

Adonis Ecology Ltd.

Biodiversity Protection and Enhancement Strategy for 6 The Grove, Epsom to Discharge a Planning Condition

Project Ref: 1533

Prepared on behalf of:

Oakton Developments

124b High Street
Epsom
Surrey
KT19 8BJ

By:



Adonis Ecology Ltd.

Unit 11 Lavenham Studios
Brent Eleigh Road
Lavenham, Sudbury
Suffolk, CO10 9PE
Tel: 01787 249 160

E-mail: askus@adonisecology.co.uk

www.adonisecology.co.uk

Registered in England and Wales No: 6208092
Registered Office: Crane Court, 302 London Road, Ipswich, IP2 0AJ.

Quality Assurance

Copyright © Adonis Ecology Ltd.

The findings outlined within this report and the data we have provided are to our knowledge true, and express our bona fide professional opinions. This report has been prepared and provided in accordance with the Chartered Institute for Ecology and Environmental Management (CIEEM) Code of Professional Conduct and the British Standard BS 42020:2013 which provides a code of practice for biodiversity in planning and development (BSI, 2013).

As far as the author and report checker are aware, the only differences that occur in this report from the recommended layouts are:

- to enable greater clarity and reduce repetition);
- where there are inconsistencies in the guideline documents; and
- to retain a proportionate approach in accordance with BS 42020:2013.

No method of assessment can completely remove the possibility of obtaining partially imprecise or incomplete information. Therefore, we cannot guarantee that this assessment completely defines the degree or extent of the occurrence of various species or habitats on the site, or the effectiveness of recommended actions as described in the report. In addition, as the ecological situation of a site is dynamic, this assessment pertains only to the conditions noted during the site visit. Therefore, to achieve the objectives of assessment as stated in this report, the conclusions are based on the information that was available during the time of the assessment and within the limits prescribed by our client in the agreement.

	Name	Signature
Report prepared by:	Marguerite Ravn BA (Hons) MPhil	
Report checked by:	Katrina Wells BSc (Hons) MSc ACIEEM	K. Wells

Contents

- 0 SUMMARY 3**
- 1 INTRODUCTION 4**
- 2 ECOLOGICAL METHOD STATEMENT 4**
- 3 PROTECTION FEATURES 5**
 - 3.1 Bats 5
 - 3.2 Birds 6
 - 3.3 Badgers 7
- 4 ENHANCEMENT FEATURES 8**
 - 4.1 Bird Boxes 8
 - 4.2 Habitat Piles 8
 - 4.3 Fruit Trees 9
- 5 HABITAT MANAGEMENT PLAN 9**
- 6 CONCLUSION 10**
- 7 REFERENCES 10**
- 8 APPENDIX 11**
 - 8.1 Appendix 1: Figure 11

Tables

- Table 1: Habitat Management Procedures for 6 The Grove, Epsom 9

Figure

- Figure 1: Locations of Enhancements at 6 The Grove, Epsom 11

0 SUMMARY

0.1 Adonis Ecology Ltd. was commissioned by Oakton Developments to produce a Biodiversity Protection and Enhancement Strategy to address Condition 13 of the extant planning permission 18/00647/FUL for 6 The Grove, Epsom, Surrey, KT17 4DQ, Grid Reference TQ 213 607.

0.2 This strategy consists of biodiversity protection and enhancement measures planned for the site to address condition 13, as well as details of the ongoing management required to ensure effectiveness of the enhancements. Condition 13 reads as follows:

The development hereby approved shall be carried out in accordance with the protection, mitigation and enhancement measures detailed in the ecological assessment with the plan of implementation details to be submitted to the Local Planning Authority and agreed in writing prior to the commencement of the development. The approved measures shall thereafter be maintained in perpetuity.

Reason: To preserve and enhance biodiversity and habitats in accordance with Policy CS3 of the Core Strategy (2007) and Policy DM4 of the Development Management Policies 2015.

