



A Preliminary Ecological Assessment & Mitigation Report for Rogers Well.

Aim: To establish the presence or absence of bats & birds in the building & importance of adjacent habitats.

Frances O'Brien
Rogers Well,
Walford,
Ross on Wye,
HR9 5RQ

Reference: 1FB-PEAR.doc
28th September 2021

Prepared by Ros Willder
Telephone: 01452 849428 Office, 07920 147441
E-mail: roswillder@yahoo.co.uk

Website: www.willderecology.co.uk

Contents

1.0 Introduction	3
2.0 Methodology of Surveys	3
3.0 Results of Surveys	4
3.1 Examination of the building & adjacent areas	4
3.2 Evening Bat Activity Survey.....	10
4.0 An Ecological Assessment & data search.....	12
4.1 Pond search	12
4.2 Data Search.....	12
4.3	3
5.0 Conclusions Mitigation & Enhancements	15
5.1 Mitigation	17
5.2 Enhancements.....	18

APPENDIX ONE LEGAL STATUS OF BATS AND BIRDS

APPENDIX TWO EXISTING BLOCK & ELEVATION PLAN

APPENDIX THREE POND SEARCH MAP

APPENDIX FOUR DESIGNATED SITE SEARCH MAP

APPENDIX FIVE PROPOSED PLAN & ENHANCEMENTS

1. Introduction

As part of the planning application for the replacement extensions & alterations to Rogers Well, it is necessary to survey the building and areas to be directly affected by the proposed development, to establish whether there are any protected species currently using the house or any priority habitats adjacent to the building.

2. Methodology of Surveys

The survey of the building & land was carried out on the 1st July 2021; by Ros Willder MCIEEM & CEnv, Bat Licence number CLS03109 & Natasha James, Dormouse license number 2019-43685- CLS of Willder Ecology, the weather was sunny. The daytime survey began at 10:30 am.

In addition, an evening bat activity survey was carried on the 11th August 2021 by three bat workers (Ros Willder, Natasha James & Jason Sawyer) see section 3.2 for full details.

The daytime survey was carried out of the building (including the attic area) and any areas which would potentially be affected by the proposal. This was done by a thorough visual inspection of building using a strong hand- held torch.

In addition, a frequency division bat detector and endoscope were used, where appropriate, to enable further detail examination of the walls. The area around the building was also surveyed and the adjacent habitats assessed.

A pond search was carried out to identify ponds within 250m & 500m of the site, the results of which are discussed in Section 4 and shown on the Pond Search map is shown in Appendix Three.

A designated site search was also carried out using the MAGIC map service from Natural England and the results are discussed in section 4 and shown in Appendix four.

3. Results of Surveys.

3.1 Examination of Rogers Well

The building proposed for an extension is in daily use as a residential dwelling. The cottage was built in 1798 with a large stone chimney on the southern elevation as shown below in figure one & also in figure 6.

The main construction for the walls of the dwelling are traditional stone that has been rendered & painted white with a series of PVC glazed windows (as shown in figure one below).

The single storey lean to on the western elevation has breeze block walls that has been rendered and painted, with a sealed slate covered roof connected to the house that is well sealed with lead flashing at the top as shown below in figure one



Figure 1 – The traditional stone building rendered & painted

The northern elevation of the cottage was previously extended upstairs and has a timber framed Dormer opening which leads out onto a decking veranda made from timber with the gable end wall also timber clad. This is the area that will be replaced with the proposed plans as shown in appendix five.



Figure 2 - Photo to Show the northern elevation of the house

The external walls are all well sealed, and the painted walls are very well-sealed with limited cracks or crevices, as shown in figures one & three. The roof of the building has synthetic slate roofing tiles & on the eastern elevation there is a fully glazed conservatory (as shown in figure three).



Figure 3 – conservatory

The conservatory is constructed from brown PVC & is glazed throughout which causes a lot of light spill onto the northern elevation of the property & the adjacent roof area & garden area & the area beneath the veranda.

In addition, there is a bright external light under this area & despite the timber floor the gaps at the edge were noted to be covered in cobwebs as shown below in figure four. The cobwebs cover timber boarding as shown above but they also cover the timber cladding on the northern elevation gable end wall which would appear to indicate that the gaps in the timber are not being used by bats.



Figure 4– timber clad veranda and flood light underneath

The immediate area around the house is all covered in hard standing with the garden beyond on the raised ground to the western part of the site divided by steps & concrete paths as shown in figure 6.

