Skilled Ecology Consultancy Ltd.

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Preliminary Ecological Appraisal Including a Protected Species Assessment at 23 & 24 Park Cottages, Church Road, Tattingstone, Suffolk.

On behalf of:

Mr & Mrs Henley

April 2022

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0 SUMMARY

- 1.1.1 Skilled Ecology Consultancy Ltd. was commissioned by Mr & Mrs Henley to undertake a Preliminary Ecological Appraisal including a Protected Species Assessment at 23 & 24 Park Cottages, Church Road, Tattingstone, Suffolk. The report is required for a planning application for demolition and replacement of the building to form one dwelling with an extension.
- 1.1.2 The survey was conducted on 15th April 2022 by experienced ecologist Roger Spring BSc MCIEEM (licensed to survey for great crested newts *Triturus cristatus* and licenced to survey for bats – level 2). The survey consisted of an inspection for preferred habitat types and signs and evidence of protected and priority species, such as for bats, great crested newts, reptiles, badgers *Meles meles* and nesting birds following Natural England (English Nature) Guidelines. A local bat record search was undertaken.
- 1.1.3 The site is small and includes an attached, double-storey, brick cottage with a pitched, tiled roof and dormer windows on the southern elevation. The building is in disrepair with the western end in danger of collapse with scaffolding erected and plastic sheeting covering the roof. The remaining area of exposed roof was well sealed to bats with any spaces around tiles appearing too small for roosting bats or access for bats into the building. The soffits were also in good condition and inside the loft thick insulation was present blocking eaves preventing access for bats into the loft.
- 1.1.4 A detached garage was also present. The garage is brick with a pitched, tiled (unlined) roof. The proposed development would also include some impact to the existing garden which is primarily laid to lawn (improved short grass) with some scattered ornamental shrubs. No trees would be impacted.
- 1.1.5 The site is located in the village of Tattingstone, with low density housing. Residential properties surrounded the site. The Alton Water Reservoir and associated flood meadow habitat is present east of the site.
- 1.1.6 The proposed construction zone was considered low in ecological value with negligible potential to support protected, priority or rare species (including bats). No signs or evidence of such species were identified during the survey visit. Two species of masonry bees were identified nesting on the site.
- 1.1.7 The risk of significant impact or harm to protected, priority or rare species or notable habitats was considered negligible.
- 1.1.8 Further ecological surveys or mitigation were considered unnecessary. However, to minimise any residual risk of impact to bats, hedgehogs and invertebrates, precautionary measures are provided in this report and should be followed. Biodiversity enhancement recommendations are also included in the report in accordance with national planning policy.

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1 INTRODUCTION

1.1 Background

- 1.1.1 Skilled Ecology Consultancy Ltd. was commissioned by Mr & Mrs Henley to undertake a Preliminary Ecological Appraisal including a Protected Species Assessment at 23 & 24 Park Cottages, Church Road, Tattingstone, Suffolk. The report is required for a planning application for demolition and replacement of the building to form one dwelling with an extension.
- 1.1.2 Wildlife such as nesting birds, bats, reptiles and great crested newts *Triturus cristatus* are protected by law. Protected and priority species and habitats, are also a material consideration for individual planning decisions under the National Planning Policy Framework, 2021 (MHCLG, 2021).
- 1.1.3 This study and report complies with the Chartered Institute for Ecology and Environmental Management (CIEEM) 2017 Guidelines for Preliminary Ecological Appraisals.
- 1.1.4 CIEEM guidelines indicate that ecological surveying typically remains valid for between 12 and 18 months (CIEEM, 2019).

2 METHODOLOGY

2.1 Desk Study

- 2.1.1 A local bat record search was conducted on behalf of Suffolk Biodiversity Information Service (SBIS).
- 2.1.2 A search of the Multi-agency Geographical Information for the Countryside (MAGIC) was also conducted, to check for statutory nature conservation sites.
- 2.1.3 These results were then combined with the findings of the site survey, to assess the risk of ecology issues, relevant to planning, occurring on the site.

2.2 Study Limitations

2.2.1 Botanical assessment was undertaken at a suitable time of year, though some early flowering species and annuals may not be visible or identifiable to species level.

