

**Church Farm Bungalows, Binsted Lane, Binsted,
Walberton, West Sussex, BN18 0LN**



Updated Ecological Appraisal

For
S.A. Construction Co Ltd
Billingshurst, West Sussex

4th December 2017



9 Pitfold Avenue, Haslemere
Surrey, GU27 1PN

1.0 INTRODUCTION

The owner of Church Farm Cottages is seeking planning permission to construct a detached property on the grounds of former bungalows. The development site (SU 981 061) currently supports the location of two former bungalow properties (chimneys and hard-standing are all that remain - see **Cover Photo**), with associated derelict gardens within a small 0.125ha (or 1,238m²) plot bounded by hedges. GPM Ecology was commissioned by S.A. Construction Ltd. to conduct an updated ecological appraisal of the site on 13th November 2017, following an earlier survey submitted to Arun District Council (ADC) by GPM Ecology (Dec 2016¹).

1.1 Aim of the Updated Survey

The main aim of the updated assessment is to provide additional information required by ADC that may be read in conjunction with the previously submitted GPM Ecological Survey 2016¹, following comments from the Environment Officer (Liz Rogers, email of 26/10/17):

Bats

Due to the location of the site, the propose demolition and the records of bats within close proximity of the site there is a moderate likelihood of bats roosting within the bungalows onsite. Unfortunately the bungalows were not been considered within the Ecological Appraisal (Dec 2016) so we are unable to establish if bats are present. Prior to determination we require that a bat survey is undertaken on the buildings to determine if there is evidence of bats roosting within the buildings. If there is evidence of bats, further bat activity surveys would be required and mitigation strategies will need to be produced. These surveys plus mitigation strategies required will need to be submitted as part of the planning application prior to determination. Due to the level of protection bats hold within European legislation, if bats are found to be roosting onsite the application will also require a Natural England Protected Species Licence for the works.

The lighting scheme for the site will need to take into consideration the presence of bats in the local area and the scheme should minimise potential impacts to any bats using the trees, hedgerows and buildings by avoiding unnecessary artificial light spill through the use of directional light sources and shielding.

The hedgerows on site are used by bats for commuting and foraging and will need to be retained and enhanced for bats. Any gaps should also be filled in using native hedge species to improve connectivity. Where any hedge is to be removed at detailed within the survey, new hedgerow should be planted. Conditions should be used to ensure this.

Reptiles

We disagree with the findings of the Ecological Appraisal' relating to reptiles, due to the current condition of the site and the records of reptiles within the local area there is a high chance of reptiles within the site. Due to the protection reptiles hold the applicant will need to have a reptile activity surveys undertaken by a suitably qualified ecologist. If reptiles are found to be present onsite a mitigation strategy for reptiles will also need to be produced and submitted with the planning application prior to determination. The mitigation strategy will need to include details of reptile fencing, translocation methods, the translocation site / enhancements and the timings of the works

Dormice

We disagree with the findings of the Ecological Appraisal relating to dormice. Due to the presence of dormice within close proximity to the site and current condition of the site and hedgerow onsite we require that further surveys are undertaken to determine the presence of dormice onsite. If dormice are present then a mitigation strategy will be needed.

¹ GPM Ecology 19th Dec 2016, Ecological Appraisal Church Farm Bungalows, Binsted Lane, Binsted, Walberton, West Sussex, BN18 0LN, for S.A. Construction Co Ltd Billingshurst, W. Sussex

2.0 METHODOLOGY

The site was re-visited by ecologist Gareth Matthes BSc MSc CIEEM on 17th November 2017 to re-assess the habitats present to support reptiles and dormice. Sue Harris conduct a bat assessment of the site on 15th November. General notes were made on habitat features present on and adjacent the site and the potential for the site to support these protected species.

3.0 SURVEY RESULTS, EVALUATIONS AND IMPACTS

3.1 Recent History of Site

The site owner Mr. S. Arch confirmed the following dates when the site had been cleared and subsequent maintenance:

1. *Cottage building demolished about 1990's, used prior as two residential dwellings*
2. *Site completely mechanically cleared by previous owner pre-appeal site visit on September 2015*
3. *Brambles and under growth cleared and boundary hedge cut hard-back during January 2017, with planning permission W/A/109/16/PL granted 08/03/17*
4. *Brambles and weeds treated with herbicide April to May 2017 and strimmed thereafter throughout the summer months*
5. *Second site spray August/September, pre-October clearance by strimming.*

3.2 Protected Species Evaluation and Impacts

3.2.1 Bats and Dormice

As described in the GPM Ecology report date December 2016 the site does not support any suitable bat roosting features, which is corroborated by a follow-up survey by Harris 2017². Impact upon bats is considered to be low to medium, as a result of removing foraging habitat and potential for light-pollution. No further surveys or assessments are considered necessary.

