



**LINDSAY CARRINGTON ECOLOGICAL
SERVICES LTD**

ECOLOGICAL APPRAISAL
AND
PHASE 1 BAT SURVEY

WEST STREET
HAVANT
HAMPSHIRE
PO9 1LA

JUNE 2012

ON BEHALF OF VAIL WILLIAMS



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SUMMARY

1. Lindsay Carrington Ecological Services Limited were commissioned by Vail Williams to conduct an Ecological Appraisal and Phase 1 bat survey at 59-61 West Street, Havant, Hampshire PO9 1LA (Grid reference: SU 714 062). This survey was required to support a planning application to retain and renovate the older buildings within the site and demolish the offices and the recent extensions.
2. A Ecological Appraisal is essentially a multi-disciplinary walk-over survey and was conducted with the objective of identifying any ecological constraints associated with the proposals such as the site's potential to support any legally protected species or habitats of high nature conservation value.
3. A phase 1 bat survey entails a detailed inspection of both internal and external features of the building looking for signs of bats.
4. No evidence of bats were recorded during the internal and external building inspection however, access to the roof voids in building 2, 3 and 4 was not possible. Buildings 1, 2 and 3 were assessed as holding low potential as bat roosting habitat whilst buildings 4 and 5 were assessed as holding low to medium potential.
5. Recommendations for phase 2 bat surveys have therefore been made in accordance with the Bat Conservation Trust's survey guidelines. The basis of a mitigation strategy has also been outlined should the presence of bats be confirmed at the site. The mitigation strategy will either be refined or removed based on the results of the phase 2 surveys.
6. Potential bird nesting habitat is present in the butterfly-bush scrub around the margins of the site and within the dense ivy on the southern elevations of building 2 and 5. A mitigation strategy has been presented to negate the risk of disturbing nesting birds.

1.0 INTRODUCTION

Lindsay Carrington Ecological Services were commissioned by Vail Williams to conduct an Ecological Appraisal and a Phase 1 bat survey at 59-61 West Street, Havant, Hampshire PO9 1LA (Grid reference: SU 714 062) on behalf of their client Mrs Sarah Mulley. This survey was required to support a planning application to retain and renovate the older buildings within the site and demolish the offices and the recent extensions. A plan showing the location of the site has been provided as Appendix I.

The objective of this survey was therefore to assess the site in order to identify any ecological constraints associated with the proposal such as the sites potential to support legally protected species or habitats of high nature conservation.

Section 2 of the report provides some background information into on legislative requirements and relevant policy. Section 3 details the methodologies adopted and Section 4 provides an account of the survey results. Section 5 provides information on the relevance of the results to the proposed development and presents appropriate measures of best practice.

2.0 RELEVANT POLICY AND LEGISLATION

2.1 *Legislation*

The following legislation may be of relevance to the proposed works. Full details of statutory obligations with respect to biodiversity and the planning system can be found in DEFRA Circular 01/2005.

- **The Conservation of Habitats and Species Regulations 2010:** This transposes the EU Habitats Directive (Council Directive 92/43/EEC) into domestic law. The Regulations provide protection for a number of species including:
 - All species of bat;
 - Dormouse; and
 - Great crested newt.

This legislation makes it an offence to deliberately capture, kill or injure individuals of these species listed on Schedule 2 and damage or destroy their breeding site or place of shelter. It is also illegal to deliberately disturb these species in such a way as to be likely to significantly affect: (i) the ability of any significant group of the species to survive, breed or rear or nurture their young; or (ii) the local distribution or abundance of the species¹;

This legal protection means that where development has the potential to impact on bats, or any protected species, the results of a protected species survey must be submitted with a planning application.²

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are also protected under this legislation. These are a network of sites designated for supporting habitats or species of high nature conservation importance in the European context. Any activity that has a detrimental effect on these European sites is made an offence under the Regulations. Where a development is likely to have a significant impact on a European site, the Regulations require a rigorous assessment of the impacts, known as an Appropriate Assessment.

¹ Note that the amendment to the Habitats Regulations in August 2007 and January 2009 has resulted in an increase in the threshold of illegal levels of disturbance to European Protected Species (EPS). An offence is only committed if the deliberate disturbance would result in significant impacts to the EPS population. However, it should be noted that activities that cause low levels of disturbance to these species continue to constitute an offence under Section 9 of the Wildlife and Countryside Act (see below).