2.3 Initial Site Survey

Habitats and Surroundings

- 2.3.1 The site was visited on the 15th April 2022 to survey for ecology issues. This included the following:
 - Noting the suitability of habitats present on the site, with regard to protected, priority and rare species; including plants, amphibians, reptiles, mammals, nesting birds, invertebrates and protected, priority or red-listed Birds of Conservation Concern (BoCC);
 - Assessing the habitats surrounding the site and in the local area;
 - Direct survey for evidence of protected species as far as possible, e.g. for bats, reptiles, great crested newts, badgers *Meles meles*, and nesting birds;
 - Checking for invasive species such as Japanese knotweed *Fallopia japonica* and giant hogweed *Heracleum mantegazzianum*.

Bat Inspection

- 2.3.2 The assessment for bats was conducted by an experienced ecologist, licensed by Natural England to disturb and take bats for science and education. Buildings were internally and externally inspected for bat activity, suitability and potential for roosting following English Nature Bat Mitigation Guidelines (English Nature, 2004) and Bat Conservation Trust Best Practice Guidelines, therefore considerations were:
 - the availability of access to roosts for bats;
 - the presence and suitability of cracks, crevices, gaps, fissures, ivy growth and other places as roosts;
 - signs of bat activity or presence, such as; the bats themselves, droppings, grease marks, scratch marks, urine spatter and prey remains.
- 2.3.3 Equipment available for use during the survey included a ladder, high powered torch, digital camera and binoculars.
- 2.3.4 The availability of access to roosts was assessed based upon the presence of holes large enough to allow entry to bats and lack of cobwebs and dirt.
- 2.3.5 The outside and inside of buildings were inspected for gaps, cavities, access points and crevices, and any signs of bats (droppings, staining, urine spatter), in accordance with Natural England (English Nature) guidelines (English Nature, 2004).

Reptiles & Amphibians

- 2.3.6 The site was inspected for potentially suitable terrestrial habitats for foraging, sheltering or dispersing amphibians and foraging, sheltering, breeding and basking habitat for reptiles. High quality terrestrial refuges searched for, included:
 - Log piles & rockeries,
 - Thick leaf litter,
 - Compost & manure heaps,
 - Mammal burrows,
 - Deep ground cracks;
 - Refuse suitable for shelter;
 - Tussock grassland;
 - Hedgerows and any other potential habitats.

Badgers & Other Mammals

- 2.3.7 Signs and evidence of badgers, and other protected, priority and rare mammal activity searched for included the following:
 - Setts, holes and burrows;
 - Foraging holes and other diggings;
 - Latrines, droppings, spraints and scats;
 - Mammal hairs;
 - Paw prints and other tracks;
 - Feeding remains;
 - Scratch marks, bedding material and other signs.

3 RESULTS AND RISK

3.1 Site Description & Location

- 3.1.1 The site is small and includes an attached, double-storey, brick cottage with a pitched, tiled roof and dormer windows on the southern elevation. The building is in disrepair with the western end in danger of collapse with scaffolding erected and plastic sheeting covering the roof. The remaining area of exposed roof was well sealed to bats with any spaces around tiles appearing too small for roosting bats or access for bats into the building. The soffits were also in good condition and inside the loft thick insulation was present blocking eaves preventing access for bats into the loft.
- 3.1.2 A detached garage was also present. The garage is brick with a pitched, tiled (unlined) roof. The proposed development would also include some impact to the existing garden which is primarily laid to lawn (improved short grass) with some scattered ornamental shrubs. No trees would be impacted.
- 3.1.3 The site is located in the village of Tattingstone, with low density housing. Residential properties surrounded the site. The Alton Water Reservoir and associated flood meadow habitat is present east of the site.
- 3.1.4 No ponds were present within 250m of the site (Ordnance Survey Map, 2022).

3.2 Nature Conservation Sites

- 3.2.1 No statutorily designated sites of nature conservation, such as Sites of Special Scientific Interest (SSSI) are located within 2km of the site (MAGIC, 2022).
- 3.2.2 However, the ecological valuable Alton Water and surrounding habitats is present just east of the site.

3.3 Data Search

3.3.1 The following information is a summary of local bat records collated through the SBIS.

Table 1: Summary of local bat records.