Although dormice have been recorded within Binsted Woods to the east, it was considered in the GPM Ecology 2016 visit that the native hedge adjacent the site was relatively isolated from these woods (as well as the sightings west of the site), with limited links to the areas dormice have been recorded, including drive-ways and roads creating gaps in hedges. Dormice are arboreal, rarely coming to the ground. While this species may cross a small gap in a hedge or a woodland ride within areas of good habitat, they are very unlikely to come to the ground crossing areas of otherwise poor habitat for dormice, unless they are dispersing. Bramble on site was cleared during January 2017 following advice in GPM Ecology Report 2016 and subsequent planning permission, therefore at the time of this assessment no potential dormice habitat will be impacted by development (see **Photo 1**).

During the 2017 ecological assessment update the adjacent hedges were assessed and the sites isolation considered with respect to connections between Binsted Wood and the application site. **Figure 1** provide an illustrates the habitats present between Binsted Wood and the site, with accompanying **Photos 2 to 5** of showing the structure of hedgerows and gaps that dormice would need to negotiate in order to reach the application site from Binsted Wood 770m by hedgerow. The total length of gaps in hedge (three gaps) for dormice to negotiate is

² Harris S (2017), Report of Preliminary Bat Survey, Church Farm Bungalows, Binsted 15th Nov 2017

is 35m to 40m. The entrance to Church Farm to the north of the application site is nearly 20m and the hedge-line is largely defunct adjacent Church Farm, supporting tall ruderal herb.

It is considered on account of the isolation due to gaps and poor hedge habitats near the application site and the fact that potential dormice habitat will not be impacted, it is considered that this species does not represent a material consideration for planning and no further surveys are considered necessary.

3.2.2 Reptiles

Slow-worms, viviparous lizard, grass snake and adder have all been noted in the SBRC report within 500m to 1km from the site. The site supports potential habitat for these species, although if present they are only likely to be represented as a transient or a small population due to the small size of the site and recent management as described above, with a bare earth and short/rough grass-sward now persisting on site (see **Figure 2a, Photos 1 and 6**). If present reptiles could be harmed during site clearance, with all species of reptiles protected from harm under the Wildlife and Countryside Act 1981.

3.2.3 Other species (birds and badgers)

The most suitable bird breeding habitat for birds (bramble-scrub) was removed in January 2017, when birds are not breeding. An ornamental evergreen hedge along the driveway will still need to be removed to facilitate development which should be removed during winter period, as wild birds protected from harm and disturbance at the nest under the Wildlife and Countryside Act 1981.

European hedgehog is a priority BAP species and although no evidence (droppings) were observed, they could be present in the area, utilising hedges and feeding on the lawns around the site. No evidence of badger or hedgehog was observed on site during both November 2016 and 2017 survey visits.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The application site will not directly impact any features of ecological importance. The only species likely to be directly impacted are breeding birds and possibly a small population of reptiles if present on site. Bats could be indirectly impacted through the installation of external lighting. The following mitigation and enhancements need to be considered in relation to this development (see **Figure 2b**):

4.1 Careful site clearance to mitigate for breeding birds

The remnant evergreen garden hedge should be removed to facilitate development outside bird breeding period (from Oct to Feb). If however it is scheduled to be removed during breeding period, then a breeding bird survey will be required and if an active nest is located then vegetation cannot be removed until the young have fully fledged and the nest is inactive.

4.2 Reptile Mitigation Strategy

Due to the small size (about 35m x 35m = 0.125ha) of the site and sub-optimal habitat for reptiles, i.e. open bare ground and dense scrub over-shaded rank grassland in 2016, it was considered a reptile survey was not needed. However, if required by ADC predetermination a survey could be conducted with any reptiles relocated during the survey period.

It should be noted that for sites larger than Church Cottages, with a small reptile population, Chichester District Council have agreed in the past to a minimal trapping period, followed by a destructive search. For example a site in Hale Common near Rogate, about 77x77m (0.6ha) and four times larger than Church Cottages site (GPM Ecology 2015³), had trapping of only five days, followed by a destructive search.

If reptiles are present the population will be small enough (due to the very small size of site) for the mitigation strategy to be agreed prior to a survey being completed. During the growing season the site (bramble-scrub and grass areas) should be cut on a regular basis, with a high cut (15-30cm above ground), to prevent reptiles from establishing on site. This mowing regime should commence from April once vegetation begins to grow.

