Whitcher Wildlife Ltd.
Ecological Consultants.

71 PILLEY GREEN, TANKERSLEY.

OS REF: SE 33558 00448.

ECOLOGY SURVEY.

Ref No: **211043.**

Date: **15th October 2021.**

Cliff Edge, Cliff Road, Darfield, Barnsley, S73 9HR.
Tel. 01226 753271.
info@whitcher-wildlife.co.uk www.whitcher-wildlife.co.uk
Company No. 4401613.

TABLE OF CONTENTS.

1. INTRODUCTION.

1.1. There are plans to build a stable on the land to the rear of 71 Pilley Green in Tankersley. A plan showing the location of the proposed stables is attached in Appendix III.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out an ecology survey of the site to establish whether there are any issues that may affect the proposed works.

1.3. The site survey was carried out on 14th October 2021 and this report outlines the findings of that survey and makes appropriate recommendations.

1.4. Appendix I and II of this report provide additional information on specific species and are designed to assist the reader to understand the contents of this report.

****

2. SURVEY METHODOLOGY.

2.1. Prior to visiting the site, the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

2.2. The survey area and immediate surrounding area was thoroughly searched for evidence of badger (*Meles meles*) activity by looking for the following signs in line with Harris S, Cresswell P and Jefferies D (1989). *Surveying Badgers*. Mammal Society: -

* Badger setts.
* Badger latrines or dung pits.
* Badger snuffle holes and evidence of foraging.
* Badger paths.
* Badger prints in areas of soft mud.
* Badger hairs caught on fencing.

2.3. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 100m in each direction were thoroughly searched for evidence of water vole (*Arvicola amphibius*) activity by looking for the following signs, in line with Dean M, Strachen R, Gow D and Andres R (2016). *The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series).* Eds Fiona Mathews and Paul Chanin. The mammal Society, London: -

* Water vole burrows.
* Water vole faeces and latrines.
* Water vole feeding stations.
* Water vole runs.
* Water vole prints in areas of soft mud.
* Water vole lawns.
* Predator field signs.

2.4. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of otter (*Lutra lutra*) activity by looking for the following signs in line with the P Chanin (2003). *Monitoring the Otter* and *Conserving Natura 2000 Rivers: Monitoring Series No10 Guidelines: -*

* Otter prints in soft mud.
* Otter spraints.
* Otter Holts.

2.5. The survey area was searched for watercourses and waterbodies. Where found, and where safe to enter the water, all were thoroughly searched for the presence of crayfish, for approximately 50m in each direction of the site, by searching under rocks and logs. Where stated, crayfish traps were also deployed into the watercourse. All survey work was carried out in accordance with the *Conserving Natural 2000 Rivers Monitoring Series No 1, Protocol for Monitoring the White Clawed Crayfish*.

2.6. The survey area was searched for trees and structures and where found these were checked for potential bat roosting sites in line with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition)* by looking for the following signs: -

* Holes, cracks or crevices.
* Bat Droppings.

2.7. The land immediately adjacent to the survey area was assessed for bat roosting potential and bat foraging potential. Connective routes and flight lines were also assessed whilst on site and using maps of the area.

2.8. The area within 500m of the survey site was cross referenced to maps to highlight all ponds close to the site. Where possible, all ponds identified were accessed using agreed access or public rights of way to assess the potential for great crested newts (*Triturus cristatus*) to be present.

2.9. The survey area was assessed for the potential for reptiles and suitable reptile habitats. Where applicable the area was also searched for the presence of reptiles.

2.10. Where appropriate, the habitat within and surrounding the survey area was searched for species such as hazel, oak, honeysuckle, bramble and other species which may provide potential habitat for hazel dormice (*Muscardinus avellanarius*). Field signs such as feeding remains and nests were also searched for where possible, in line with P Bright, P Morris and T Mitchell-Jones *The Dormouse Conservation Handbook 2nd Edition*.

2.11. Where appropriate, the area within and surrounding the survey area was assessed for its potential to house habitat for red squirrels. Field signs of red squirrels were searched for at least every 50m, looking for any dreys, feeding signs or sightings of red squirrels.

2.12. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice.

