The ground flora comprised mainly of dog's mercury. The hedgerow provides habitat for breeding birds.
3		A species poor hedgerow creates the boundary to the north west of the site. This is a well maintained hedge comprising of introduced garden sp. including laurel and conifer sp. The hedgerow provides habitat for breeding birds.

		
4	 	A species poor hedgerow makes up the northern boundary of the site, becoming defunct towards the eastern end. Hawthorn is the dominant species with some elder also present. There is one oak tree within the hedge. A row of ten trees lies behind the hedge just outside of the site boundary (five oak and five poplar sp.) Some of the branches over hang the site. None of these trees have features noted to be suitable for bats. The hedgerow and trees provide habitat for breeding birds.
5		There is an area of dense scrub in the north east corner of the site. This comprises mainly of blackthorn with some hawthorn. The scrub provides habitat for breeding birds.

6		There are two mature trees along the eastern boundary, an ash and an alder that were noted to have potential for bat roosts (low potential). These trees also provide nesting habitat for birds.
7	 	The eastern boundary of the site consists of a defunct species poor hedge of hawthorn and some elder with a fence line behind. Eight mature poplar sp. were noted in a row running parallel with the hedge. The hedgerow and trees provide habitat for breeding birds.
8		A small stream approximately 1m wide and 20cm deep runs adjacent to the site along the south eastern boundary and then enters the site briefly running around the corner heading south and back out of the site to follow the fence line. The stream is shallow with muddy banks and a gravelly substrate. It is likely to dry up occasionally. It is not thought to be suitable for water vole due to its shallow nature and unvegetated banks. Otter could migrate along its length, though this is unlikely since the site is close to roads, residential properties and retail outlets.

Appendix B – Extended Phase 1 Habitat Plan



Appendix C – Species Records Plan