The Hard standing immediately adjacent to the property is comprised of decking, paving slabs & gravel, as shown in figures one to three & on the photo on the front cover of this report.

The western elevation has a small garden timber shed adjacent to the cladding on the upstairs extension. The garden shed is comprised of tongue & groove timbers with a bitumastic felted roof which is covered in vegetation from the overgrown roadside shrubbery (as shown below in figure five).



Figure 5- the garden shed on the western elevation



Figure 6 – the adjacent raised garden to the west

The interior of the property is in daily use & all the rooms are plastered & painted throughout. The upstairs rooms are built into part of the pitched roof as shown below in figure seven.



Figure 7 – the internal ceiling

As such the loft space in the roof is very small with only a 2ft height as shown below in figure eight, the roof space has an old elm timbers and bitumen lining & there was dirty cobwebs on the timbers in the roof.



Figure 8 – the roof space

There was no evidence of use by bats found in the interior of the attic in the building or in the garden shed. There is also a lack of crevices within the external walls. The tight-fitting doors and windows frames do not offer optimum bat roosting habitat & due to the lack of crack and crevices that the painted walls and synthetic slate tiles provides further reduce the potential access into the small roof space by bats.

Despite the majority of the house having a negligible suitability for use by bats due to the tight-fitting roofing tiles & the painted walls & the cobweb covered timber boarding, it was noted that there were one or two small crevices within the chimney, where mortar had been lost or stones had weathered on the chimney. This together with the location of the property within a woodland setting it was felt necessary to carry out an evening survey to see if the site was used by bats either for roosting or commuting by bats.

The area adjacent to the building to be affected by this proposal is comprised of a hard standing decking, concrete paths & roadside ornamental garden shrubs which provide a limited value for wildlife as shown in figures one to three.

3.2 Evening Bat Activity Survey results from Rogers Well on 11/08/21

Temperature Start 18 ° C End 16.3 ° C, Cloud cover 40%,

No Wind until halfway through when wind gusts between 0.8-1.1 m/s occurred on and off for 30 min.

Surveyors: Ros Willder (RW), Natasha James (NJ), Jason Sawyer (JS)

Positions: West elevation Northeast elevation South elevation

Sunset 20:42 (Start: 20:20 End: 22:16)

20:47	Common Pipistrelle (CP) flying along woods opposite house.
20:48 & 49	Soprano Pipistrelle (SP) foraging around trees to the South.
20:53	Noctule (N) flying Northeast.
20:55	CP flying past site along track and woods West to North.
20:56	CP & SP flying past site along track and woods West to North.
20:57	CP x2 foraging NE over garden of house.
20:58	N flying high over site and CP flew over house roof towards woods and track.
21:00-02	CP x2 and SP constant foraging in woods opposite site.
21:03-05	SP x3 foraging in garden of house then in woods opposite to the house over the track.
21:06	CP flying past site West to East down track and SP foraging in woods and N flying high over site.
21:08	SP flew from Southwest towards NE over house roof and CP flew from the West over house roof to East and foraging in woods over the track.
21:10-11	CP x2 foraging over house and garden.
21:12-14	CP & SP constant foraging along track and woods to the North.
21:14 & 15	CP foraging over house and garden and SP foraging in nearby woods over the track opposite.
21:18	SP x2 foraging by house and garden.
21:20	SP x2 flew up track and down track several times.

21:21	SP foraging on site.
21:25 & 26	CP flying along track from West to North.
21:25	Serotine flying along track between house and woods.
21:34	SP flying from NE to SE and then foraging in garden.
21:36	N flying high over site and brief registration of a Western Barbastelle from woods over the track.
21:39 & 42	CP foraging in woods and SP flying past.
21:45	CP flying by site and Myotis heard not seen.
21:46	SP flying by site along track and woods.
21:49	Serotine flying along woods by track.
21:52	SP heard not seen.
21:56	Myotis heard very faintly from the edge of site.
22:00	N flying high over site.
22:05	Myotis- SP flying past very faint.
22:08	SP flying past site along track.
22:12	Survey finished.

Notes – No bats emerged from the cottage but clearly the woods which surround the cottage are exceptionally well use by foraging bats

4. Pond & Data search results & Ecological Assessment

4.1 POND SEARCH

A pond search was carried out, using the MAGIC map service from Natural England, to within a radius of 500m of Rogers well. The results of the map-based pond search show there are no ponds within 500m as shown in the pond search plan in appendix three.