Species	Approximate Location	Year		
Mammals: bats (all are UK & EU protected)				
Brown long eared	Tattingstone churchyard	2009		
Common pipistrelle	Tattingstone churchyard	2009		
Nathusius	Tattingstone	2014		
Soprano pipistrelle	Tattingstone	2014		
Daubentons	Alton Water	2017		

3.4 Protected, Priority & Rare Species

Vegetation & Habitats

- 3.4.1 The site includes a house, garage, hardstanding and garden mainly laid to lawn (improved short grass) with some ornamental shrub planting.
- 3.4.2 Ornamental shrubs and garden beds included: immature cherry *Prunus* sp., ornamental geranium *Geranium* sp., green alkanet *Pentaglottis Sempervirens*, pendulous sedge *Carex pendula*, bramble *Rubus fruticosus*, ivy *Hedera helix*, rose *Rosa* sp., daffodil *Narcissus* sp., spotted laurel Aucuba japonica, rowan *Sorbus aucuparia* and holly *Ilex aquifolium*,.
- 3.4.3 A short strip of planting is also present on the eastern boundary including; cherry *Prunus* sp., hawthorn *Crataegus monogyna*, snowberry *Symphoricarpos albus*, forsythia *Forsythia* sp.
- 3.4.4 Lawn included; daisy Bellis perennis, common mouse-ear *Cerastium fontanum*, white clover *Trifolium repens*, cats-ear *Hypochaeris radicata*, ribwort plantain *Plantago lanceolata*, creeping buttercup *Ranunculus repens*, primrose *Primula* sp., perennial rye grass *Lolium perenne*, annual meadow grass *Poa annua*.
- 3.4.5 No protected, priority or notable plants were found. No UK priority habitats were found or proposed for impact. No Schedule 9 invasive plants were found.

Bats

3.4.6 The house and garage were both considered negligible in suitability or potential for roosting bats. No signs or evidence of bat activity were found and opportunities for roosting were negligible. Access for bats into the loft was blocked and gaps around the roof were too small for roosting bats. Furthermore, the plastic sheeting over half of the roof prevents access for bats into this area.

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- 3.4.7 Wall cracks were present in places but these were through gaps and unsuitable for roosting.
- 3.4.8 The surrounding environment was considered optimal for foraging bats with mature trees and nearby reservoir likely to produce significant quantities of flying insects for feeding bats.

Other Protected & UK Priority Mammals

3.4.9 The site was considered very small in size and low in suitability for foraging or sheltering by other protected priority or rare mammals such as badgers *Meles meles* and hedgehogs *Erinaceus europaeus* etc. No signs or evidence of such were noted during the survey. It could not be discounted that the occasional hedgehog may pass through the site for temporary foraging.

Birds

- 3.4.10 Birds observed or heard on or close to the site during the survey included; starling *Sturnus vulgaris*, wood pigeon *Columba palumbus*, great tit *Parus major*, robin *Erithacus rubecula*, blue tit *Cyanistes caeruleus* and blackbird *Turdus merula*.
- 3.4.11 Starling are UK priority birds and red-listed Birds of Conservation Concern (BoCC). Starling were not observed on site, though were heard in the distance.
- 3.4.12 All other birds recorded are common, widespread and green-listed BoCC. No signs or evidence of barn owl or other notable birds were recorded.
- 3.4.13 The BoCC ratings are summarised as follows:
 - Red-listed highest conservation concern;
 - Amber-listed moderate conservation concern;
 - Green-listed least conservation concern.

Great Crested Newts & Other Amphibians

- 3.4.14 Habitats present included buildings, hardstanding, short improved grass and small garden beds. The habitats were low-negligible in suitability or potential as terrestrial habitat for great crested newts and other amphibians.
- 3.4.15 No local ponds are present for breeding great crested newts. The reservoir is unsuitable for breeding great crested newts, though may support other more common amphibian species.
- 3.4.16 Amphibians were not observed during the survey visit.

Reptiles

- 3.4.17 Habitats present were considered negligible in suitability or potential for reptiles of any species.
- 3.4.18 The survey was undertaken in weather conditions suitable for active reptiles. Reptiles were not discovered during the survey visit.

Invertebrates

- 3.4.19 The site was considered small in size and low in suitability or potential for invertebrates of conservation concern with common and widespread habitat types present in an isolated locality.
- 3.4.20 Two common species of masonry bees Anthophora plumipes and Osmia rufa were found using gaps in the mortar of walls on the southern and eastern elevations.

Other Protected, Priority or rare Species

3.4.21 No signs or evidence of any other protected or priority species were observed on the site, nor were there any suitable habitats for such.

