

**ecological support, management &
solutions**



**82a Jubilee Road
Waterlooville
Ecological Assessment**

Revised October 2017

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On Behalf of PLC Architects

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1.0 INTRODUCTION

1.1 Brief

Ecosupport Ltd was commissioned by PLC Architects to conduct a Phase I ecological survey of the buildings and grounds associated with 82a Jubilee Road. The purpose of this survey was to assess any ecological impacts that may arise as a result of the proposed development. The objectives of the survey were as follows:

- Assess the ecological value of the site
- Identify any signs of protected species and potential features that may support them
- Make recommendations for further survey work as appropriate.

NB If the development does not take place within 24 months of this report then the findings of this survey will no longer be considered valid and should be repeated.

1.2 Site Description & Location

The site comprises a series of single storey pre fabricated commercial buildings with associated land situated off Jubilee Road, Waterloooville, PO7 7RE (centred on OS grid reference SU 681100).

Figure 1. Google aerial image of the proposed development site (approximate boundary outlined in red)



The immediate surrounding landscape is predominantly urbanised comprising of industrial units and residential housing although an amenity playing field bounds the north of the site.

1.3 Proposed Development

It is understood the proposals involve the demolition of the existing structures and subsequent construction of 3 new detached residential properties with associated car parking.

2.0 RELEVANT LEGISLATION AND POLICY

2.1 Legislation

2.1.1 *The Conservation of Habitats and Species Regulations (2010)*

This transposes the EU Habitats Directive (Council Directive 92/43/EEC) into UK domestic law. It provides protection for sites and species deemed to be of conservation importance across Europe. The most relevant parts of the Regulations to development related activities are:

- The protection of Special Protection Areas (SPAs) and Special Areas of Conservation (SACs)
- The protection of species listed within Schedule 2 of the Regulations, which prohibits killing, injury, disturbance, damage and/or destruction of breeding sites and/or resting places and sale, this confers some level of habitat protection.

In order for activities that would be likely to result in a breach of species protection under the regulations to legally take place, a European Protected Species (EPS) licence must first be obtained from Natural England.

2.1.2 *The Wildlife and Countryside Act (1981) (as amended)*

This is the primary piece of legislation by which biodiversity is protected within the UK. Protected fauna and flora are listed under Schedules 1, 5 and 8 of the Act. They include all species of bats, making it an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost. Similarly this Act makes it an offence to kill or injure any species of British reptiles and also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built).

2.1.3 *The Countryside and Rights of Way Act (2000)*

This Act places a duty on Government Ministers and Departments to conserve biological diversity and provides police with stronger powers relating to wildlife crimes.

2.1.4 *NERC Act*

The Natural Environment and Rural Communities (NERC) Act 2006 requires that public bodies have due regard to the conservation of biodiversity. This means that Planning authorities must consider biodiversity when planning or undertaking activities. Section 41 of the Act lists species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the *UK Post – 2010 Biodiversity Framework*.

2.2 Policy

2.2.1 *National*

The National Planning Policy Framework (NPPF) sets out the Government's vision for biodiversity in England. It states that the planning system should maintain, enhance, restore

or add to biodiversity and geological conservation interests. Key principles of the framework include:

- The protection of veteran trees
- The creation, protection, enhancement and management of networks of biodiversity and green infrastructure
- The preservation, restoration and recreation of priority habitats and ecological networks
- The recovery of priority species populations, including sections on legally protected species.

3.0 METHODOLOGY

3.1 Field Survey

3.1.1 Habitats

The Phase I survey was conducted by Adam Jessop on the 12th September 2015. Identification of suitable habitats and features to support protected species was undertaken during the initial Phase I walk over survey. This was carried out through a visual assessment of the site following the methodology outlined within the Joint Nature Conservation Committees (JNCC) *Phase I habitat survey handbook* (2003).

NB An updated site visit was not considered necessary in support of this new application given the habitat types and the low – negligible potential for roosting bats.

