Ecological Impact Assessment

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Site	Camelia Botnar Foundation, Ivorys Drive, Horsham, RH13 8DQ, West Sussex
Client	Mr E. Rodda
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The assessment and appraisal are considered relevant for a maximum of 18 months due to the possibility of changes in the habitats on-site and scope of proposals. Should alterations to the proposals or site occur, the ecologist should be consulted to confirm that the appraisal is still valid.

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Summary

Mr E. Rodda has commissioned a Preliminary Ecological Appraisal (PEA) and Ecological Impact Assessment (EcIA) for proposals at the Camelia Botnar Foundation, Horsham, RH13 8DQ, West Sussex *(grid refence: TQ19822384, hereafter referred to as 'the site'*).

The proposals are for the installation of solar panels with associated battery storage and cabling.

A Preliminary Ecological Appraisal was carried out on 25th May 2025 by Aidan Bird (*BSC in Ecology, Conservation and Environment* and accredited agent under a CL18 license with 6 years professional experience).

The proposals area consists of a walled garden. Within the garden is modified grassland with scattered trees, ruderal vegetation, bare ground and paved paths. A shed is noted along the western boundary.

No ponds are noted onsite. 14no. ponds are noted within a 500m radius of the site.

The shed is considered to have bat roost suitability but was inaccessible for further inspection. Should it be affected by works, a further investigation shall be required before works commencing.

The grassland is of limited value for reptiles and amphibians. During the survey a grass snake *Natrix helvetica* was noted. Due to the limited scope of works, no impacts shall occur to reptiles or amphibians if the mitigation within this report is followed.

The site also presents foraging value for birds, badgers and hedgehog.

When mitigation and enhancements have been taken into account, the proposals are not considered to have a negative impact upon designated sites, habitats or protected species in accordance with planning policy and once enhancements are considered, would result in a minor gain of onsite ecology. The proposals would therefore accord with the relevant Local Plan Policies.

1.0 Introduction

1.1 Mr E. Rodda has commissioned a Preliminary Ecological Appraisal (PEA) and Ecological Impact Assessment (EcIA) for proposals at Camelia Botnar Foundation, Ivorys Drive, Horsham, RH13 8DQ, West Sussex (grid refence: TQ19822384, hereafter referred to as 'the site').

1.2 A Preliminary Ecological Appraisal was carried out on 25th May 2025 by Aidan Bird (BSC in Ecology, Conservation and Environment and accredited agent under a CL18 license with 6 years professional experience).

1.3 The following ecological impact assessment report has been completed by Alex Rosenfeld (6 years professional experience). The purpose of the assessment has been to identify whether any potential impacts upon protected species, habitats or designated sites might occur, and to propose mitigation or avoidance measures where necessary.

1.4 Based on the results of the appraisal, recommendations for potential ecological enhancements have been provided.

Site Description and Surrounding Area

1.5 The proposals area consists of a walled garden. Within the garden is modified grassland with scattered trees, ruderal vegetation, bare ground and paved paths. A shed is noted along the western boundary.

Figure No. 01 – Site location



Figure No.02 – UKHabs Map



1.6 The site is located on Ivorys Drive which leads off Maplehurst Road to the east. The site is within the landholding of the Camelia Botnar Foundation, RH13 8DQ, West Sussex. The works area is surrounded by hedgerow and walls.

1.7 Bordering the site beyond the wall and hedgerow lies grass gardens belonging to the same owner to the east. To the south and west are grass areas with tracks and vacant land also in the same land holding. To the north runs Ivorys Drive.

1.8 The wider area consists primarily of arable fields with hedgerows and woodland.

1.9 No ponds are located onsite. 14.no ponds are within a 500m radius.

Proposals

1.10 Proposals are for the installation of solar panels with associated battery storage and cabling.

2.0 Scope of Assessment

1. *Categorise habitats present on the site;*
2. *Identify habitat which may have potential for protected species;*
3. *Identify whether any signs of protected species are present on-site;*
4. *Recommend whether further surveys are required, or whether there are any relevant constraints with regards to protected species;*
5. *Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;*
6. *Provide recommendations as to how the site and proposals could be enhanced with regards to protected species and habitats.*

2.1 The assessment and appraisal are considered relevant for a maximum of 18 months due to the possibility of changes in the habitats on-site and scope of proposals. Should alterations to the proposals or site occur, the ecologist should be consulted to confirm that the appraisal is still valid.