A set of two compost bins will be positioned adjacent the road-side hedge (see **Figure 2b**) and a supervised top-soil scrape (i.e. destructive search for reptiles) will be carried-out and supervised by an appropriately experienced ecologist, during site clearance and the removal of the brick-work around the concrete base. If reptiles are located on site then a reptile exclusion fence will be installed along the south-west and north-east boundaries of the site between the tree protective fence and site boundary. Any reptiles caught during searches will be released into the prepared compost bins. Development should not commence during reptile hibernation period (October to March), in case reptiles are present on site, as they would be harmed if taken out of hibernation during the winter-period.

Habitat mitigation will include planting new 30m section of native hedge on the east boundary (species planted: hazel *Corylus avellana*, elder and dogwood *Cornus sanguinea*), as well as installing bird boxes (x2), to mitigate for the loss of breeding and foraging habitats for protected species.

4.3 Lighting strategy to minimise impact upon bats

Although no further bat surveys are recommended on account that no roost sites will be directly impacted, there is potential for impact on foraging, as a result of external lighting (see GPM Ecology report 2016 and Harris 2017²). Mitigation needs to be implemented to ensure that this impact is minimised and recommendations should be followed as detailed by Harris 2017² and / or lighting installation considerations as listed by Bat Conservation Trust (2009⁴):

1. Mitigating for the loss of foraging habitat

Planting the hedge and fruit (e.g. apple) orchard will mitigate for the loss of foraging habitat across the site.

2. Type of lamp (light source)

Impacts can be minimised by the use of low pressure sodium lamps or high pressure sodium instead of mercury or metal halide lamps where glass glazing is preferred due to its uv filtration characteristics.

3. Luminaire and light spill accessories

Lighting should be directed to where it is needed and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only. Planting can also be used as a barrier or man-made features that are required within the build can be positioned so as to form a barrier to lighting on trees or hedges.

4. Lighting column

The height of lighting columns in general should be as short as is possible as light at a low level reduces the ecological impact. However, there are cases where a taller column will enable light to be directed downwards

³ GPM Ecology 2015, Hale Common Cottage, Rogate, West Sussex Reptile Survey, 29th July 2015

⁴ Bat Conservation Trust (BCT 2009), Bats and Lighting in the UK, Bats and the Built Environment Series

at a more acute angle and thereby reduce horizontal spill. For pedestrian lighting this can take the form of low level lighting that is as directional as possible and below 3 lux at ground level.

5. Predicting where the light cone and light spill will occur

There are lighting design computer programs that are widely in use which produce an image of the site in question, showing how the area will be affected by light spill when all the factors of the lighting components listed above are taken into consideration, a useful tool to inform the mitigation process.

6. Light levels

The light should be as low as guidelines permit. If lighting is not needed, don't light.

7. Timing of lighting

The times during which the lighting is on should be limited to provide some dark periods.

4.4 Landscaping and mitigating for the impact upon scrub habitat

As described above and illustrated on **Figure 1b**, it is recommended that a 30m section of native hedge is planted on the eastern perimeter of the site, bordering the arable field, as well as a small orchard supporting five fruit trees is planted within the amenity grassland, east of the main bungalow site. These features will help mitigate for the loss of scrub habitat, used by a variety of species (birds, bats, hedgehogs, reptiles) for both breeding and foraging.

In addition, due to the location of the application site adjacent a priority BAP hedge non-native species (e.g. Cotoneaster) listed in Schedule 9 plant species (WCA 1981, as amended 2010) must be avoided within the landscape scheme. The existing hedge and oak tree should be protected from construction activities, by installing a tree protective fence to prevent contractors damaging the hedge. A biodiversity tool-box talk should be provided for contractors working on site and potentially damaging activities monitored by the site foreman.

5.0 SUMMARY OF RECOMMENDATIONS

Table 1: Summary of features, impacts, further surveys required and appropriate mitigation.

Feature	Value	Impact	Mitigation / Enhancement	Further Surveys
Native Hedge	Parish	Low to Medium	Protection during development. No non-native Schedule 9 listed species to be planted	Monitor contractor and storage, by site foreman
Reptiles	Site (low status if present)	Low to Medium	If present relocate during destructive search, install exclusion fence and compost bins	Reptile survey (if required by ADC)
Breeding Birds and Bats	Site only	Low to Medium	Bramble / hedge removed in winter period. Plant hedge and orchard, install sympathetic lighting. Install sparrow and tit boxes on buildings next to hedge.	Breeding bird survey. if the boundary vegetation is removed Mar-Sept period