² DEFRA Circular 01/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.

- **The Wildlife and Countryside Act 1981 (and amendments):** Protected fauna and flora are listed under Schedules 1, 5 & 8 of the Act. Species likely to be of relevance include:
 - All species of **bat**. It is 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;
 - All species of **British reptile** (in particular grass snake, common lizard, adder and slow-worm). It is illegal to kill or injure these species;
 - **Barn owls**. It is an offence to intentionally kill, injure, or disturb barn owls, or to take, damage or destroy their eggs and nests (whilst in use or being built); and
 - **Great crested newt**. It is illegal to obstruct access to any structure or place which great crested newts use for shelter or protection or to disturb any great crested newt while it is using such a place.

This Act 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). In addition, it is an offence to disturb any nesting bird listed on Schedule 1 or their young.

Schedule 9 of the Act lists those species for which it is an offence to plant or cause their spread. Species listed under Schedule 9 that are most likely to be encountered are Japanese knotweed (*Fallopia japonica*) and giant hogweed (*Heracleum mantegazzianum*).

Sites of Special Scientific Interest (SSSIs) are also protected under the Wildlife and Countryside Act 1981. These are a network of sites identified as being of national nature conservation importance and hence afforded legal protection.

- **The Countryside and Rights of Way Act 2000:** This Act strengthens nature conservation and wildlife protection through a number of mechanisms. It places a duty on Government Ministers and Departments to conserve biological diversity, provides police with stronger powers relating to wildlife crimes, and improves protection and management of SSSIs.
- **The Protection of Badgers Act 1992:** This Act makes it an offence to wilfully take, injure or kill a badger; cruelly mistreat a badger; interfere with badger setts, sell or possess a live badger; mark or ring a badger. A licence is required for work involving the use of hand tools within 10metres of a sett and heavy machinery within 20 metres of a sett.
- **Wild Mammals (Protection) Act 1996:** This Act provides protection for all wild animals from intentional Acts of cruelty.
- **Hedgerow Regulations 1997:** These Regulations establish a set of criteria for assessing the importance of hedgerows. Where a hedgerow is deemed to be

‘important’ its removal is prohibited without consent from the local Planning Authority.

2.2 Policy

The following policy is of relevance to the proposed works:

- **National Planning Policy Framework (NPPF):** This sets out the Government’s vision for biodiversity in England with the broad aim that planning, construction, development and regeneration should maintain and enhance, restore or add to biodiversity and geological conservation interests. NPPF includes sections on legally protected species and sites (see Section 2.1).
- **Biodiversity Action Plans (BAPs):** BAPs set out policy for protecting and restoring priority species and habitats as part of the UK’s response as signatories to the Convention on Biological Diversity. BAPs operate at both a national and local level with priority species and habitats identified at a national level and a series of Local BAPs that identify ecological features of particular importance to a particular area of the country. The requirement to consider and contribute towards BAP targets was strengthened through the Countryside and Rights of Way Act 2000. Habitat and Species Action Plans that are likely to be of relevance include:
 - Pipistrelle bat (UK BAP);
 - Brown long-eared bat (UK BAP).

3.0 METHODOLOGY

3.1 *Desk study*

The National Biodiversity Network website was used to provide any information they may hold on bats within a 10km radius of the proposed works.

3.2 *Field survey*

3.2.1 Vegetation

The standard Phase 1 habitat survey methodology (JNCC 2010) was adopted whereby habitats are mapped using colour codes. A detailed walkover survey was undertaken on the 30th May 2012 by Hannah Stebbings and Oliver Reeves, directly searching for legally protected and invasive species of plant and categorising any habitats of ecological value that were encountered. A general description of the vegetation was also noted, listing species encountered and scoring their abundance using the DAFOR scale:

- D Dominant;
- A Abundant;
- F Frequent;
- O Occasional;
- R Rare;
- L Local (used as a prefix to any of the above).

3.2.2 Phase 1 bat survey

Bats roost in a wide variety of sites within buildings, with many species roosting in cracks and crevices, within brick work, under slates and tiles, and within timber beam joints where they are difficult to see.