3.0 Planning Policy and Legislation

National Planning Policy

3.1 The National Planning Policy Framework (NPPF) was updated in December 2024 and sets out the government planning policies for England and how they should be applied. 'Chapter 15: Conserving and Enhancing the Natural Environment' states that development should be 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.'

3.2 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

3.3 The current Local Plan is subject to Regulation 19. Therefore, The Horsham District Planning Framework (Horsham District Council, 2015 - 2031) was used to appraise the proposals.

Local Planning Policy

3.4 The site is within the Horsham District. As the existing local plan is at Regulation 19 stage, the proposals shall be assessed against existing Horsham District Planning Framework 2015.

3.5 Policy 31 - Green Infrastructure and Biodiversity states:

1. Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. Proposals that would result in the loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss, and ensures that the ecosystem services of the area are retained.

2. Development proposals will be required to contribute to the enhancement of existing biodiversity, and should create and manage new habitats where appropriate. The Council will support new development which retains and /or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity through the creation of green spaces, and linkages between habitats to create local and regional ecological networks.

3. Where felling of protected trees is necessary, replacement planting with a suitable species will be required.

4. a) Particular consideration will be given to the hierarchy of sites and habitats in the district as follows:

i. Special Protection Area (SPA) and Special Areas of Conservation (SAC)

ii. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)

iii. Sites of Nature Conservation Importance (SNCIs), Local Nature Reserves (LNRs) and any areas of Ancient woodland, local geodiversity or other irreplaceable habitats not already identified in i & ii above.

b) Where development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated that:

i. The reason for the development clearly outweighs the need to protect the value of the site; and,

ii. That appropriate mitigation and compensation measures are provided.

5. Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to a HRA to determine the need for an Appropriate Assessment. In addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan

- The Conservation of Habitats and Species Regulations 2017;
- The Wildlife and Countryside Act 1981 (as amended);
- The Natural Environment and Rural Communities (NERC) Act 2006;
- The Wild Mammals (Protection) Act 1996.

3.6 All species of bat and their roosts are protected under The Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981. It is an offence to intentionally kill, injure or handle a bat, to possess a bat (live or dead), disturb a roosting bat, or sell or offer a bat for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

3.7 All UK bird species are protected against disturbance whilst occupying a nest under the Wildlife and Countryside Act 1981. Developments that could predictably disturb, kill or injure nesting birds could result in an offence. Furthermore, a number of bird species are targets of UK and Local Biodiversity Action Plans and listed as Species of Principle Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. This obligates local authorities to have regard to the purpose of conserving biodiversity with particular emphasis on targeted species.

3.8 All other mammals receive general protection against cruelty, inhumane killing or injuring under the Protection of Mammals Act 1996.

4.0 Methodology

Desktop Study

4.1 'Magic' Maps was consulted for information pertaining to priority habitats, statutory designated sites and permitted European Protected Species Mitigation Licences (EPSML's) within a potential zone of influence of the development site.

4.2 The following potential zones of influence have been used when identifying designated sites in the local area: Local Nature Reserves (LNRs), National Nature Reserves (NNRs) and Sites of Special Scientific Interest (SSSIs) were searched for within a 2.0km radius of the site, and internationally designated sites including Special Protection Areas (SPAs), potential Special Protection Areas (pSPAs), Ramsars (Wetlands of International Importance) and proposed Ramsars (pRamsar) within a 10km radius of the site. Special Areas of Conservation (SACs) and possible Special Areas of Conservation (pSACs) within a 12km radius of the site, to account for the potential presence of SAC's designated for their bat interest, in accordance with recent guidance (SDNP, 2020).

4.3 Due to the scale and scope of proposals, a biodiversity record centre search was not considered necessary.

4.4 A search was carried out to identify features of ecological interest in the area, such as water bodies and ancient woodland.

4.5 The report is written based on the following guidance:

- CIEEM Guidelines for Ecological Report Writing 2017 (CIEEM, 2017)

- CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018)

- Surveys have been carried out following the guidance sources set out in CIEEM's Good Practice Guidance for Habitats and Species (CIEEM, 2021), which include:

  o CIEEM Guidelines for Preliminary Ecological Appraisal, Second Edition (CIEEM, 2017)

  o CIEEM Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. Second Edition (CIEEM, 2017)

  o Bat Conservation Trust (BCT) Bat Surveys for Professional Ecologists: Good Practice Guidelines (BCT, 2023)

Site Visit

4.7 A site visit was conducted on 25th May 2025 during suitable. Habitats were recorded broadly according to the UK-Hab Classification System as described within the UK Habitats Manual v2.01 (UKHab Ltd 2023). All habitats present on-site were recorded on a UKHab map (*Figure No. 01 – Site Habitat Plan*).