The fact that there are chickens in the garden, beyond the decking area to the east of the house & the fact there is decking & hard standing concrete paths all around the building makes the likelihood of any amphibians including GCN being on site is considered to be negligible.

4.2 THE DATA SEARCH

The data search was carried out using the MAGIC Map service from Natural England. The search results identified the site is within the Wye Valley Area of Outstanding Natural Beauty. The nearest designated site is Coughton Wood and Marsh Site of Special Scientific Interest (SSSI) which is situated 1.2km away from the site and The River Wye SSSI and Special Area of Conservation (SAC) is 1.5km away from the site so further consideration of the potential impacts will have to be fully assessed.

Within the 2km search radius, results showed several Priority Habitats within the wider area including:- Coastal and floodplain grazing marsh, Lowland meadows, Purple moor grass and rush pastures, Traditional Orchard and Deciduous Woodland.

Of the Deciduous Woodland recorded within the search radius, several sites were noted as Ancient Semi-natural Woodland, Cherry Woods, Beech Tree Woods, Chase wood, Dam Wood, Deep Dean, Ferny Bank & Mayers Grove, Hengrove and Warm hill woods, Howle Hill Wood, Marks Well Wood, Lodge Grove, Little wood, Purlieu wood, Sharman's Grove, Oakes Wood, The Sough Wood, Thomas Wood, Warren Wood. Sixteen-acre wood, Wood, Wet Wood. It should be noted that no Priority Habitats were observed or recorded within the proposed development Boundary.

The following species were also recorded within the 2km search radius, Lapwing, Turtle Dove, Yellow Wagtail. Common Pipistrelle and Soprano Pipistrelle and GCN, But no other records of European Protected Species were found.

4.3 Ecological Assessment

The habitats within the house were assessed as generally having negligible suitability for bats, however as the stone chimney had a couple of cracks & crevices in it & the property is located within a woodland setting in addition to the daytime survey an evening survey was carried out to assess the use by bats. The House, shed & the adjacent areas of hard standing (concrete & gravel) and the decking were assessed as having negligible suitability for use by any European protected species.

The house is in daily use throughout with only a very small, enclosed attic area, the external lights & the light spill from the conservatory & the lack of available cracks and crevices within the building (apart from the chimney) make the building of negligible suitability for use by bats and this was confirmed by the complete lack of evidence of any bats emerging from the house roof or chimney or timber clad walls or the garden shed. There was no evidence of nesting birds within the buildings, and this may be due to the complete lack of direct flight access into the house or garden shed.

This proposal for the house will require dismantling of the existing upper storey extension & conservatory & footings to be dug for the replacement extension. However, the proposed extension is largely within the existing footprint of the existing property. As the proposed alterations are a replacement porch where the current lean to is, an enclosed single storey extension where the current conservatory is together with a two-storey building to replace the current upper storey extension within the existing footprint the impact is reduced. The area around the house to be directly affected is entirely hard standing, extensive decking & over grown ornamental shrubs & climbers by the garden shed, within the red development boundary & currently brightly lit by the conservatory light spill & external lights on the walls of the property. The proposal will not affect the terraced garden to the west so the habitats to be affected are minimal.

There will be no adverse impacts on any amphibians including GCN by this proposal as no ponds will be affected by this proposal and there are no ponds within 250m of the site, The house is surrounded by hard standing and timber decking which provides no cover for GCN & the rest of the garden will be unaffected by the proposals as such the likelihood of any adverse impacts on GCN is considered to be negligible.

The nearest Site of Special Scientific Interest is Coughton Wood and Marsh SSSI situated 1.2km away & the River Wye SSSI and Special Area of Conservation (SAC) which is situated 1.5km away whilst the works are confined to the low level extensions to the house within an area of hard standing & decking with some low level removal of ornamental shrubs by the roadside as such it is not considered that the proposed works will have any potential to have adverse effects on the identified designated sites.

Although the designated sites will not be directly adversely impacted on by the proposed low-level works and therefore there will be no impact on them, indirect or secondary impacts will also need to be considered on the SAC.

Even though there will be no direct impacts on the designated sites as the proposed works are for an extension & the existing foul water system will be utilized for the extension so there is no potential for phosphate leaching from the site as there are no ditches or drains that lead into the tributaries of the River Wye.

The other consideration is bat species that are associated with the River Wye & the Wye Valley SAC, such as Lesser & Greater Horseshoe bats could be adversely affected by this proposal. However, as an evening survey was carried out & whilst plenty of foraging bats were recorded using the surrounding woodlands no Horseshoe bats were recorded using the site or the nearby woodlands & the design of the extension will not cause additional light spill into the woodlands on the opposite side of the lane.