2.13. This survey was carried out by Alex White BSc, MSc, ACIEEM. Alex has had experience in a professional capacity as a Graduate Ecologist carrying out ecology and protected species surveys and Phase 1 Habitat surveys and joined Whitcher Wildlife in 2016 as a Wildlife Consultant. Alex holds Natural England Survey Licences for Great Crested Newts, Bats, Hazel Dormice and Barn Owls and is currently working towards gaining further Natural England survey licences. She also holds Scottish Natural Heritage and Natural Resources Wales Licences for Great Crested Newts. She has successfully completed courses run by the Chartered Institute of Ecology and Environmental Management (CIEEM) and The Mammal Society to further her knowledge of protected species and plant identification. Alex is also an Associate member of CIEEM.

****

3. SURVEY RESULTS.

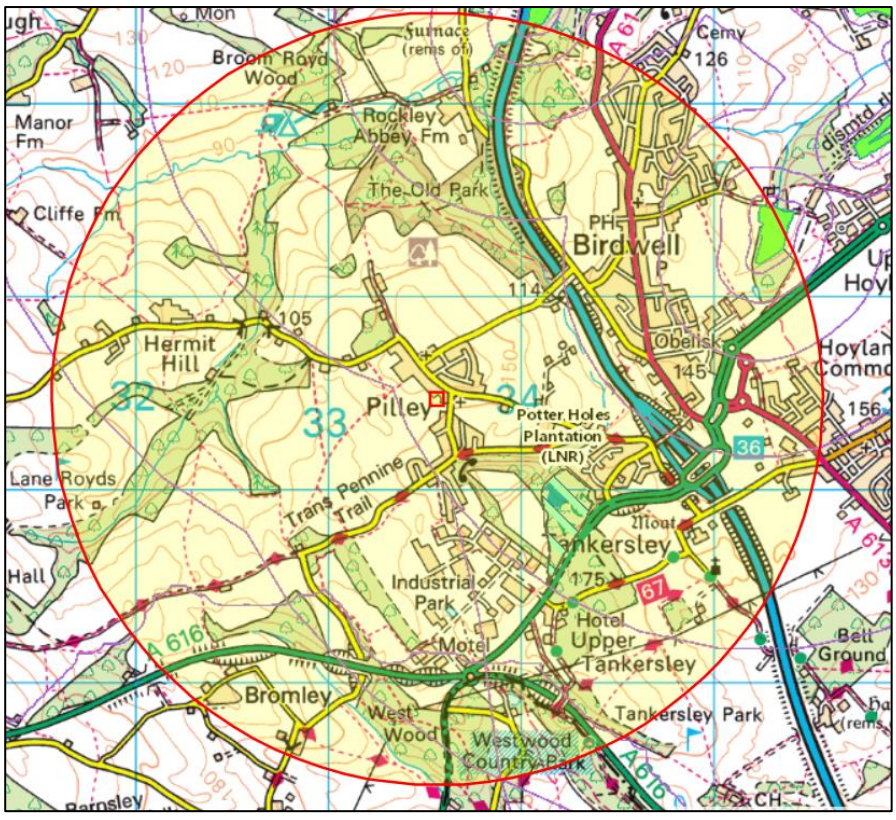
3.1. Data Search Results.

3.1.1. A 2km desktop data search for publicly available records of protected species and statutory designated sites was carried out.

3.1.2. There are recent records of great crested newts, smooth newt, common toad, common frog, water vole, grass snake, common pipistrelle and numerous bird species within 2km of the survey area.

3.1.3. There were no statutory or non-statutory designated sites within the survey area. Two sites were identified within the 2km search which included Potter Holes Plantation Local Nature Reserve and Dearne Valley Wetlands Site of Special Scientific Interest. The closest site was Potter Holes Plantation LNR which was situated approximately 0.7km southeast of the survey area.

3.1.4. The Magic Map below highlights the location of the survey area with 500m buffer and the two designated sites within the search area.



3.2. The Surveyed Area.

3.2.1. The survey area included an area of land to the rear of 71 Pilley Green in Tankersley. The aerial photograph below highlights the survey area in red.