Bats often access roosts at key areas such as the gable end, soffits, barge boards, ridge tiles, between double lintels, around window frames, through open joints in the brickwork or broken tiles through open doors / entrances to the buildings.

The presence of roosting bats can be spotted through signs such as accumulations of moth or butterfly wings, staining, bat droppings, or bats themselves. The absence of these cannot, however, be treated as conclusive evidence that bats are not using the buildings. An assessment was therefore also made of the potential of the building to support bats based on the following scale:

Confirmed Roost	Evidence of bat occupation found
High Roosting Potential	With significant roosting potential, either because they contain a large number of suitable features or those features present appear optimal
Medium Roosting Potential	Features with moderate roosting potential, with roosting features appearing less suitable
Low or Negligible Roosting Potential	Buildings with few, if any, features suitable for roosting

A direct search for evidence of bats was therefore conducted on 30th May 2012 by suitably qualified bat ecologists Oliver Reeves (Licence number: 20114639) and Hannah Stebbings.

3.2.3 Protected Species Assessment

Habitats and features were assessed for their potential to support protected species (see Section 2). In many cases determining the presence, distribution and population size of protected species will require additional, specialist surveys.

Badger

A direct search was undertaken for signs of badger. Signs of badger may include setts, dung pits, latrines, paths or hairs on fences and vegetation. Any setts encountered were classified according to the number of entrances and the extent of their use.

Reptiles

Reptiles are widespread in habitats that provide both cover, in the form of scrub or tall vegetation, and basking areas such as areas of hard standing or short grassland communities. Piles of debris or rubble also provide excellent cover and hibernation sites for reptiles. Effective survey for reptiles is time-consuming and labour intensive involving the use of artificial refuges (usually roofing felt or carpet tiles) which attract individuals. Habitats within the site were therefore assessed for their suitability to support reptiles during this survey, and recommendations for further survey or mitigation made where appropriate.

Great crested newts

Suitable breeding ponds are essential to support populations of great crested newt although they actually only spend a relatively short period of the year in the ponds during the spring for breeding. The remainder of the year is spent in suitable 'foraging' habitat such as tall grassland and woodland. During the winter the great crested newt hibernates, often amongst the roots of trees and scrub or in places such as piles of rubble, amongst foundations of buildings or under fallen trees and logs.

Great crested newts are known to forage up to at least five hundred metres from their breeding pond and suitable habitats that fall within two hundred and fifty metres must be considered even in situations where the breeding pond itself will not be affected. This survey therefore identified whether ponds are present within this radius and where possible assessed their suitability to support great crested newt using the Habitat Suitability Index as developed by Oldham et al. (2000).

4.0 RESULTS

4.1 Desk study

Data obtained from the internet resources MAGIC and NBN are presented below.

Statutory and non-statutory sites

Table 1 below lists internationally, statutory and non statutory designated sites within a five kilometre radius of 59-61 West Street, Havant.

Table 1: Statutory and non statutory designated sites within a 5km radius of 59-61 West Street, Havant

Site name	Conservation status	Distance from site	Size (Ha)	Habitat description
Chichester Harbour	SSSI ¹	3.9km	3695	Chichester Harbour is a large estuarine basin in which at low water extensive mud and sand flats are exposed, drained by channels which unite to make a common exit to the sea. The site is of particular significance for Wintering wildfowl and waders and also breeding birds both within the Harbour and in the surrounding permanent pasture fields and woodlands.
Warblington Meadow	SSSI	1km	4.26	Comprises of unimproved grazing marsh adjoining Chichester Harbour and is of special interest for its gradation from freshwater, baserich marsh to old reclaimed saltmarsh, and for its rich associated flora, with a total of 158 species of flowering plants having been recorded up to the time of notification.