In addition, because the whole house & decking area is well lit up by the external lights & existing conservatory causes light spill from it into the night sky, as well as light spill from the house this proposal will not increase the current light levels but will reduce the light spill as the conservatory is to be replaced so there will be no secondary impacts on the woodlands in the area & no secondary impacts on the foraging bats in the area.

5. Conclusion, Mitigation & Enhancements

The proposed replacement extensions & alterations are limited to works on the eastern & northern elevation of the house as shown on the proposed plans in appendix five.

The house & shed and its immediately adjacent areas of hard standing (decking, concrete paths & gravel) with occasional overgrown ornamental shrubs are of limited value to wildlife, as such the proposal will not have any adverse effects on the wider area or any designated sites such as Coughton Wood and Marsh SSSI or The River Wye SAC (as detailed in section 4.3) or priority habitats or any European protected species such as Bats or amphibians or reptiles in the wider area.

The lack of evidence of Bat activity within the building suggests that there are no bats currently using the building for roosting; this may be due to the high light levels from the glazed conservatory roof and the site being well-lit from external lights and the construction being comprised primarily of painted walls which are well sealed providing no cracks or crevices and the timber boarding & roof tiles being too well sealed for bats. As such it can be concluded that the house & shed have negligible suitability for bats.

Even though no evidence of bats was found, and the majority of the adjacent habitats to be directly affected are hard standing, a careful precautionary approach to works to the existing roof should be taken so these impacts can be avoided all together as detailed in section 5.1 Mitigation (a precautionary approach). Although the house is surrounded by hard standing beyond this is a road/lane & woodland & although no amphibian (included GCN) or reptile habitat will be affected by this proposal & the likelihood of any GCN or reptiles being on site is concluded to be negligible a precautionary approach is recommended to avoid all potential harm.

There was no bird nests found in the house or shed & as such there is no restriction on the timing of any works to the house.

However due to the identification of the woods nearby to the house (over the Lane) being used by foraging bats mitigation will be required such as the building works would need to be restricted to daylight hours & no additional light spill from the proposed extension see 5.1 Mitigation.

Even though the works are deemed to have minimal impact to the local site this does not mean that enhancements cannot be designed to enable a clear biodiversity gain for wildlife as part of this proposal see section 5.2.

5.1. Mitigation (a precautionary approach)

All persons involved in the works to the house roof & the new extension shall receive a detailed 'Toolbox Talk' on Nesting birds, Bats & reptiles & Great Crested Newts & the importance of the nearby woodlands & River Wye SAC from Ros Willder of Willder Ecology, or a similarly qualified ecologist.

The toolbox talk will cover the following: -

- ❖ the full legal protection of Nesting birds, Bats & reptiles & amphibians (GCN)
- ❖ the lifecycle of Bats and their potential roosting & foraging areas within the site & wider woodland area
- ❖ The lifecycle of Great Crested Newts & reptiles & what habitats they will be found in & how to identify a GCN.
- ❖ What to do if evidence of either Bats or birds are found during works
- ❖ What to do if Great Crested Newts or reptiles are found during works
- ❖ All building works would need to be restricted to daylight hours with no external working lights that could cause disturbance to foraging bats in the nearby woods.
- ❖ All existing external lights on the north elevation will be removed
- ❖ Any ornamental shrub removal will be carried out, outside of the main birds nesting season March/April to August.

Before any dismantling works begin the house shall have a pre-commencement check to see if any birds have begun nesting or that there is any evidence of use by bats. All dismantling roof works will be overseen by Ros Willder of Willder Ecology. If any bats or GCN are found all works will cease until Natural England has been contacted and way forward agreed which may include a license application to permit the works to continue.

No new external lighting are planned on the walls of the building that could cause additional light spill into the surrounding area and the existing external lights will be removed & replaced with downlighters & which will reduce the current level of light spill away from the wider surrounding woodlands in the local area.

The extension has been designed so that will be no fenestration on the upper storey of the northern elevation that could cause light spill on to the wider surrounding woodland area.

5.2 ENHANCEMENTS

Although no bats or birds were found a stone open fronted bird box will be incorporated into the new extension wall on the side elevation as shown in appendix five.