3.2.2. The survey area included semi-improved neutral grassland and tall ruderals. This was an arable field which was seeded a few months prior to the survey. The grassland was assessed as being semi-improved as this is not extensively managed although previous fertiliser application is affecting the current species present. The photographs below highlight the current status of the site.

3.2.3. The species present include perennial ryegrass (*Lolium perenne*), Yorkshire fog (*Holcus lanatus*), cocks' foot (*Dactylis glomerata*), false oat grass (*Arrhenatherum elatius*), fescue (*Festuca* sp.), common bent (*Agrostis capillaris*), meadow foxtail (*Alopecurus pratensis*), common nettle (*Urtica dioica*), thistle (*Cirsium* sp), white clover (*Trifolium repens*), broadleaved dock (*Rumex obtusifolius*), cleavers (*Galium aparine*), cow parsley (*Anthriscus sylvestris*), burdock (*Arctium lappa*), broadleaved willowherb (*Epilobium montanum*), shepherds purse (*Capsella bursa-pastoris*), creeping buttercup (*Ranunculus repens*), common sorrel (*Rumex acetosa*) and dandelion (*Taraxacum officinale*).

3.2.4. The survey area was surrounded by residential properties to the north, east and south and arable land to the south. The aerial photograph below highlights the location of the survey area within the wider landscape.

3.3. Survey Results.

3.3.1. There were no badger setts or badger field signs identified within the survey area.

3.3.2. There were no watercourses within, or close to, the survey area and therefore, no suitable aquatic habitat for water vole, otter or white clawed crayfish.

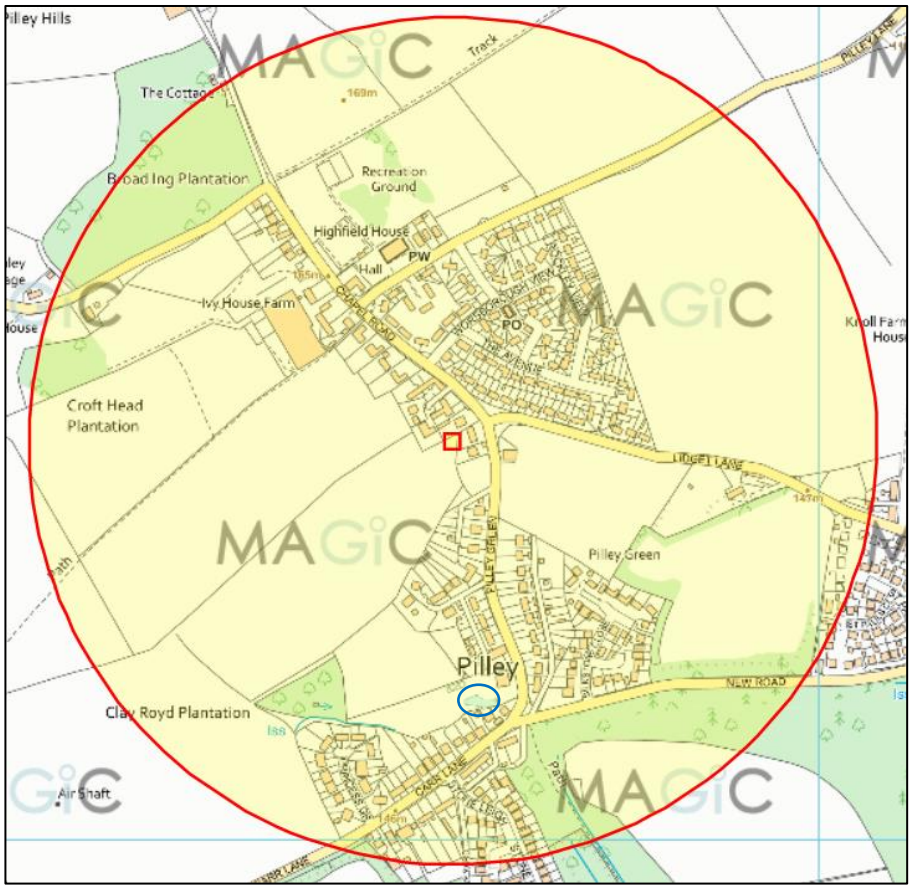
3.3.3. There were no structures within the survey area suitable for roosting bats

3.3.4. No trees were located within the proposed area of the stable and all trees beyond the boundaries of the survey area were assessed as having negligible bat roost potential.