4.8 During the survey any constraints with regard to protected species were considered; potential for impacts upon protected species even when evidence of such was not noted at the time of survey.

4.9 Points of interest for protected species have been plotted into the Site Habitat Plan and within target notes. Protected and Notable Species considered as part of this assessment include but are not limited to:

- *Bats – foraging, commuting, roosting, swarming and hibernating;*
- *Badgers Meles meles – setts, latrines, push-unders and trapped hairs to fences, snuffle holes, and tracks;*
- *Dormice Muscardinus avellanarius – nesting and commuting;*
- *Great Crested Newts Triturus cristatus and other Amphibians such as Common Toads Bufo bufo – terrestrial active and hibernation habitat and aquatic habitat, including commuting;*
- *Birds – nesting, foraging and wintering;*
- *Reptiles – terrestrial active and hibernation habitat;*
- *Rare or Notable Invertebrates;*
- *Rare or Notable Plants;*
- *Water Voles Arvicola amphibius – foraging and shelter habitats;*
- *Otters Lutra lutra – foraging and shelter habitats;*
- *White-clawed Crayfish Austropotamobius pallipes;*

4.10 The structure and trees were inspected for features conducive to bat and bird roosting. The bat roost assessment was conducted following the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines (2023). Any evidence of bats such as grease marks, bat droppings, feeding remains and suitable cavities were noted.

4.11 Structures were assigned levels of bat roost suitability, ranging between negligible and high for buildings. Trees are assessed either as having no suitability, PRF-I (only able to support individual bats) and PRF-M (being able to support larger numbers of bats and therefore maternity colonies).

4.12 Due to the site visit being carried out over one day, it is possible that some signs of protected species may not be apparent within this short timeframe. This is a constraint

recognised within the Survey Guidelines and all reasonable effort has been made to identify evidence of protected species. The further revisits added certainty to the original findings.

Ecological Impact Assessment

4.13 The methodology for Ecological Impact Assessment (EcIA) follows best practice guidelines set by the Chartered Institute of Ecology & Environmental Management (CIEEM): 'Guidelines for Ecological Impact Assessment' (CIEEM, 2018). This includes identifying the baseline conditions on the site and subsequently rating the potential effects of the development based on the sensitivity and value of the resource affected, combined with the magnitude, duration and scale of the impact (or change). This is initially assessed without mitigation measures, and then assessed again after allowing for the proposed mitigation measures; this provides the residual effects. The assessment is divided into construction effects and longer-term operational effects.

4.14 Each ecological feature within the site has been considered within a defined Geographic context such as:

- International and European;
- National;
- Regional;
- County;
- District;
- Local;
- Site Level;
- Negligible.

4.15 Based upon CIEEM guidance, value was determined with reference to the following factors:

- Its inclusion as a Designated Site or other protected area;
- The presence of habitat types of conservation significance, e.g. Habitats of Principal Importance (NERC 2006);
- The presence (or potential presence) of species of conservation significance e.g. Species of Principal Importance (NERC 2006);
- The presence of other protected species e.g. those protected under The Wildlife and Countryside Act 1981;
- The sites social and economic value.

4.16 Specifically in the case of bats, the impact assessment has been conducted in accordance with the recently published Bat Mitigation Guidelines (Reason and Wray 2023). Other relevant guidelines such as the Dormouse Conservation Handbook, Great Crested Newt Mitigation Guidelines and Froglife Advice Sheet for Reptiles were consulted as appropriate.

5.0 Constraints

5.1 During the assessment, the shed along the western boundary was not accessible internally. All other areas of the site were inspected.

6.0 Baseline Ecological Conditions

Desktop Study

Designated Sites and Habitats within 12.0km

6.1 No statutory designated sites were noted within a 2.0km or 12.0km radius of the site.

6.2 No non-statutory designated sites were noted within a 1.0km radius of the site.

6.3 Due to the nature of the proposals, the LPA will not have to consult with Natural England.

Habitats

Desk Study

6.4 Within 1.0km of the site there are Priority Habitats of Deciduous Woodland and Traditional Orchards. A section of Deciduous Woodland lies c.20.0m to the south of the site.