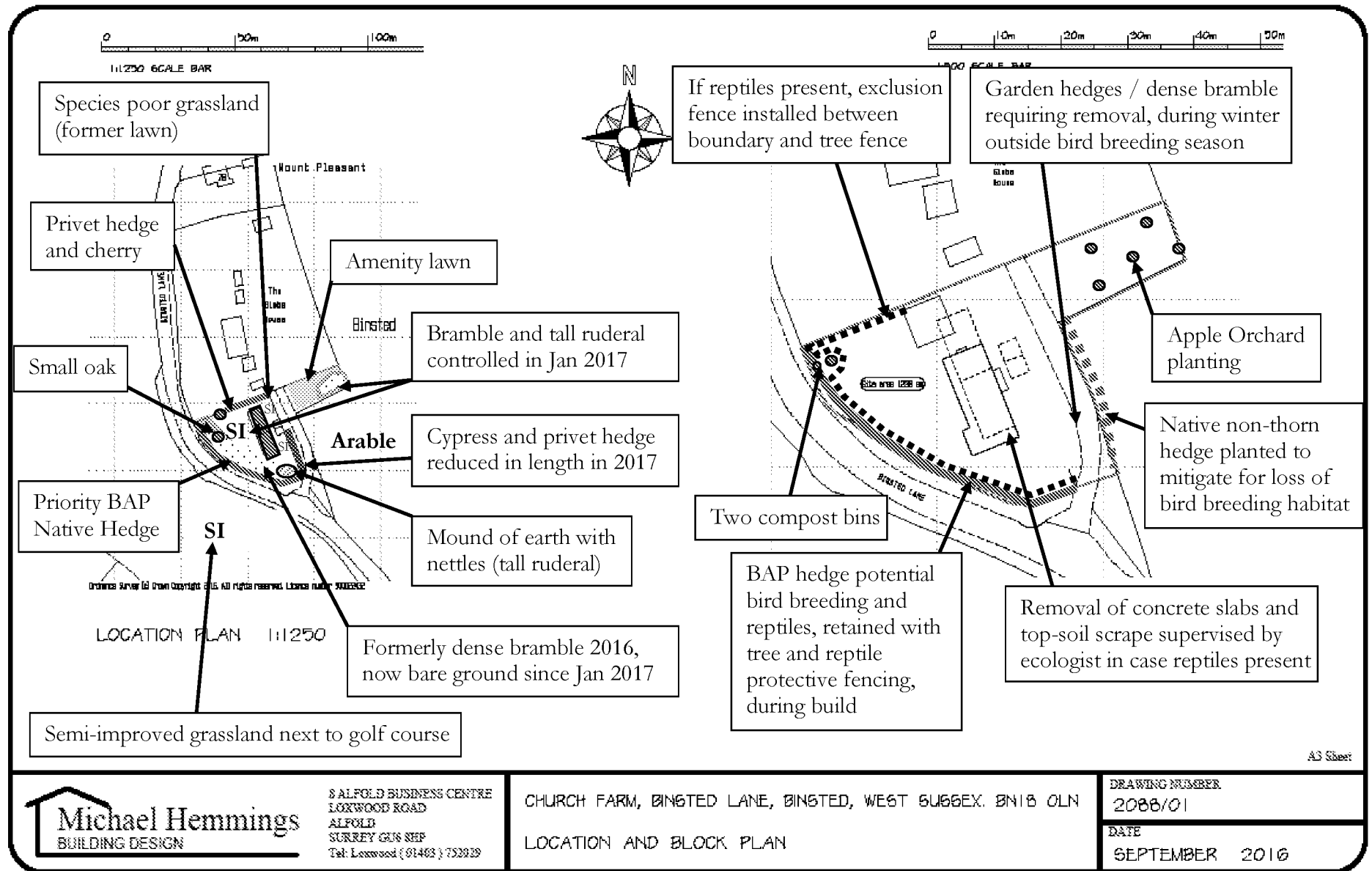


Figure 2a: Habitat Plan

Church Farm Bungalows, Binsted
Ecological Appraisal
GPM Ecology, November 2017

Figure 2b: Ecological Mitigation Plan

Church Farm Bungalows, Binsted
Ecological Appraisal
GPM Ecology, November 2017



Photographs: Church Farm Bungalows, Binsted (2017)



Photo 1: Application site with bramble removed during January 2017



Photo 2: Entrance to site, with a 5m gap in hedge



Photo 3: Gap (15m) in field entrance opposite Binsted Church



Photo 4: Hedge gaps at cross-roads to tracks and paths (18m), about 370m from Binsted Wood



Photo 4: Entrance to Church Farm north of Cottages (15m to 20m gap in hedge)



Photo 6: Remnant chimneys and grass at Church Cottages, Binsted