3.3.5. The survey area was assessed as having low suitability for foraging and commuting bats due to lack of diversity in the grassland. There were also no mature vegetation or watercourses providing linear features close to the proposed stable location. There was a hedgerow and trees approximately 30m from the proposed location of the stable, as shown in the photograph below. A tthorough evaluation of bat activity could not be made during a daytime survey of the site.

3.3.6.1. The site survey and review of Ordnance Survey maps and aerial photography highlighted one pond approximately 300m south of the survey area. This pond could provide suitable habitat for breeding great crested newts although as it was on private

land, no further assessment has been undertaken. The map below highlights the location of the survey area with 500m buffer and the location of the pond.



3.3.6.2. The terrestrial habitat is unsuitable for great crested newts as there are no areas of refugia in the proposed location of the stable. There was a small amount of timber stored close to this location although it was raised off the ground with pallets.

3.3.6.3. Previous planning applications and the Magic website were also searched for previous records or surveys around this area of the pond and no EPS licences were identified within this location. The records identified on Magic and within the data search were approximately 1km south and southwest of the survey area.

3.3.7. There was no mature vegetation within, or adjacent to the proposed location of the stables. The grassland could be suitable for ground nesting birds, depending on the future management regime, although the risk is considered extremely low due to the close proximity to numerous residential properties. Three pheasants were identified within the survey area during the survey.

3.3.8. The area of grassland and tall ruderals is unlikely to be utilised by reptiles and the site was assessed as being of low value for reptiles. There were records of grass snake within the local area although these are from 2010 and not close to the survey area.

3.3.9. The survey area is outside of the known UK distribution of hazel dormice and red squirrel. Therefore, no further consideration is given to either species.

3.3.10. No non-native invasive species of plant, listed under Schedule 9 of The Wildlife and Countryside Act 1981, were identified within the survey area.

****

4. EVALUATION OF FINDINGS.

4.1. There were no statutory designated sites within, or adjacent to, the survey area. Therefore, no such sites will be affected by the proposed works.

4.2. The survey area included semi-neutral improved grassland and tall ruderals which were assessed as being low value habitats.

4.3. Overall, the works will have a low impact on the biodiversity value of the survey area due to the small loss of grassland and tall ruderals. It is also the applicants intention to plant a hedgerow along the western boundary of the site which will increase the biodiversity value of the survey area.

4.4. There were no badger setts or badger field signs identified within the survey area. Therefore, no badgers will be directly affected by the proposed works. Badgers, and other mammals, could potentially venture onto site during the works and become trapped in open excavations.

4.5. There were no watercourses within, or close to, the survey area. As there is no habitat suitable for water vole, otter or white clawed crayfish, these species will not be affected by the proposed works.

4.6. There were no structure or trees within the survey area suitable for roosting bats, therefore, no roosting bats will be affected by the proposed works.

4.7. The survey area was assessed as having low suitability for foraging and commuting bats. The proposed development will not cause any fragmentation of habitat and will not lead to any significant increase in lighting. Therefore, foraging and commuting bats will not be affected by the proposed works.

4.8. There was one pond identified within 500m which could provide suitable habitat for great crested newts. Given the distance from the survey area and the lack of suitable terrestrial habitat, full surveys are not considered necessary. Precautions to ensure no suitable habitat is created on site are recommended in Section 5.

4.9. No mature vegetation will be affected by the proposed works. The ground vegetation could be suitable for ground nesting birds although the risk is considered

low. The works would have a high impact on any nesting birds within the location of the proposed stable.

4.10. The survey area provides limited habitat for reptiles although grass snake have been recorded within the local area. It is considered unlikely individual reptiles will be affected by the proposed works although precautions have been recommended to ensure the site remains unsuitable.

4.11. There were no non-native invasive plant species identified within the survey area, therefore, no such species will be affected by the proposed works.

****

5. RECOMMENDATIONS.

5.1. No excavations should be left open to ensure no badgers, or other mammals, become trapped if they venture onto site. Alternatively, mammal ramps could be installed.