¹ SSSI: Site of Special Scientific Interest

Langstone Harbour	SSSI	2.7km	2069	Langstone Harbour is a tidal basin which at high water resembles an almost landlocked lake. At low water extensive mud flats are exposed, drained by three main channels which unite to make a common and narrow exit to the sea. The harbour includes one of the largest areas of mixed saltmarsh on the south coast, and extensive cord-grass <i>Spartina anglica</i> marsh in an advanced state of degeneration.
Brook Meadow	LNR ¹	3.7km		Consists of 5 acres of grassland, surrounded by woodlands and flanked by two streams. Brook Meadow is full of birds, insects and wild flowers and has Water Voles in the river. It is designated as a Site of Importance for Nature Conservation and is also a Local Nature Reserve.
West Hayling	LNR	2.1km		The Harbour is home either permanently or on a migratory basis for tens of thousands of seabirds, which find that the thousands of hectares of intertidal mudflats contain a massive assemblage of marine invertebrate life.
Farlington Marshes	LNR	3km	121	An area of low lying coastal grazing marsh jutting out into Langstone Harbour. The 300 acres (c 121 ha.) of Farlington is one of the last fragments of a once common habitat around the harbour. It is also one of the few large open spaces left within the Portsmouth area.
Gutner Point	LNR	4.8km		Comprises of Grassland, saltmarsh and inter-tidal mudland extending into Chichester Harbour.
Eames Farm	LNR	4.4km	117	The farm lies at the heart of Chichester harbour and boasts extensive coastal grazing marsh of national and international importance for its plants and bird life.

¹ LNR: Local Nature Reserve

These records of bat species in the vicinity of the site increase the likelihood of them being present at 59-61 West Street, Havant.

Protected and notable species records

Table 2 below lists previous records of bat species within a ten kilometre radius of the site highlighted by the NBN.

Table 2: Protected and notable species within a ten kilometre radius of 59-61 West Street, Havant

Common Name	Scientific name	Status	Location
<i>Mammals</i>			
Serotine	<i>Eptesicus serotinus</i>	Schedule 2, Habs Regs ¹ , Schedule 5, WCA ²	Multiple records at grid reference SU7107 within approximately 5km of site.
Noctule	<i>Nyctalus noctula</i>	Schedule 2, Habs Regs, Schedule 5, WCA	3 records at grid reference SU7106 within approximately 5km from site.
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Schedule 2, Habs Regs, Schedule 5, WCA, UK BAP ³	Multiple records within 10km grid square SU70.
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	Schedule 2, Habs Regs, Schedule 5, WCA	5 records at grid reference SU7100, within approximately 5km of site.
<i>Reptiles</i>			
Slow-worm	<i>Anguis fragilis</i>	Schedule 5, WCA, UK BAP	4 records within 5km of the site, 2 records at grid ref SU7201.
Grass snake	<i>Natrix natrix</i>	Schedule 5, WCA, UK BAP	4 records within 5km of the site, 2 records at grid ref SU7103.
Common lizard	<i>Zootoca vivipara</i>	Schedule 5, WCA, UK BAP	1 record at grid ref SU7101, within approximately 5km of the site.

¹ Habs Regs: Conservation of Habitats and Species Regulations 2010

² WCA: The Wildlife and Countryside Act (1981) (as amended)

³ UK BAP: UK Biodiversity Action Plan

These previous records of protected species in the vicinity of the site increase the likelihood of them being present.

4.2 Field Study

4.2.1 Vegetation

The accompanying Phase 1 habitat map provided as Appendix II depicts the habitats encountered and highlights areas of particular interest with target notes. The site comprises predominantly hardstanding with five buildings, a yew tree within the north eastern corner of the site and scrub / ruderal habitat around the site boundary. Descriptions of habitats encountered are presented below.

Scrub / ruderal (Target note 1)

Small, areas and strips of scrub / ruderal habitat are located along the site's boundaries. Species present include locally abundant butterfly-bush (*Buddleja davidii*), hedge bindweed (*Calystegia sepium*), locally frequent ivy-leaved toadflax (*Cymbalaria muralis*), Oxford ragwort (*Senecio squalidus*) with locally occasional bramble (*Rubus fruticosus*) and locally rare common chickweed (*Stellaria media*). Table 3 lists the species encountered within the scrub / ruderal habitat.