0.3 The protection measures for bats on site will consist of the installation of a bat box and a licenced ecologist to check the roof internally before the removal of the roof tiles begin, as well as supervision during the hand removal of the relevant roof tiles and soffits. In addition lighting precautions will be adhered to.

0.4 The protection measures for badgers and badger setts on site will consist of a thorough follow-up check of the site no more than one month prior to commencement of the works. Fences will be erected to protect badger setts, and an ecologist will supervise any digging within 20m of any sett entrances as well as the demolition of the existing shed. In addition, timing, lighting and working precautions will be adhered to.

0.5 The protection measures for birds consist of timing precautions or a bird nest check to avoid risk to active bird nests.

0.6 The biodiversity enhancements on site will consist of house martin and sparrow bird boxes, the construction of habitat piles and the planting of fruiting plants and bushes.

0.7 Full details of all protection and enhancement measures are outlined within this report. A habitat management plan is included with planned timescales and subsequent requirements to maintain the enhancement measures in perpetuity.

0.8 If this Biodiversity Protection and Enhancement Strategy is followed, it should be possible for the proposed development to ensure continuing provision of ecological features and ensure the long-term maintenance of these features on the site.

1 INTRODUCTION

1.1.1 Adonis Ecology Ltd. was commissioned by Oakton Developments to produce a Biodiversity Protection and Enhancement Strategy to address Condition 13 of the extant planning permission 18/00647/FUL for 6 The Grove, Epsom, Surrey, KT17 4DQ, Grid Reference TQ 213 607. The development will consist of a two storey extension, and conversion of the existing dwelling into flats with associated parking and landscaping.

1.1.2 Condition 13 reads as follows:

The development hereby approved shall be carried out in accordance with the protection, mitigation and enhancement measures detailed in the ecological assessment with the plan of implementation details to be submitted to the Local Planning Authority and agreed in writing prior to the commencement of the development. The approved measures shall thereafter be maintained in perpetuity.

Reason: To preserve and enhance biodiversity and habitats in accordance with Policy CS3 of the Core Strategy (2007) and Policy DM4 of the Development Management Policies 2015.

1.1.3 This strategy outlines all biodiversity protection and enhancement measures for the site to meet the above condition, as well as all measures necessary for the maintenance of the enhancement features on the developed site.

1.1.4 Oakton Developments will be responsible for implementing the enhancement measures on the site during the construction works. The management and maintenance of the enhancement features will be the responsibility of the future site owners.

2 ECOLOGICAL METHOD STATEMENT

2.1.1 The purpose of this strategy is to ensure that the proposed development provides ecological protection for protected species which may occur on site and enhancements suitable for species which may occur in the local area.

2.1.2 The protection objectives are as follows:

- to identify and describe potentially significant impact risks to protected species associated with the proposed development;
- to describe measures by which any significant risk of deleterious impacts should be avoided, wherever reasonably possible;

2.1.3 The conservation objectives are as follows:

- to provide native and/or wildlife attracting plant species on site to improve botanical species diversity in order to benefit local wildlife:

- to provide increased potential for wildlife to shelter on site, through provision of wildlife boxes and habitat features which may be suitable for many small animals, particularly small mammals, amphibians and reptiles.

3 PROTECTION FEATURES

3.1 Bats

- 3.1.1 Following the recommendations of the Preliminary Ecological Appraisal and Roost Assessment conducted by Arbtech Consulting Ltd. in 2017 (Arbtech, 2017), two nocturnal surveys were conducted by Simlaw Ecology in May 2018 which found no bats roosting within the dwelling on site (Simlaw, 2018).
- 3.1.2 In January 2020 Adonis Ecology Ltd. Conducted an updated Preliminary Ecological Appraisal and Preliminary Bat Assessment which concluded that there was very low potential for roosting bats (Adonis, 2020b). However, the Local Planning Authority requested that a single new nocturnal survey be undertaken, which was subsequently conducted by Adonis Ecology on the 7th of May 2020. Again, no bats were observed emerging from or entering the building during the survey. Foraging and commuting activity was low by low numbers of bats, with the majority of activity over the trees at the rear of the site, which are expected to be retained within the proposed development (Adonis, 2020a).
- 3.1.3 If the works have not been undertaken within two years of the date of the last nocturnal survey, the 7th of May 2020, the risk of impact to bats should be re-assessed.