As an enhancement for bats an integral bat soffit box will be included behind the barge boards at the edge of the extension roof & the extension roof will be lined with bitumastic roofing felt & a bat access tile included to encourage future use of the house by bats as shown in Appendix five.

If all the recommendations are followed no harm will occur to either the designated sites or bats or birds and enhanced provision will be made for future use by both bats and birds as an overall enhancement for biodiversity to the site.

APPENDIX ONE LEGAL STATUS OF BATS & BIRDS

LEGAL PROTECTION OF BATS

The Wildlife and Countryside Act 1981 (WCA) transposes into UK law the Convention on the Conservation of European Wildlife and Natural Habitats (commonly referred to as the 'Bern Convention'. The 1981 Act has been amended several times, most recently by the Countryside and Rights of Way [Crow] Act 2000, which added 'or recklessly' to S 9 (4)(a) and (b).

All species of bats are listed on Schedule 5 of the 1981 Act, and are therefore subject to the provisions of section 9, which make it an offence to:

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

The Conservation of Habitats and Species Regulations 2017 which consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law and came into force on 30th November 2017.

All bats listed on Annex IV of the Directive and some are also listed on the Annex II. The latter Annex relates to the designation of Special Areas of Conservation (SACs) and covers **Greater** and **Lesser Horseshoe bats**, **barbastelle** and **Bechstein's** bat.

Inclusion on Annex IV ('European protected species) means that member states are required to put in place a system of strict protection as outlined in Article 12; this is done through inclusion on Schedule 2 of the Regulations. Regulation 53 makes it an offence to;

- ❖ Deliberately capture or kill a bat
- Deliberately disturb a bat
- ❖ Damage or destroy a breeding site or resting place of a bat
- ❖ Keep, transport, sell or exchange, or offer for sale or exchange alive or dead bat or any part of a bat

LEGAL PROTECTION OF BIRDS

The Wildlife and Countryside Act 1981 is the main instrument for the protection of wild birds in the law of England, Wales and Scotland.

It protects all wild birds of whatever species (certain exceptions apply within the act).

Barn Owls are listed on Schedule 1 which gives them special protection.

The act makes it an offence “if any person intentionally- Kills, injures or takes (handle) any wild bird;

Takes, damages or destroys the nest of any bird while that nest is in use or being built; (barn owls do not ‘build’ a nest but may make a nest scrape) or

Takes or destroys an egg of any wild bird”

It is also an offence “if any person has in his possession or control-

any live or dead wild bird or any part of, or anything derived from, such a bird; or An egg of a wild bird or any part of such an egg” (s 1 (2)).

LEGAL PROTECTION OF AMPHIBIANS AND REPTILES

Reptiles are protected from killing and injury (two species are fully protected, this includes, but is not confined to:

Disturbance and deliberate destruction of their habitat) under The Wildlife and Countryside Act 1981 (as amended).

The Conservation (Natural habitats &c.) regulations 1994 (the habitats Regulations were recently updated by The Conservation of Habitats and Species regulations 2017

Amphibians such as Great crested newts are fully protected, including protection against:

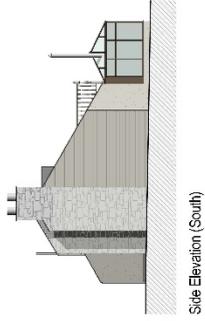
- Deliberate disturbance
- Deliberately killing or capturing
- Deliberately taking or destroying eggs
- Deliberately damaging or destroying breeding sites and places of shelter.

Licensing from Natural England or District Licensing with Nature Space

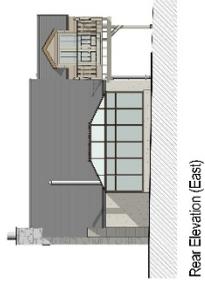
A Licence simply permits an action that is otherwise unlawful. A licence should be applied for if, on the basis of survey information and specialist knowledge, it is considered that the proposed activity is reasonably likely to result in an offence (killing, breeding site destruction, etc – see above). No licence is required if, on balance, the proposed activity is unlikely to result in an offence (this is from the great crested newt mitigation guidelines).

APPENDIX TWO EXISTING BLOCK PLAN & ELEVATION PLAN

All drawings are prepared in accordance with the requirements of the Building Regulations of 2010.
 It is noted that this drawing is prepared for information purposes.
 This drawing is the property of the Architect and is not to be used for any other purpose without the written consent of the Architect.
 The Architect is not responsible for any errors or omissions in this drawing.
 Apex Architecture is not responsible for any errors or omissions in this drawing.