5.2. It is recommended that ground preparation for the stable is undertaken outside of the nesting bird season. If any of the ground vegetation is disturbed during the nesting bird season, a nesting bird survey, carried out by a suitability qualified surveyor should be undertaken before the works commence.

5.3. Precautions should be implemented to ensure the site remains unsuitable for great crested newts and reptiles. This should include the avoidance of storing materials on site for a long time and where materials are to be stored these should be raised off the ground by the use of pallets to ensure no habitat is created.

5.4. The hedgerow to be planted should be a species rich native hedgerow; this should include species such as: holly *(Ilex aquifolium),* native honeysuckle *(Lonicera periclymenum),* elder *(Sambucus nigra),* hazel *(Corylus avellana),* hawthorn *(Crataegus monogyna),* blackthorn *(Prunus spinosa),* guelder rose (*Viburnum opulus*) and field maple (*Acer campestre*).

****

Prepared by:	
Alexandrea White BSc MSc ACIEEM.	Date: 15th October 2021.

Checked by:	
Jenny Whitcher Roebuck MCIEEM.	Date: 18th October 2021.

6. REFERENCES.

Chartered Institute of Ecology and Environmental Management. 2017. ***Guidelines for Preliminary Ecological Appraisal, Second Edition.*** CIEEM, Hampshire.

Chartered Institute of Ecology and Environmental Management. 2017. ***Guidelines for Ecological Report Writing, Second Edition.*** CIEEM, Hampshire.

1981. ***Wildlife and Countryside Act.*** *http://www.legislation.gov.uk/ukpga/1981/69* (accessed 18/02/16)

2000. ***Countryside and Rights of Way Act.*** *http://www.legislation.gov.uk/ukpga/2000/37/contents.*

2017. ***The Conservation of Habitats and Species Regulations.*** *http://www.legislation.gov.uk/uksi/2010/490/contents/made.*

2012. ***National Planning Policy Statement.*** *https://www.gov.uk/government/publications/national-planning-policy-framework--2*

Anon. 1995. ***Biodiversity: the UK Steering Group report. Vol 2: Action Plans.*** HMSO, London.

Joint Nature Conservation Committee. 2004 (ed.). ***Handbook for Phase 1 habitat survey: A technique for environmental audit.*** JNCC, Peterborough.

1992. ***Protection of Badgers Act.*** *https://www.legislation.gov.uk/ukpga/1992/51/contents.*

Harris S, Cresswell P and Jefferies D. 1989. ***Surveying Badgers.*** Mammal Society. London.

Dean M, Strachen R, Gow D and Andres R (2016). ***The Water Vole Mitigation Handbook*** (The Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. The mammal Society, London

Chanin P. 2003(a). ***Ecology of the European Otter.*** Conserving Natura 2000, Ecology Series No.10. English Nature, Peterborough.

Chanin P. 2003(b) ***Monitoring the Otter Lutra lutra.*** Conserving Natura 2000 Rivers Monitoring Series No. 10. English Nature, Peterborough.

Peay S. 2003. ***Monitoring the White-Clawed Crayfish Austropotamobius pallipes.*** Conserving Natura 2000 Rivers Monitoring Series No. 1. English Nature, Peterborough.

English Nature. 2001. ***Great Crested Newt Mitigation Guidelines.***

Langton T, Beckett C, Foster J. 2001. ***Great Crested Newt: Conservation Handbook.*** Froglife, Suffolk.

Oldham et al. 2000. ***Great Crested Newt Habitat Suitability Assessment. ARG UK Advice Note 5, May 2010.***

Collins J. (ed.) 2016. ***Bat Surveys for Professional Ecologist: Good Practice Guidelines.*** 3rd ed. The Bat Conservation Trust, London.

English Nature. 2004. ***Bat Mitigation Guidelines.*** English Nature, Peterborough, UK.

BTHK 2018. ***Bat Roosts in Trees – A Guide to Identification and Assessment for Tree-Care and Ecology Professionals.*** Exeter: Pelagic Publishing.