Protection for Roosting Bats in Main Dwelling

- 3.1.4 Overall, it was considered that the likelihood of the dwelling being used as a regular bat roost was negligible, and of being used occasionally as a roost was very low. Therefore, no further surveys were considered necessary, and it was considered that works could proceed without a European Protected Species Mitigation Licence (EPSM).
- 3.1.5 However, to prevent any risk of harm to individual bats in the highly unlikely event any bats are present within the buildings during the works, a suitably licensed ecologist will oversee the hand removal of the roofing tiles of the main dwelling on site. The process will be undertaken as follows:
- one Schwegler 1FE Bat Box or one Beaumaris Woodstone bat box will be installed on a retained tree on-site, at approximately 4m in height, away from external lighting, and where there is a clear path of flight to the boxes.;
 - before the removal of roof tiles begins, a suitably licensed ecologist will check roof internally for bats as far as possible;
 - a suitably licensed ecologist will oversee hand removal of roof tiles and soffits considered by the ecologist to have potential to support a bat roost.

Each tile will be lifted by hand and the space beneath, and the underneath of the tile itself, will be checked for bats or significant signs of bats before discarding.

3.1.6 If no bats were found during these works, any remaining demolition can proceed without further input from the ecologist.

3.1.7 In the considered unlikely event that a bat is found during these works, works must stop immediately and further surveys may be required to inform an application to Natural England for a European Protected Species Mitigation Licence.

Protection for Foraging and/or Commuting Bats

3.1.8 In order to reduce the risk of indirect disturbance to bats that are likely to be foraging and/or commuting on or around the site, both during and post-development, sensitive lighting of the site will be used according to the guidelines below:

- Lighting on site will be minimised so far as possible;
- hoods or directional lighting to avoid light directed at the adjacent hedgerows, trees or the sky will be used;
- external lighting will be on as short a timer as possible so that lights are turned off when not in use.

3.1.9 Further, where possible, warm spectrum LED lights (ideally less than 2700K) will be used, as LED bulbs produce the least amount of UV light possible. Lighting will also feature peak wavelengths higher than 550nm to avoid the light components that are most disturbing to bats. The brightness of the lamps will also be kept as low as feasibly possible, with significant impacts shown on bats at 3.6 lux, with bats shown to peak in foraging levels at 0.45 lux (ILP, 2018). Lighting will also be kept at as low a height level as possible, using low level bollards or down lights where possible. Lighting which emit an ultraviolet component or that have a blue spectral content have high attraction effects on insects and will be avoided.

3.1.10 Work will not take place between sunset and sunrise between April and September (the main season of bat activity), and any security or spot lighting required will be kept to a minimum, and be on a short timer to reduce the extent of lighting on site during development.

3.2 Birds

3.2.1 Any tree and vegetation removal, including the ivy covering on top of the shed, will be undertaken outside the period of 1st March to 31st August. If this timeframe cannot be avoided, a close inspection for active bird nests of the trees, ivy covering and other vegetation to be removed will be undertaken immediately prior to clearance by an ecologist. If any active nests are found, they will be retained until the young have fledged.