Table 3: Species recorded within scrub / ruderal habitat

Common name	Latin name	Abundance	Status
<i>Grasses, sedges and rushes</i>			
Yorkshire-fog	<i>Holcus lanatus</i>	LF	Common & widespread
Annual meadow-grass	<i>Poa annua</i>	LF	Common & widespread
Smooth meadow-grass	<i>Poa pratensis</i>	LF	Common & widespread
<i>Herbaceous species</i>			
Sycamore sapling	<i>Acer pseudoplatanus</i>	LR	Common & widespread
Butterfly bush	<i>Buddleja davidii</i>	LA	Common & widespread
Hedge bindweed	<i>Calystegia sepium</i>	LA	Common & widespread
Common mouse-ear	<i>Cerastium fontanum</i>	LF	Common & widespread
Spear thistle	<i>Cirsium vulgare</i>	LO	Common & widespread
Canadian fleabane	<i>Conyza canadensis</i>	LF	Common & widespread
Ivy-leaved toadflax	<i>Cymbalaria muralis</i>	LF	Common & widespread
Willowherb sp.	<i>Epilobium sp.</i>	LO	Common & widespread
Cut-leaved crane's-bill	<i>Geranium dissectum</i>	LO	Common & widespread
Cat's-ear	<i>Hypochaeris radicata</i>	LR	Common & widespread
Prickly lettuce	<i>Lactuca serriola</i>	LO	Common & widespread
Ribwort plantain	<i>Plantago lanceolata</i>	LF	Common & widespread
Bramble	<i>Rubus fruticosus</i>	LO	Common & widespread

Common name	Latin name	Abundance	Status
Groundsel	<i>Senecio jacobaea</i>	LO	Common & widespread
Common ragwort	<i>Senecio jacobaea</i>	LO	Common & widespread
Oxford ragwort	<i>Senecio squalidus</i>	LF	Common & widespread
Prickly sow-thistle	<i>Sonchus asper</i>	LF	Common & widespread
Common chickweed	<i>Stellaria media</i>	LR	Common & widespread
Dandelion	<i>Taraxacum agg.</i>	LO	Common & widespread
White clover	<i>Trifolium repens</i>	LO	Common & widespread
Greater mullein	<i>Verbascum thapsus</i>	LR	Common & widespread
Germander speedwell	<i>Veronica chamaedrys</i>	LO	Common & widespread

All species recorded within the scrub / ruderal habitat are common and widespread and are therefore considered to be of negligible value botanically. However, areas of buddleja and bramble may provide limited potential bird nesting habitat. Recommendations regarding nesting birds are provided in Section 5.2.

4.3 Bat Survey

4.3.1 Description of building

The plan provided as Appendix I illustrates the locations of the buildings described below. Five buildings are present with the site including an office block, workshops / warehouses and building extensions. The following was noted:

Building 1 (The office block)

- It is a two storey building of brick construction;
- It has a flat roof with felt / metal lining with uPVC overhang;
- The window and door frames are a combination of wood and uPVC with both single and double glazed windows;
- Soffit boxes are present on the north eastern and the southern elevation and wooden fascia boards are situated on the south eastern elevation;
- Suspended ceiling tiles are present in the interior of the building, there is no roof void;
- The office block measures approximately 30 metres in width by 10 metres in length.

Building 2 (Workshop south of the office block)

- It is a single storey building of brick and breeze block construction with wooden clad sliding doors;
- It has a pitched roof with corrugated asbestos sheeting, ridge tiles and guttering;
- Wooden soffit and fascia boarding is present with lead flashing joining the workshop to the office block which lies to the immediate north of the building;
- The roof void is sealed and boarded;

- Dense ivy covers the southern elevation of the building;
- The building measures approximately 15 metres in length by 10 metres in width.

Building 3 (Joinery offices / workshop)

- This building has brick elevations with a pitched corrugated metal roof;
- Window frames are metal with single glazed windows;
- Wooden fascia and barge boards are present;
- A roof void is present along the western side of the building measuring 2 metres in height, 20 metres in length and 3 metres in width;
- Wooden sarking is present with no additional lining between;
- Asbestos piping was present within the roof void therefore a full search was not conducted for health and safety reasons;
- No obvious access points for bats were observed;
- Suspended ceilings are situated throughout the western side of the building, a few ceiling tiles on the southern side were removed to reveal that wooden sarking was present;
- The eastern side of the building comprises a large open warehouse with areas of exposed corrugated metal roofing and areas of roof void which are closed off;
- Inaccessible roof voids were sealed by chipboard with a timber frame;
- Additional outbuildings of varying sizes and constructed from timber with corrugated metal roofs are located on the eastern elevation;
- The building measures approximately 15 metres in length and width.