4 DISCUSSION OF RISK AND LEGISLATION

4.1 Protected & Priority Species

Bats

- 4.1.1 Bats are protected under the Wildlife and Countryside Act 1981 as amended by the Countryside Rights of Way Act 2000 and under the Conservation of Habitats and Species Regulations 2017. Some bats are also UK priority species. A summary of the offences likely to be relevant to development are:
 - Intentionally or deliberately kill, injure or take a bat;
 - Intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection, whether bats are present or not;
 - Damage or destroy a breeding site or resting place of any bat;
 - Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection;
 - Deliberately disturb a bat anywhere.

- 4.1.2 Bats have been recorded locally (SBIS, 2022) and surrounding habitats were optimal for foraging bats. However, the buildings proposed for impact were negligible in suitability or potential for roosting bats and no signs or evidence of such were recorded during the survey visit.
- 4.1.3 No trees will require felling.
- 4.1.4 Therefore, the risk of significant impact or harm to bats, bat roosts or local bat conservation was considered negligible.
- 4.1.5 Further bat surveys or mitigation were considered unnecessary. However, to minimise any residual risk of impact to bats, precautionary measures detailed later in the report should be followed.

Other Protected, Priority & Rare Mammals

- 4.1.6 The site was considered negligible in suitability or potential for any other protected, priority or rare mammals and no signs or evidence of such were discovered during the survey visit.
- 4.1.7 Further surveys or mitigation for any other protected, priority or rare mammals were considered unnecessary. However, to minimise any residual risk of impact to hedgehogs, precautionary measures detailed later in the report should be followed.

Birds

- 4.1.8 Wild birds are protected under the Wildlife and Countryside Act 1981 and, with certain exceptions (e.g. pest species) in certain situations, it is an offence to intentionally:
 - Kill or injure any wild bird;
 - Take, damage or destroy the nest of any wild bird while it is in use or being built;
 - Take or destroy the egg of any wild bird.
- 4.1.9 Some bird species (such as barn owls) are also specially protected under Schedule 1 of the Wildlife and Countryside Act 1981 and others are UK priority species.
- 4.1.10 It is possible that on occasions widespread priority birds, such as house sparrow and starling etc. may visit the site and use adjacent habitats. However, the site was considered low in suitability for nesting by such species and no signs or evidence of past nesting by such species was observed within the construction zone.

4.1.11 Overall, it was considered unnecessary to undertake further bird surveys for rare or protected birds or provide mitigation for such species. However, to prevent harm to common nesting birds, precautionary measures, detailed later in the report, should be followed.

Great Crested Newts & Other Amphibians

- 4.1.12 Great crested newts are protected under the Wildlife and Countryside Act 1981 as amended by the Countryside Rights of Way Act 2000, and the Conservation of Habitats and Species Regulations 2017. Great crested newts are also UK priority species. A summary of the offences likely to be relevant to development are:
 - Intentionally or deliberately capture or kill;
 - Intentionally injure;
 - Deliberately disturb, or intentionally or recklessly disturb in a place of shelter or protection;
 - Damage or destroy a breeding site or resting place;
 - Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.
- 4.1.13 The proposed construction zone is very small and negligible in suitability for great crested newts or a significant population of other amphibians.
- 4.1.14 Overall, it was considered that the risk of significant impact or harm from the proposed works were considered negligible.
- 4.1.15 Therefore, further amphibian surveys or mitigation were considered unnecessary.

Reptiles

- 4.1.16 Widespread reptile species including, grass snake, adder, slow worm and common lizard, are protected from intentional killing and injuring under the Wildlife and Countryside Act 1981. They are also UK priority species.
- 4.1.17 The site is very small and habitats proposed for impact very low in suitability for reptiles. Therefore, the risk of significant impact or harm was considered negligible. Therefore, further reptile surveys or mitigation were considered unnecessary.

Plants & Invertebrates

- 4.1.18 No rare, protected, priority species or UK priority habitats are proposed for impact. No Schedule 9 invasive plants were found.
- 4.1.19 Further botanical surveys or mitigation were considered unnecessary.
- 4.1.20 Regarding invertebrates, habitats present were common, widespread and isolated from any habitat of high ecological value for invertebrates (such as woodland or species rich meadows etc.). The risk of presence of a significant assemblage of invertebrates of conservation concern was considered very low.
- 4.1.21 Further invertebrate surveys or mitigation were considered unnecessary. However, to compensate for the loss of nesting habitat for masonry bees, recommendations detailed later in the report, should be followed

Other Protected & Priority species

4.1.22 No signs or evidence of other protected, priority or rare species were observed on the site and it was considered that there was a very low risk of such species occurring on the site or being impacted by the proposed development.