BOCC4 Eaton et al. 2015. ***Birds of Conservation Concern 4: The Population Status of Bird's in the UK, Channel Islands and Isle of Man.***

Joint Nature Conservation Committee. 2004. ***Common Standards Monitoring Guidance for Birds.*** 2004 ed. JNCC, Peterborough.

Froglife. 1999. ***Froglife Advice Sheet 10: Reptile Survey.*** Froglife, London.

Bright P, Morris P, Mitchell-Jones T. 2006. ***The Dormouse Conservation Handbook*** 2nd edition. English Nature, Peterborough.

Joint Nature Conservation Committee. 2004 (ed.). ***Common Standards Monitoring Guidance for: Reptiles and Amphibians.*** JNCC, Peterborough.

Joint Nature Conservation Committee. 1996. ***UK Strategy for Red Squirrel Conservation.*** JNCC, Peterborough.

Appendix I. BADGER INFORMATION.

Ecology

Badgers are territorial animals who live in social groups called 'clans'. The territory of these clans can vary in size from 0.2km^2 to 1.5 km^2 with anywhere between two and twenty Badgers present. In areas where two clans meet territorial boundaries become well-defined, marked by a series of dung pits called latrines. In areas with relatively low Badger populations there will be less competition for territory and the number of territorial markings will be low or even non-existent.

Badgers use paths around their territory repeatedly, following a scent trail from previous use; thus, Badger paths become well worn. These paths are important to the Badgers and obstruction to these paths will interfere with the Badger's movement around their territory.

Badger setts are any structure or place which displays signs of current or seasonal use by a Badger. Within a Badger clan territory there can be several Badger setts which are categorised in the following ways:

- ***Main Sett.*** *There will normally be one main sett in a territory. This will generally be the largest sett in the territory, typically with five or more entrances, will be permanently occupied throughout the year and used as the breeding sett.*
- ***Outlying Sett.*** *These are the smallest setts with generally only one or two entrances. They are intermittently occupied and there can be any number in a territory.*
- ***Annex Sett.*** *A sett of intermediate size, located close to the main sett and connected by well-defined paths. These are occupied for prolonged periods and may be used as a second breeding sett if there are two breeding sows in the clan.*
- ***Subsidiary Sett.*** *A sett of intermediate size, similar to an annex sett but located at some distance from the main sett and not connected to the main sett by defined paths.*

Badgers can mate at any time of year, but delayed implantation controls the time of birth. Most cubs are born between January and March, but they can be born at any time between December and June. An average of two to three Badger cubs are born to each sow and will initially be totally dependent on their mother. Cubs do not appear above ground until during April or May when they are 8 – 10 weeks old and are not fully weaned until at least June of each year.

Badgers are omnivorous, but their preferred food source is worms and insects. Worms are most abundant in well-grazed pastureland while mixed woodland is a good source of insects and grubs. Badgers have a soft and supple nose with which they snuffle into the ground to find insects. When they do this, they leave distinct round holes known as snuffle holes or grubbings. Badgers easily find worms on the surface of well-grazed pastureland and often leave no visible indications of this foraging.

Surveys

Walkover surveys can be conducted to identify the presence of Badgers within an area. This will identify the presence of any setts, dung pits, paths or foraging activity.

Bait marking techniques can be used to survey Badger territories. This involves feeding Badgers at each sett pellets of different colours over a period of at least two weeks. The colour of pellet found in dung pits and territorial latrines shows what areas each clan of Badgers is occupying.

Legislation

Badgers are protected under Schedule 6 of the Wildlife and Countryside Act (1981) and the Protection of Badgers Act (1992).

This makes it an offence to take, kill or injure a Badger, cruelly ill-treat a badger, use Badger tongs or firearms in the killing or taking (or attempt) of a Badger. It is also an offence to damage, destroy, obstruct access to, or any entrance of, a Badger sett, to cause a dog to enter a Badger sett or disturb a Badger while it is occupying a sett.

Appendix II. NESTING BIRD INFORMATION.

Ecology

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub, but others are ground nesting or prefer man- made structures or buildings.

Surveys

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Legislation

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1. -(5) of the Act states that: - If any person intentionally: - disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

Appendix III. PROPOSED LOCATION OF THE STABLE.