Site Assessment

6.5 The site is given over to the following habitats.

U1b5 – Building

6.6 A small shed lies along the western boundary. Overall, this habitat is of '**negligible'** ecological value. Its' potential for supporting protected species shall be discussed in section 7.0 - *Protected Species*. This habitat is of '**negligible'** ecological value.

U1b6 – Other Developed Land

6.7 A small paving slab path is noted in the north of the site.

G3c, 32 81 – Modified Grassland with Scattered Trees and Ruderal Vegetation

6.8 The majority of the site consists of a tall sward height grassland. The dominant species include brome sp. Yorkshire fog *Holcus lanatus* and perennial ryegrass *Lolium perenne.* The edges of the site, which are not to be affected by works contained more species such as bind weed *Convolvulus arvensis,* Oxtongue *Helminthotheca echioides* and buttercup *Ranunculus repens.*

6.9 In the north western corner lies an area of planted trees. Species consists predominantly of Scots pine *Pinus slyvestris*. A low number of goat willow *Salix caprae* are also present. All trees are of a similar height and age. Overall, this habitat is of **'site'** value only.

6.10 A small area of ruderal vegetation is noted along the western boundary. Species noted include bramble *Rubus fruiticosus agg.* bind weed and hogsweed *Heracleum sphondylium*. Overall, this habitat is of '**site'** value only.

510 – Bare Ground

The north eastern area of the site consists of bare ground, appearing to be used for excavator training. This habitat is of **'negligible'** value.

U1b – Developed Land; Sealed Surface

6.11 A paving slab path is noted across the site. This habitat is of **'negligible'** value.

7.0 Protected Species Assessment

Bats

Desk Study

7.1 No granted EPSML granted within the last 10 years are present within a 2.0km radius of the site.

There are records of common and nathusius's pipistrelle (*Pipistrellus pipistrellus* and *Pipistrellus nathusii*), serotine (*Eptesicus serotinus*), soprano pipistrelle (*Pipestrellus pygmaeus*), Bechstein's (*Myotis bechsteinii*) and western barbastelle (*Barbastella barbastellus*) within a 2.0km radius.

Site Assessment

7.2 No signs of bat were noted during the assessment.

7.3 The small sheds on the boundary appeared to have value for bats externally with lifted areas of roof noted.

7.4 The walls were topped with clay roof tiles which appeared to be cracked and lifted thus being of value to roosting bats. The wall roof and shed are considered to be of **'low'** suitability to roosting bats.

7.5 As plans are restricted to areas away from the sheds and walls, no further investigations were conducted.

7.6 The trees onsite are all small with no value for bats. No cracked or lifted bark was noted during the survey. Overall, the trees are of '**negligible'** suitability for roosting bats.

Foraging and Commuting

7.7 The low species diversity and lack of inflorescence within the grass sward limits the value for foraging bats. The wider surrounding area consists of ponds, woodland and hedgerows with minimal night time lighting creating prime foraging and commuting habitat. Overall, the walled garden is of **'low'** value to foraging bats.

Birds

Desk Study

7.8 Numerous bird species are present in the local area, including those which utilise farmland, woodland and hedgerow habitats.

Site Assessment

7.9 No nests were noted during the survey. The grassland is too long to support species such as skylark and meadow pipit nesting. The scrub would support nesting species such as song thrush *Turdus philomelos* and wren *Troglodytes troglodytes.*

7.10 The entire site provides foraging opportunities for a range of species such as blackbird *Turdus merula,* siskin *Spinus spinus* and robin *Erithacus rubecula.* Overall, the site is of **'low'** value to nesting birds and '**low'** value to foraging birds.

7.11 The wider landholding consists of numerous opportunities for nesting birds.

Reptiles

Desk Study

7.12 There are multiple records of reptiles within a 2.0 km radius of the site.

Site Assessment

7.13 The site provides limited foraging and commuting opportunities across the area. During the survey a grass snake was noted on the eastern edge of the site. The grassland does provide limited sheltering and commuting opportunities for reptiles within the ruderal vegetation.

7.14 The wall surrounding some of the site significantly reduces the potential for amphibians and reptiles to enter.

Amphibians

Desk Study

7.15 There are no records of GCN within a 500m radius of the site.

7.16 1no. pond is located onsite. 14no. ponds were noted within a 500-meter radius of the site. The closest is c. 20.0m to the south of the site.

Site Assessment

7.17 The site offers limited value for amphibians due to the tall sward height of the grassland. The scrub creates foraging and hibernating value. Th walls vastly reduce the potential for amphibians to enter the site.