Side Elevation (South)



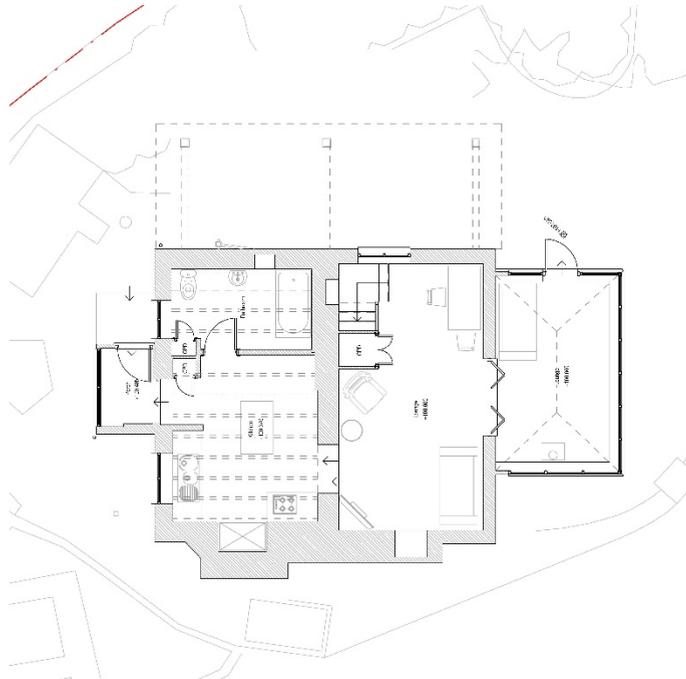
Rear Elevation (East)



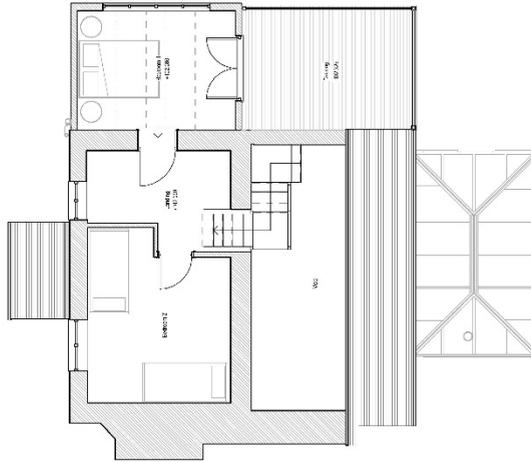
Side Elevation (North)



Front Elevation (West)



Ground Floor Plan



First Floor Plan

Project Name	Client	Scale	Drawn By	Checked By	Date
A	Willder Ecology 21	1:100	J. O'Connell	J. O'Connell	2023-06-01