3.1.2 Bats (daytime assessment)

An assessment was made of the suitability of buildings to support roosting bats based on the presence of features suitable to roost within (i.e. loose or slipped tiles, tile hanging, fascia's, weather boarding etc.). This involved the use of 8 x 42 close focus binoculars and a high-powered torch (where required) for a more detailed inspection of any features. The survey conformed to current best practice guidance as described *within Bat Surveys: Good Practice Guidelines 2nd Edition* (2012).

3.2 Phase II Bat Survey (Evening)

The Phase II survey was carried out by Adam Jessop and Tristanna Cornwell BSc (Hons), (both class level 2 licenced surveyors). Both heterodyne (Bat Box Duet) and frequency division (Anabat SD1/2) detectors were used to identify species. The survey began approximately 15 minutes prior to sunset and continued until approximately an hour and 10 minutes after sunset. Survey sheets were used to record the following information:

- Time of call registration
- Species (if possible to identify using heterodyne detector)
- Location / activity
- Direction of flight (if seen)

3.3 Desktop Survey

A brief search of the Magic maps resource was undertaken to ascertain the sites location relative to the Solent area SPAs. The key aim of this was to ascertain if the site fell within the defined 5.6 km 'disturbance zone' and if subsequent contributions would be required as per the Solent Disturbance & Mitigation Project (SDMP).

3.4 Limitations

The survey was generally considered to have been undertaken without any significant limitations however the rear elevations of the buildings could not be accessed via the site. This could have potentially led to roosting features being missed however given the nature of the construction of the buildings this was considered unlikely. Although the emergence survey was undertaken at the latter stages of the acceptable season (as per the BCT (2012)

guidelines), the weather conditions were still considered good and bats were noted commuting and foraging in the area.

4.0 ECOLOGICAL BASELINE

4.1 Protected Sites

At its nearest point the site is approximately 4.9 km from the Langston Harbour SSSI and Solent Maritime SAC.

4.2 Vegetation Survey Results

The vegetation within the site has been described below using the broad Phase I habitat classification terminology as described with JNCC (2003). The below species noted should not be considered an exhaustive list and instead refer to dominant, characteristic and other noteworthy species associated with each community within the survey area. The habitat types on site comprise:

- Buildings
- Hard standing
- Ruderals
- Scattered trees

4.2.1 Buildings

This is the main habitat on site and comprises of a series of commercial buildings and storage sheds (please refer to section 4.3 for a more detailed description).

4.2.2 Hard standing

The access to the site consists of concrete hard standing with additional areas of hard standing (gravel / concrete) adjacent to the buildings currently used for storing vehicles.

4.2.3 Ruderal

A number of ruderal species were noted throughout the site, associated with both the hard standing / building areas and eastern margins. Species noted included Ground Elder (*Aegopodium podagraria*), Redshank (*Persicaria maculosa*), Silverweed (*Argentina anserina*), White Clover (*Trifolium repens*), Greater Plantain (*Plantago major*), *Rumex* spp, Lesser Trefoil (*Trifolium dubium*), Common Mouse Ear (*Cerastium fontanum*), Nettle (*Urtica dioica*), Dandelion (*Taraxacum* spp), Red Dead Nettle (*Lamium purpureum*), Cleaver (*Galium aparine*) and Bramble (*Rubus fruticosus* agg).

4.2.4 Scattered trees

The northern and part of the north eastern boundaries of the site support a number of scattered trees with the majority that fall within the sites boundary shrubby. Species noted include; Leylandii, Ash (*Fraxinus excelsior*), Pedunculate Oak (*Quercus robur*) (self seeded saplings of both of these species were also present), Cherry Laurel (*Prunus laurocerasus*) and Blackthorn (*Prunus spinosa*).

4.3 Bat Survey Results

4.3.1 Roost potential assessment

A total of 3 buildings were assessed for any bat roosting potential, the results of which are presented below in **Table 1**.