3.3 Badgers

- 3.3.1 The Preliminary Ecological Appraisal and Roost Assessment conducted by Arbtech Consulting Ltd. in 2017 found badger poo in close proximity to a badger sett, approximately 10m from the development area. This badger sett had been locally determined to be abandoned. The Arbtech report considered that no badger sett was due to be impacted by the proposed development (Arbtech, 2017).
- 3.3.2 In January 2020, Adonis Ecology Ltd. undertook a Preliminary Ecological Appraisal (PEA) and Preliminary Bat Roost Assessment (PRA) of the site. This assessment found two badger setts in the north of the site, as well as foraging signs within the gardens of the property, though it was considered that none of the setts were main setts (Adonis, 2020b).
- 3.3.3 In March 2021, Adonis Ecology Ltd. conducted an update badger check of the site and surroundings (as far as possible). Four likely badger setts were found on the site, all with at least one entrance which showed signs of current use (entrance relatively clear of debris and/or some evidence of recent digging), although none showed signs of heavy/frequent use (e.g. significant fresh digging) and none were considered to be a main sett. The setts were all on or near the edge of the site, but two were in relatively close proximity to the proposed development. The vegetated habitats on the site were also clearly used by foraging badgers, with badger signs observed throughout the vegetated areas of the site (Adonis, 2021).

Protection for Badgers

- 3.3.4 As badgers are highly mobile and can dig new setts relatively quickly, a follow-up badger check will be undertaken no more than one month before the onset of works to ensure no new holes have been created nearer to the proposed works.
- 3.3.5 All site workers will be informed of the presence of badger setts on site during their site induction, which will make it clear that it is an offence to damage a sett or to disturb badgers within a sett.
- 3.3.6 To retain the setts on site and prevent risk of impact to the existing badger sett, no digging (including exploratory works) or use of heavy machinery will be allowed within 10m of any sett entrance. To ensure that this area is not impacted, Heras type fencing will be installed to prevent accidental damage, with signage also provided to inform the reason of the fence, and to inform all site workers and visitors that the area should not be entered at any time. Fencing will not obstruct the mammal track at the top of the bank in order to avoid restricting the badgers' access to other foraging areas.
- 3.3.7 Ground works and excavations in the rear garden will start between July and November, outside the period when badgers have young cubs and are therefore most vulnerable to disturbance (taken to be December to June inclusive). Any trenches or holes which will be left overnight will either be fully covered, or have a wooden plank placed in them in such a way that any badger that falls in can climb out safely. Alternatively, one end of the trench will be sloped or stepped to allow animals to climb out.

- 3.3.8 All digging within 20m of any sett entrance will be supervised by an ecologist, to ensure no tunnels are damaged. Although a breach of any tunnel was considered unlikely, should the supervising ecologist consider there to be potential for a breach, works in that area will stop immediately and the ecologist will advise how to proceed. If it is considered that works cannot continue without causing damage to a sett or harming a badger, a Natural England licence to close the sett will be required.
- 3.3.9 Any demolition of the walls and roof of the existing shed will be undertaken by hand as far as possible, and care should be taken to avoid debris falling into the adjacent badger sett. Care will also be taken to avoid damage to the base of the shed which will be retained as part of the new summer house. Any trees to be removed within 10m of a sett entrance will be soft-felled, and the stumps will be left in situ.
- 3.3.10 Security lighting will be directed away from the undergrowth.
- 3.3.11 Any chemicals or pollutants used or created by the development will be stored and disposed of correctly according to COSHH regulations.

4 ENHANCEMENT FEATURES

4.1 Bird Boxes

- 4.1.1 The site will be enhanced for birds by the addition of six bird boxes provided on the new building. This will increase the potential of the site to support a wider range of species of nesting birds, including Section 41 species. The boxes will be installed following the manufacturer's instructions, during the construction of the development.
- 4.1.2 The following will be installed:
- 3 x Schwegler no.9A double house martin nests
 - 3 x Vivara Pro woodstone sparrow nest boxes
- 4.1.3 Alternative boxes could be used but these must be confirmed for suitability by an ecologist.
- 4.1.4 The boxes will be installed under the shelter of the eaves or overhanging roofs, at least six to seven metres above the ground, ensuring that there is unobstructed access for birds entering and leaving. The boxes will not be south facing to avoid chicks overheating and will not be above windows or doors to minimise disturbance to occupants of the houses from noise and droppings. The recommended locations and positions for the installation of the bird boxes are provided in Figure 1 in Appendix 1.