4.2 Other Issues

Sensitive Habitats

- 4.2.1 The site is a significant distance from any statutorily designated nature conservation sites, though it is close to the ecologically sensitive and ecologically valuable Alton Water. However, the proposal is small scale, would not increase the local housing stock and is far enough away from the wetland habitats that the risk of direct or indirect impact to Alton Water or any other sensitive habitat was considered negligible.
- 4.2.2 Further surveys or mitigation for designated nature conservation sites or other sensitive habitats were considered unnecessary.

5 **RECOMMENDATIONS**

5.1 Precautionary Measures & Compensation

Bats

5.1.1 To minimise any residual risk of impact to bats, the following precautionary measures should be undertaken:

- During demolition roof materials should be removed by hand. If at any point bats or evidence of bats (droppings) are found works should stop and an ecologist called for advice;
- Any new proposed external lighting should be minimised. Where external lighting is required, it should be warm white LED lamps with glass glazing, rather than plastic, as these produce the least amount of heat and UV light possible, minimising the attraction effects on insects and minimising disturbance to local bats;
- Any external lighting proposed for the development should be aimed carefully, to minimise illumination of boundary habitats and avoid light spillage into the sky, or horizontally out from any buildings, by using hoods or directional lighting.

Invertebrates

5.1.2 To compensate for the loss of masonry bee nesting habitat it is recommended that six new bee bricks be incorporated into the walls of the new building and one Schwegler clay reed nesting box. The bricks should be positioned high (above 2m) on the southern and eastern elevations replicating the positions of the existing nesting sites. The clay reed nesting box should be positioned high (above 2m) on a tree or large shrub facing a southerly direction. The demolition works to walls should ideally commence outside of the peak bee nesting season (March – July).

Hedgehogs

- 5.1.3 The risk of significant impact or harm to hedgehogs was considered very low. To minimise any residual risk of harm, the below construction related precautionary measures should be followed:
 - The site should continue to be cut short before construction commences to prevent the site from increasing in ecological value for hedgehogs and other wildlife.
 - Demolition waste should be removed off site immediately during demolition to prevent piles of debris forming which could be used for shelter by wildlife that may be harmed by subsequent movement of materials
 - Construction materials should be stored on hardstanding or on pallets to prevent wildlife from sheltering in the materials and being harmed by movement of the materials;

- Any temporary excavations for the development should be covered at night or should have a roughly sawn plank placed in them to facilitate escape for any wildlife which may fall in;
- No development/construction activities at night when hedgehogs are mostly active;
- Any new boundary fencing should have gaps at the base every 15m to allow for hedgehog movement. The gaps should be at least 13cm in diameter.
- In the unlikely event that hedgehogs are observed on the site when an Ecologist is not present, activities in that area should cease and the animal should be allowed to disperse of its own accord or an ecologist should be contacted for advice.

5.2 Enhancements

- 5.2.1 By undertaking the following recommended biodiversity enhancements, the site will be improved for local wildlife and provide a net-gain in accordance with national planning policy (NPPF, 2021).
- 5.2.2 The addition of bat boxes and bird boxes on the new building will increase the potential roosting and nesting sites for local bats and birds. Specifically, the following boxes should be used;
 - 1 x Beaumaris Woodstone Bat Box;
 - 1 x Vivara pro sparrow box.
- 5.2.3 The boxes/bricks can be installed into new walls or mounted externally on walls. The new boxes should be installed high (just below the roofline) and should be free from obstruction and light sources. The bat box should ideally be positioned facing a southerly aspect, while the bird box should be facing a northerly direction or otherwise be out of direct sunlight.
- 5.2.4 Wildlife boxes can be purchased on-line through suppliers such as The Wildlife Shop and NHBS.
- 5.2.5 Any new soft landscaping should include only native and/or wildlife attracting species. Prioritising fruit producing varieties is recommended.
- 5.2.6 New/restored grass areas should be sown with a wildflower meadow mixture such as EM1 from Emorsgate Seeds.