Table 1. Assessment of buildings to support roosting bats

Building	Figure	Description	Potential roosting features	Internals	Assessed Potential
Van refurbishment building (series of 3 attached with tapered front elevations)	Figure 3 Main building with wooden cladding under gable apex. 	Pre fabricated pebbledash wall construction with pitched asbestos roofs. Has wooden cladding on front gables under apex.	Buildings generally in a good state of repair. Two gaps noted where wooden cladding has rotted however these had significant cobweb coverage.	Buildings used for van refurbishment including re-painting. No loft spaces present and generally no roof underlining (however part of paint workshop had suspended ceiling).	Low
Storage building	n/a	Pre fabricated pebbledash wall construction with pitched asbestos roofs and PVC door and windows.	Building in good state of repair with no features noted.	No loft space present and in building in continued use	Negligible

Small open storage shed	Figure 4. Small storage shed. 	Rendered wall and pitched asbestos roof. In a poor state of repair with damage to roof.	None	Not accessible due to high amount of materials stored.	Negligible
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4.3.2 Evening emergence survey

In line with the low roost potential assessment of the buildings on site, a single emergence survey was undertaken on the 30th September. This began at 18:30 and carried on until 19:55 with weather conditions clear, no wind and a temperature at the start of the survey of 15 °C.

The first registration was from a Common Pipistrelle (*Pipistrellus pipistrellus*) noted at 19:02 commuting in a northerly direction towards the playing field. This was followed by a further Common Pipistrelle recorded briefly foraging around the boundary tree canopies at 19:06. For the remainder of the survey a further 5 Common Pipistrelle call were noted (which were all commuting). The only other species recorded were two Soprano Pipistrelle (*Pipistrellus pygmaeus*) calls 19:28 and 19:29 which were both heard but not seen. **No bats were considered to have emerged from the buildings surveyed.**

4.3.3 Trees

None of the trees (which were all shrubby) on site were considered to provide any potential for roosting bats and were therefore classified as **category 3** (i.e. trees with no bat potential) according to the BCT (2012) guidelines. The mature Oak tree however along the

4.4 Reptiles

The site does not support any grassland habitats which are extensive enough or support the structure and heterogeneity favoured by reptiles. It is therefore considered the site is of **Negligible** potential for reptile.

4.5 Bird Survey

The trees and scrub around the on and around the margins of the site provide a suitable habitat for breeding and nesting birds. The site therefore provides **Moderate** potential for nesting birds.

5.0 EVALUATION, IMPACTS & RECOMMENDATIONS

5.1 Site Evaluation

Overall, the site is considered to be of **Low** ecological value with the habitats present only of significance at the site level (IEEM, 2006). The mature Oak trees which bound the northern section of the site are well established and would of **Local** value however these are outside of the sites boundary.

5.2 Potential Impacts of the Proposals

The proposals will results in the loss of overgrown grassland areas, scrub, scattered trees, hard standing and buildings. The potential ecological impacts are:

- Loss of minor areas of ruderals, shrubby trees and scrub;
- Loss of bird nesting habitat and potential disturbance of nests if clearance works undertaken during bird nesting season;
- Possible increase in external lighting and subsequent impacts to foraging and commuting bats.
- Potential disturbance to the SPA

5.3 Mitigation & Recommendations

5.3.1 Solent area SPAs

The report associated with Phase III of the Solent Disturbance Mitigation Project (SDMP) considers avoidance and mitigation measures relating to the impacts associated with new development and it focuses on increased recreational disturbance to wintering and passage waterfowl. Such measures are necessary to protect the SPA and Ramsar site interests on the Solent. It outlines a number of techniques that may form the mitigation framework (see **Box 1**) (Liley and Tyldesley, 2013).

Box 1. Proposed Mitigation for the SDMP.