7.18 The surrounding areas to the site are of little value to GCN in the form of well-tended garden to the east, arable fields and bare ground. The ponds noted are all primarily distant from one another or in small groups away from the site.

7.19 The potential for GCN to be present is '**low'**.

Badger

Desk Study

7.20 Badger (*Meles meles)* records are confidential, but they are likely present nearby.

Site Assessment

7.21 No evidence of badger such as setts, snuffle holes or latrines were noted. The site is bound by hedgerow and walls. Due to the connectivity of woodland, hedgerows and scrub in the surrounding area, there is potential that badger would be present locally. The site has a 5-bar gate on the southern aspect which could allow entry. The site provides good foraging value. Overall, the site is of '**low' value** to foraging badger.

Other

7.22 No potential for or evidence of any other protected species such as rare plants was recorded. There is good potential for hedgehogs *Erinaceus europaeus* to forage in the grass garden given its size and the surroundings. No impacts upon other protected species are considered likely and have not been assessed further.

8.0 Evaluation of Impacts and Mitigation

Designated Sites

Potential Impacts

8.1 None foreseen. The intervening distance and varying habitats between the site and Designated Sites shall negate any potential impacts.

Avoidance, Mitigation and Compensation

8.2 None required.

Habitats

Potential Impacts

8.3 In the absence of mitigation, areas of grassland would be lost permanently to works.

8.4 Habitats could be permanently degraded through site activities such as plant machinery movement and ground works.

Avoidance, Mitigation and Compensation

8.5 Ensure all materials and plant machinery is stored and operates within exiting hard surfaces where possible. Ground Protection Measures shall be installed on plant machinery routes within the grassland to avoid compaction and churning up of the ground. The lightest machinery possible shall be used at all times to avoid compaction.

8.6 Tree protection fencing shall be installed around the area of scattered trees to avoid impacts to root protection areas in line with BS5837:2012.

8.7 All hazardous chemicals should be stored on existing hard surfaces away from soft or open ground. Refuelling should be undertaken in a designated area on existing hard surfaces. Spill kits should be provided in case of emergency.

Biodiversity Net Gain

Potential Impacts

8.8 In the absence of mitigation, habitats could degrade and lose their biodiversity value permanently due to works.

Avoidance, Mitigation and Compensation

8.9 To avoid degradation of the removed turf along the cable path, the topsoil shall be removed carefully prior to installation and stored safely to ensure that it doesn't dry out or fall apart. Once the cables are installed, the topsoil and turf shall be replaced, monitored and managed to ensure they maintain a healthy state.

8.10 The grassland beneath the panels shall be monitored and subject to management to ensure it does not degrade post works.

8.11 To ensure the biodiversity value of the site is increased onsite, trees shall be planted along the wall edges on the northern site boundary or within the wider landholding post works.

Species shall be native and produce fruit and nuts to provision foraging value for a range of species.

Bats

Potential Impacts

8.12 None foreseen. The shed on the western boundary and tiled top of the wall are not to be affected by works. No trees are of value to roosting bats.

8.13 No loss of foraging habitat shall occur to facilitate proposals.

Avoidance, Mitigation and Compensation

8.14 Should proposals change to involve impacts upon the shed and tiled wall, further investigations shall be required.

8.15 Works shall be designed to minimise disturbance of any bats which might use the surroundings. No external lighting shall be installed whatsoever.

8.16 Should any lighting be required, it must strictly accord with the BCT/ILP Guidance Note 08/23, with minimal illumination of the boundary vegetation in particular (taken to be no more than 0.2 lux other than for emergency lighting). Construction phase lighting shall not be used.

8.17 Trees and hedges to be retained must be protected in accordance with British Standard 5837:2012.

Nesting Birds

Potential Impacts

8.18 No vegetation is currently scheduled for removal that would impact nesting birds. If proposals change, this could lead to the destruction of a nest. This would constitute an offence under the Wildlife and Countryside Act 1981 (As Amended).

Avoidance, Mitigation and Compensation

8.19 Should proposals change to include the removal of ruderal vegetation on the western boundary, works shall be carried out outside of the nesting season (March-August inclusive) and in any case shall be preceded by a check to ensure no nests are present. If this is not possible, a more detailed inspection shall be undertaken by a suitable qualified ecologist and dependent on the results of this, monitoring would be necessary by the ecologist to confirm no nests are present or likely to be concealed.