6 CONCLUSION

- 6.1 At the time of survey, the site supported common and widespread habitats low in ecological value. No signs or evidence of protected, priority or rare species were identified. The risk of significant impact to such species or to local ecological value was considered negligible.
- 6.2 Further ecological surveys or mitigation were considered unnecessary. Recommendations for bats and birds are provided.
- 6.3 With recommendations followed as described, the development could proceed with a minimal risk of harm impact to protected, priority or rare species or habitats.
- 6.4 With the biodiversity enhancements followed as described, the proposed development would be enhanced for the benefit of local wildlife in accordance with national planning policy.

7 **REFERENCES**

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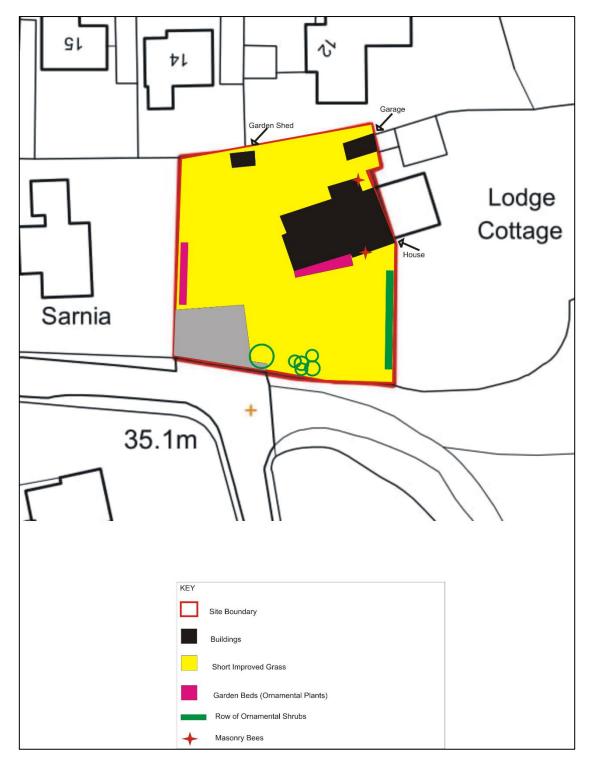
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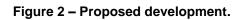
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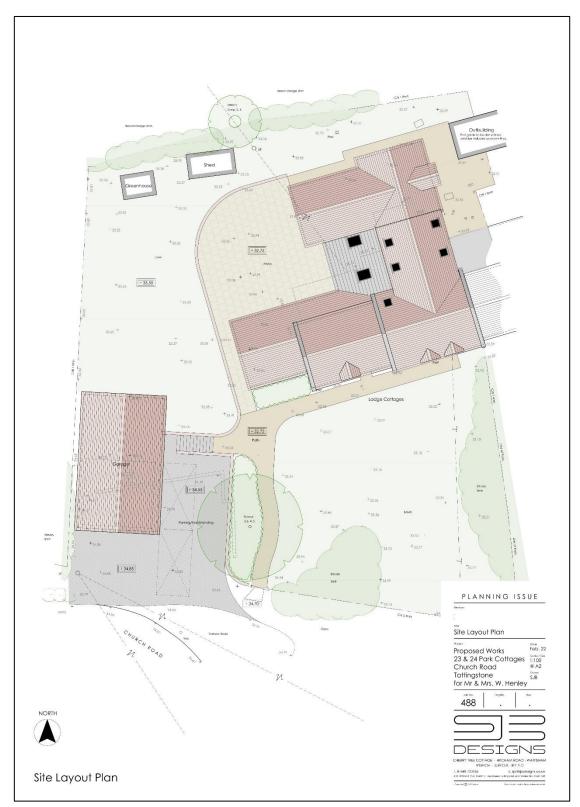
8 APPENDICES

8.1 Appendix 1: Figures

Figure 1 - Habitat map of the site.







8.2 Appendix 2: Photographs

Photograph 1: Main site area at Park Cottages.



Photograph by Roger Spring 2022

Photograph 2: Main site area at Park Cottages.



Photograph by Roger Spring 2022

Photograph 3: Garage at Park Cottages.



Photograph by Roger Spring 2022

Photograph 4: Southern elevation at Park Cottages.



Photograph by Roger Spring 2022

Photograph 5: Inside the loft at Park Cottages



Photograph by Roger Spring 2022

Photograph 6: Anthophora plumipes going into nesting site on the eastern elevation at Park Cottages.



Photograph by Roger Spring 2022