4.2 Habitat Piles

- 4.2.1 Two habitat piles will be created on site and comprise vegetation, logs and bricks, using materials from site clearance where possible, piled to a minimum height of

50cm, each covering an area of at least 1m². These will provide potential hibernation sites for a variety of wildlife, including reptiles and hedgehogs. Vegetation and logs from site maintenance activities will continue to be added to these piles and used to create additional habitats. Allowing log piles to naturally decay and break down will also create potential habitat for invertebrates, and in turn, food for birds and bats.

- 4.2.2 The habitat piles will be constructed during the construction phase of the development, with one habitat pile situated among the trees to the north-east of the site and the other within the northern strip of trees, see Figure 1 in Appendix 1. Appropriate signage will be installed to prevent well-meaning residents from ‘tidying’ them away.
- 4.2.3 After the habitat piles have been constructed, a licenced ecologist will do a post-completion check to confirm that they have been created correctly and make any immediate recommendations for remedial measures should alterations be required.

4.3 Fruit Trees

- 4.3.1 Fruit trees and bushes will be planted on the developed site as appropriate to provide additional foraging resources for badgers and other wildlife. A minimum of three trees or bushes will be planted, using a mix of fruiting species, such as apples, pears, plums and elder, to strengthen the availability of forage throughout the year. Trees and bushes will be planted between October and April, and will be protected and supported following industry best practice.
- 4.3.2 If possible, trees and shrubs of local provenance will be sourced, as these have a better chance of thriving. For bio-security purposes, only UK-grown species will be planted.

4.3.3

5 HABITAT MANAGEMENT PLAN

- 5.1.1 Table 2 below provides management prescriptions that will be undertaken on site, with planned timescales and any subsequent requirements:

Table 1: Habitat Management Procedures for 6 The Grove, Epsom

Month	Years	Task	Notes
May to September	1-2	Water trees and bushes	Trees and bushes to be watered each week in dry weather, every 2-4 weeks in wetter weather
October to March	2-5	Trees and bushes to be checked	Dead or unhealthy trees or bushes to be replaced before end of subsequent April. Mulch, supports and protective measures to be replaced if required
October to February	2-5	Check bird boxes externally	Replace lost or damaged boxes.
Annually	2-5	Habitat piles checked	Re-construct damaged piles. Add tree prunings or logs to the habitat piles to maintain initial size.

5.1.2

6 CONCLUSION

- 6.1 If this Biodiversity Protection and Enhancement Strategy is followed, appropriate protection and enhancement measures for a variety of wildlife will have been provided on the site and the management procedures should maintain the features into the future.

7 REFERENCES

- Adonis Ecology (2020a). *Nocturnal Bat Survey of Building at 6 The Grove, Epsom*. Adonis Ecology Ltd., Lavenham.
- Adonis Ecology (2020b). *Preliminary Ecological Appraisal and Preliminary Roost Assessment of Land and Buildings at 6 The Grove, Epsom*. Adonis Ecology Ltd., Lavenham.
- Adonis Ecology (2021). *Badger Assessment for Proposed Development at 6 The Grove, Epsom*. Adonis Ecology Ltd., Lavenham.
- Arbtech (2017). *Preliminary Ecological Appraisal and Roost Assessment, 6 The Grove, Epsom, Surrey KT17 4DQ*. Arbtech Consulting Ltd., Chester.
- British Standards Institute (2013). *BS 42020:2013 Biodiversity – Code of Practice for Planning and Development*. British Standards Institute, London.
- Simlaw Ecology (2018). *Bat Presence or Likely Absence Survey 6 The Grove, Epsom, Surrey*. Simlaw Ecology, Dorking.

8 APPENDIX

8.1 Appendix 1: Figure

Figure 1: Locations of Enhancements at 6 The Grove, Epsom

Adonis Ecology Ltd.
 Tel: 01787 249160 E-mail: Askus@adoniseology.co.uk
 Title: Figure 1: Locations of Enhancements at 6 The Grove, Epsom



Background image taken from "Proposed Site Layout Plan" produced by The Woolhampton Design Centre, Drawing No.18/022/01, dated November 2018.