8.20 Any active nests must be granted a 5.0 m buffer from any works, until such time that the chicks within have fledged and the nest is no longer in active use.

8.21 Should an active nest be discovered or suspected during works, all operations in the area must cease and a suitably qualified ecologist contacted for advice.

Reptiles and Amphibians

Potential Impacts

8.22 In the absence of mitigation, works could lead to the injury or death of a reptile or amphibian.

Avoidance, Mitigation and Compensation

8.23 Due to the scope and scale of works, it is considered Reasonable Avoidance Measures shall be sufficient to protect amphibians and reptiles.

8.24 Prior to works starting, the entire works area to be impacted shall be mown low to nullify the value for reptiles and amphibians.

8.25 The grass should be mown in two phases. The first should take the sward to 150mm then checked by a suitably qualified ecologist. Any reptiles or amphibians found shall be moved to suitable habitats away from the works area. A second cut shall take the sward to 50mm. The grass shall be cut in a directional manner from the centre of the site towards the edges to encourage any reptiles or amphibians present to leave the area. Cutting of the grass should be undertaken during the reptile season (March – October inclusive) to ensure reptiles do not hibernate in the works area.

8.26 The grassland shall be kept at a low sward height throughout the works period to ensure it continues to be of no value to reptiles and amphibians. A thorough check of the works area shall be undertaken by an ecologist prior to works (post cutting).

8.27 All materials shall be stored on existing hard surfaces where possible or pallets, and any piles of timber metals etc. checked for presence of amphibians or reptiles before removal.

8.28 In the **highly unlikely** event a GCN is discovered, all works must cease and a suitably qualified ecologist contacted for advice.

Badger

Potential Impacts

8.29 In the absence of mitigation, there is a potential that badgers and other mammals could become trapped in trenches and footings.

Avoidance, Mitigation and Compensation

8.30 Ensure all trenches and footings are covered at night and when the site is unattended or fitted with a shallow angled ramp to allow any trapped animals to escape.

Other

Potential Impacts

8.31 In the absence of mitigation there is a low risk of hedgehogs being disturbed, especially if materials are not stored properly in the garden.

Mitigation and Compensation

8.32 All materials shall be stored on hard surfaces or pallets, and any piles of aggregates, timber etc. checked for presence of hedgehogs before removal.

Residual Impacts

8.33 The overall impact of the scheme will be negligible.

9.0 Ecological Enhancements

9.1 The most beneficial enhancements would involve the following:

- Scattered fruit and seed producing trees and shrubs should be planted within the wider landholding.
- Planting of night scented species such as jasmine and honeysuckle to provide foraging value for bats.
- Altered management of the existing modified grassland for the benefit of wildlife, including the addition of suitable wildflower seed / plugs and an altered mowing regime which benefits floristic diversity.
- The provision of nesting boxes for a variety of bird species such as starling and house sparrow within trees and swallow boxes in a sheltered spot away from external lighting on the walls.
- The creation of log and compost piles, as well as artificial hibernacula in quiet corners of the site;
- Bat boxes suitable for a range of species to be incorporated into the southern aspect of the walls trees;
- Installation of invertebrate boxes in both sunny and sheltered locations to cater for a range of species.

10.0 Conclusions

10.1 The proposals area consists of a walled garden. Within the garden is modified grassland with scattered trees, ruderal vegetation, bare ground and paved paths. A shed is noted along the western boundary.

10.2 The site offered '**low' value** for roosting bats within the shed and tiled roof of the walls.

10.3 The site is of value for foraging and nesting birds and foraging badger, reptile and hedgehog.

10.4 No further surveys are required. Should works change to involve changes to the sheds and tiles on the walls, further investigations shall be required.

10.5 No significant effects are anticipated upon designated sites, provided the avoidance and mitigation measures stated within this report are followed.

10.6 When mitigation has been taken into account, the proposals are not considered to have a negative impact upon designated sites, habitats or protected species. Enhancements and a Biodiversity Net Gain Assessment are included to confirm how ecological gains will be achieved.

11.0 References

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13.0 Appendix A - Site Photos

Photo 1 –Grassland viewed looking south.



Photo 2 - Area of trees in the northwest of the site.



Photo 3 – Shed on the western boundary with bat roost potential and ruderal vegetation surrounding.



Photo 4 – Dense ruderal vegetation along the western boundary.



Photo 5 – Bare ground used for excavator training.



14.0 Appendix B - Pond Locations