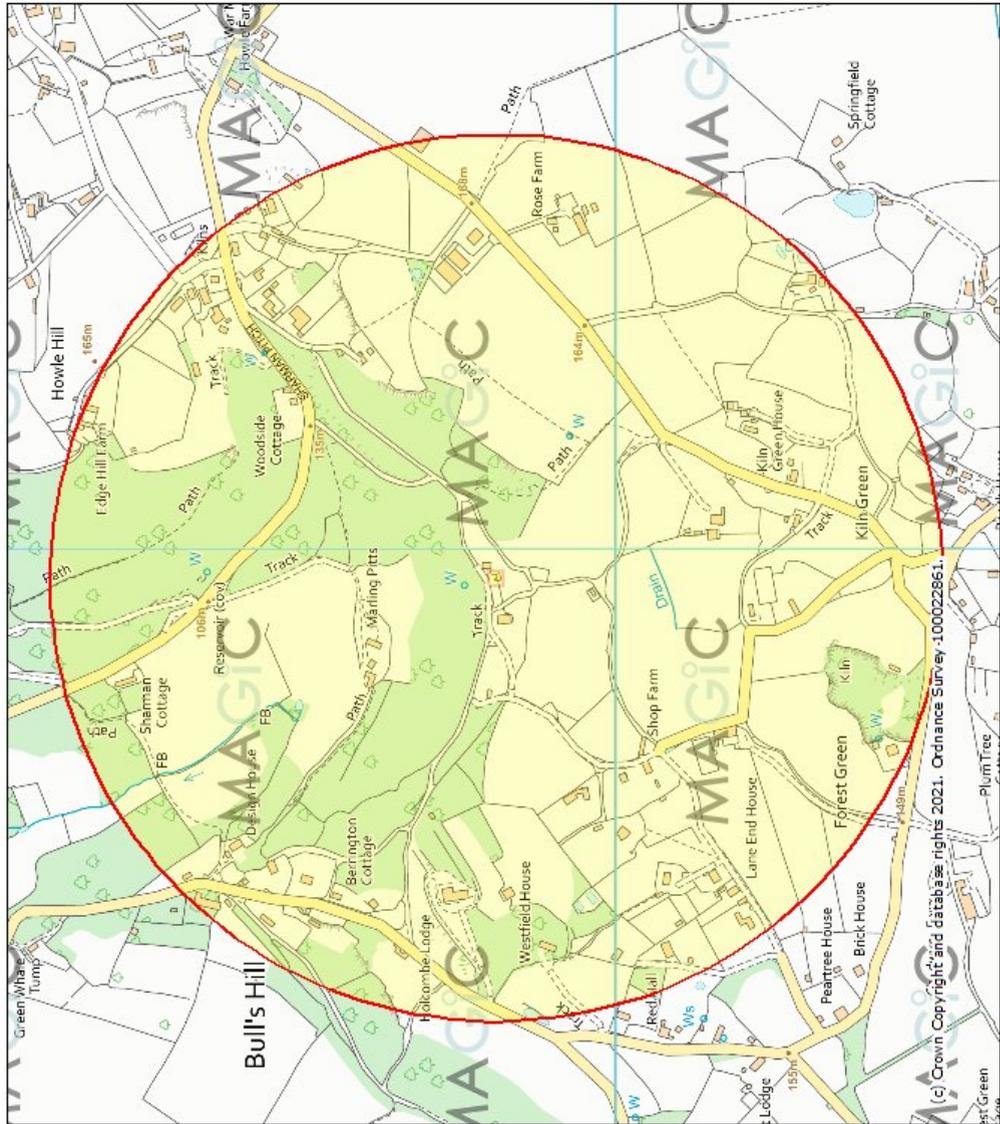
Apex Architecture is a registered architectural practice in Ireland.
 Registered Architect: James O'Connell
 Registration No: 123456789
 100, The Quay, Dublin, D01 X1A2, Ireland
 Tel: +353 1 234 5678
 Email: info@apexarchitect.com

Project Name	Client	Scale	Drawn By	Checked By	Date
A	Willder Ecology 21	1:100	J. O'Connell	J. O'Connell	2023-06-01