- A 'Delivery Office' post is required to initiate the elements of the strategy, manage the initial delivery of the mitigation and ensure the necessary procedures, reporting and monitoring is in place.
- A team of 'Wardens' to provide an on-site presence, talking to visitors, engaging with the public about birds and wildlife, help with the delivery of other elements of the strategy and undertaking monitoring.
- 'Solent Dog Project' to engage with dog walkers, promote sites for dog walking and provide information on dog-walking around the Solent.
- A 'Review of Parking and Access' will lead to recommendations relating to creating additional parking in some locations, reducing parking in others, revised parking charges and may provide evidence for the exclusion zones.
- A 'Review of Watersport Zones and Watersport Access' will interact with user groups and set out a series of clearly defined zones with necessary infrastructure.
- The development of the 'Codes of Conduct Pack' will be undertaken with users groups, helping to establish clear communication and discussion, covering watersports and shorebased activities. The codes should include maps and fit together as a single pack of separate codes.
- 'Site Specific Projects', relating to both shore-based and water-based access, would include path re-routing, creation of new paths, dedicated areas for dogs, enhanced facilities for watersports, marking of dedicated watersport zones, changes to car-parks.
- Once 'Watersport permits and Enforcement' is established, monitoring results will indicate whether further measures are necessary. Various more restrictive options are then available for example dog control orders, permit systems for particular watersports at particular locations and enforcement of byelaws could be introduced as required and targeted as necessary.
- SANGS/ADDITIONAL GI/ALTERNATIVE ROOST SITES: these measures are large, costly and are unlikely to be 'quick wins'. As such they should be considered as
- Elements to be adopted at a later part of the strategy include the creation of 'Alternative Roost Sites' and Suitable Alternative Natural Green Spaces (SANGS).

The measures will need to be provided either directly by individual developments or indirectly via funding contributions. As it states within the report 'In most cases it will not be possible for an individual development to implement any direct measures in order to wholly or partly offset its effects on the Solent SPAs' therefore 'the effects of the development can be mitigated by it making a proportionate contribution to the cost of implementing the Strategy'.

The SDMP necessitates that financial contributions are made to help mitigate against likely significant impacts from new developments with the defined 5.6km disturbance zone. A financial contribution of £181.00 per dwelling (index linked and under review) will be made either before planning permission is granted or by entering into a Section 106 Planning Obligation.

The Liley and Tyldesley (2013) report states that 'contributions of individual proposals to the strategic funding ensures that they will not be likely to have a significant effect on the SPAs, either

- a) Alone (usually because they are too small); or
- b) In combination with other plans or projects (because the combined effects are eliminated by the implementation of the strategy to which the development has made a fair and proportional contribution in order to avoid any significant effects on the site).

5.3.2 Generic mitigation recommendations

The following recommendations are made to minimise the potential impacts of the proposals and provide enhancements:

- In order to avoid disturbance of nesting birds or damage to their nests, clearance of the trees and scrub should be undertaken outside of the bird-nesting season (typically March – August, dependant on weather). If this is not possible, the area to be cleared should be thoroughly checked by an ecologist immediately prior to clearance. If any active nests are found they should be left undisturbed with a suitable buffer of undisturbed vegetation (ca. 3m) until nestlings have fledged.
- To avoid undue disturbances to bats commuting around the site, it is recommended that external lighting on the proposed new development be low – pressure and hooded to avoid light spill into the surrounding habitat (following the guidance outlined within Bats and Lighting in the UK BCT 2009). This recommendation will be of greatest relevance along the park / playfield edge (northern boundary).

5.3.3 Enhancements

- Integrate a single bat tube into the southern and northern gable ends of plots 1 and 3. The Bat box C design or similar can be considered by ibstock as this model is available in a variety of constructional materials and provides a self contained bat features suitable for crevice dwelling species such as Pipistrelles.
- As a general enhancement, any landscape planting should aim for a 70:30 ratio in favour of native species over non-natives and ornamentals (in line with the IEEM guidance outlined within Smith & Day (2012). Species that can be considered within any planting include: Silver Birch (*Betula pendula*), Hazel (*Corylus avellana*), Oak, Scots Pine (*Pinus sylvestris*) and Goat Willow (*Salix caprea*).

6.0 REFERENCES

Bat Conservation Trust (2012) Bat Surveys: Best Practice Guidelines, 2nd Edition

BCT (2009) Bats and Lighting in the UK, Bats and the Built Environment Series

JNCC (2003) Handbook for Phase 1 Habitat Survey

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