APPENDIX THREE POND SEARCH MAP

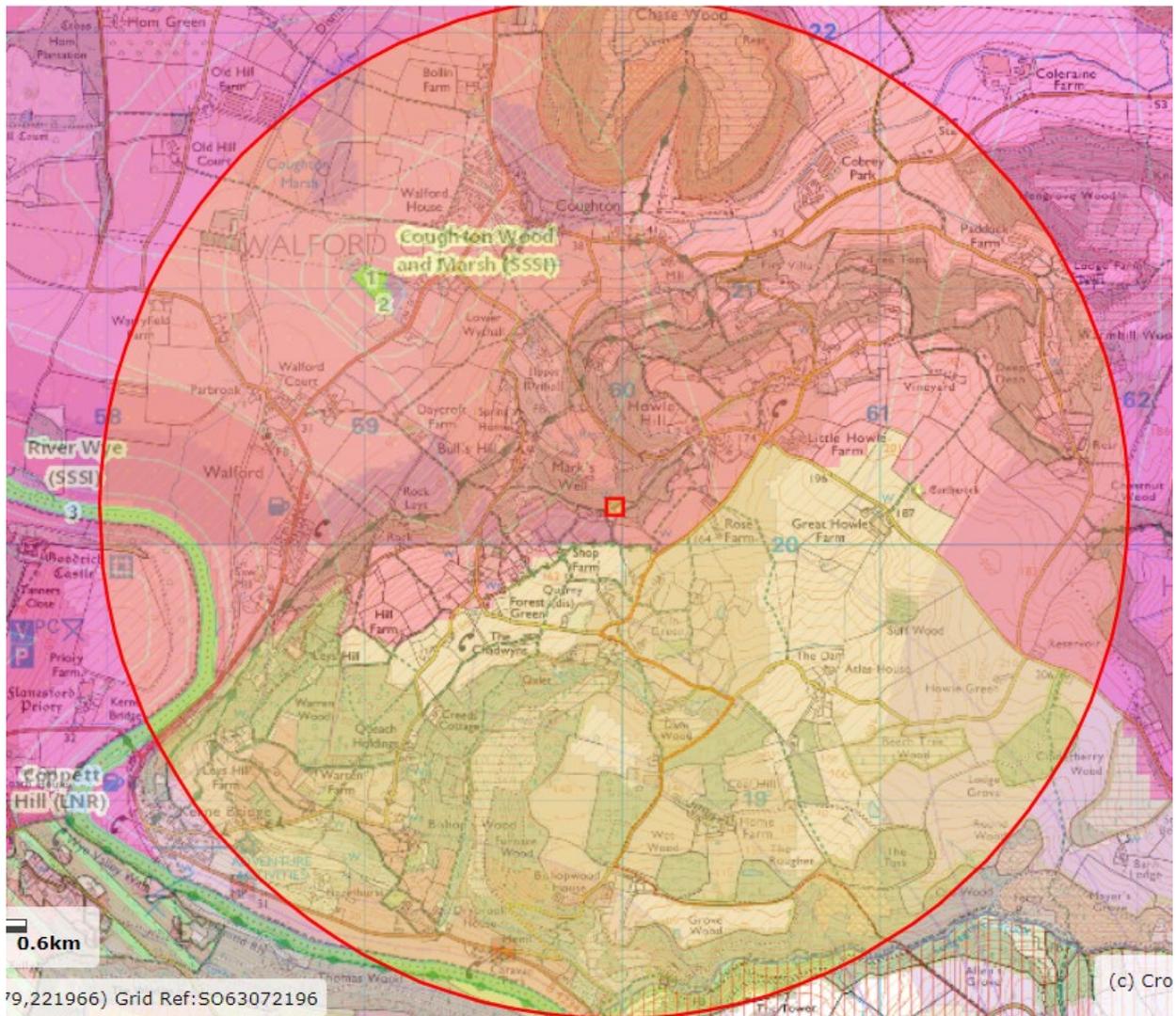
MAGiC

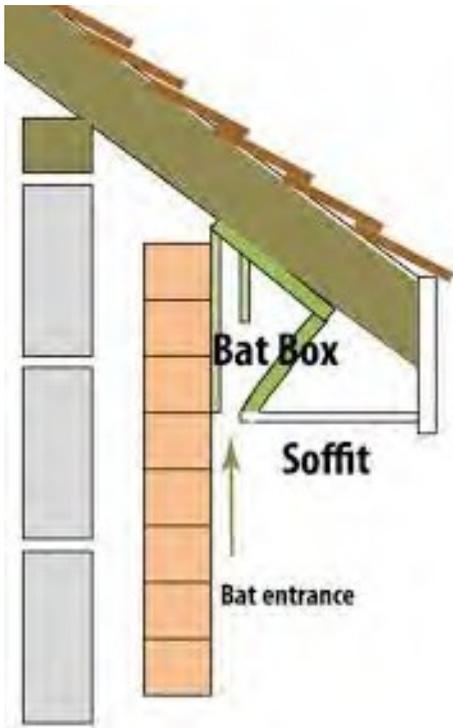
Pond Search



Projection = OSG36
 xmin = 358700
 ymin = 219500
 xmax = 361300
 ymax = 220700
 Map produced by MAGiC on 30 June, 2021.
 Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGiC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.

APPENDIX FOUR DESIGNATED SITE SEARCH MAP





To be positioned behind the barge board at the edge of the roof



Habibat Bat Access Slate - Standard

Dimensions: 418Hx375Wx80Dmm, entrance hole dimensions: 20Hx100Wmm, weight: 1.3kg. The Habibat Bat Access Standard Slate is designed to provide access to roof space for our protected bat species. The Bat Access Slate consists of a standard sized slate, with a capped vent which allows access to roof felt (for roosting Pipistrelles) or roof space.

Lead Access Tile

The Habibat Bat Lead Access Tile is designed to provide access to roof space for our protected bat species. The Bat Access Tile consists of a Lead tile, with a capped vent which allows access to roof felt (for roosting Pipistrelles) or roof space.



To be positioned within the new extension roof



WoodStone Build-in Open Nest Box

WoodStone Build-in Open Nest Box is designed for use in new build or renovations. The nest box is intended to be built into walls to provide nesting cavities. This provides much needed nesting cavities for species such as Robins, Wagtails and Black Redstarts. Constructed from FSC certified WoodStone this nest box will not deteriorate like a traditional wooden nest box. NHBS Price: £17.95 including VAT.



To be positioned at the top of the wall