Building 4 (Joinery workshop to the north of building 3)

- The building is of brick construction with a triple hipped roof with clay roof and ridge tiles;
- Three voids are present although no access was gained due the voids being sealed with chip board;
- A large wooden sliding door is present on the western elevation of the second floor;
- A brick chimney with a lead flashing seal is present on the western elevation;
- A small flat roofed extension is located on the western elevation with felt lining and wooden fascia boards;
- Additional outbuildings of varying sizes, constructed from timber with corrugated metal roofs, are located on the eastern and southern elevations;
- The main building measures approximately 15 metres in length and width.

Building 5 (Warehouse to the south of building 3)

- The building is of a brick and breeze block construction with a flat, marginally sloped metal roof;

- The building has a timber frame with wooden door and window frames and single glazed windows,
- Wooden barge boards are present;
- Dense ivy covers the southern external elevation;
- A lean to comprising a timber frame with corrugated elevations and an open northern facing elevation is present;
- The building measures approximately 21 metres in length by 10 metres in width.

4.3.2 Presence/absence survey

The presence / absence survey was undertaken on the 30th May 2012 by Oliver Reeves (Licence number: 20114639) and Hannah Stebbings. A summary of the results of the building inspections has been provided below whilst an assessment of the potential of the buildings to support roosting bats has been presented in Table 4.

Building 1 (The office block)

Internal survey

No evidence of bats was recorded during the internal survey, the building is flat roofed and therefore no roof void is present.

External survey

Despite a thorough external survey of building 1 no evidence of bats was recorded.

Building 2 (Workshop south of the office block)

Internal survey

No evidence of bats was recorded during the internal survey, however the roof void was sealed therefore a thorough internal search was not possible.

External survey

Despite a thorough external survey of building 2 no evidence of bats was recorded.

Building 3 (Joinery offices / workshop)

Internal survey

No evidence of bats was recorded during the internal survey, however only restricted access to the roof voids was possible therefore a thorough internal search was not conducted.

External survey

Despite a thorough external survey of building 3 no evidence of bats was recorded.

Building 4 (Joinery workshop north of building 3)

Internal survey

No evidence of bats was recorded during the internal survey, however the roof void was sealed therefore a thorough internal search was not possible.

External survey

Despite a thorough external survey of building 4 no evidence of bats was recorded.

Building 5 (Warehouse south of building 3)

Internal survey

No evidence of bats was found during the internal inspection. Although no roof void was present the western elevation has a cavity wall which has potential to be used by bats.

External survey

Despite a thorough external survey of building 5 no evidence of bats was recorded.

Table 4: Potential opportunities for bats

Building reference	Potential access points for bats	Roosting opportunities	Overall suitability
Building 1 (Office block)	Between the fascia / soffit board and brickwork on the eastern and southern elevation.	Under the fascia / soffit board on the eastern and southern elevation.	Building 1 can be classified as holding low/negligible roosting potential for bats due to restricted access and roosting opportunities available.
Building 2 (Workshop of south office block)	- Via soffits; - Around the building frame, - Gaps between sliding doors and brick elevations, - Via lifted ridge tiles.	- In soffit boxes; - Ivy on the southern elevation, - Under lifted ridge tiles.	Building 2 can be classified as holding low roosting potential for bats based on the external search. A full internal search was not possible as the roof void was sealed therefore the extent of roosting opportunities available is unknown. A number of access points are however available for bats.
Building 3 (Joinery / offices / workshop)	- Gaps where corrugated metal roof meets elevations, - Gaps where chipboard has warped / small holes have been created.	- Along ridge in western roof void, - Between wooden sarking at metal roof.	Building 3 can be classified as holding low roosting potential for bats based on the external search and limited roof void access. A full internal search was not possible as the roof void was sealed in places therefore the extent of roosting opportunities available is unknown. A number of access points are however available for bats.
Building 4 (Joinery workshop)	- Gaps between sliding doors and brickwork; - Gaps where chipboard has warped / small holes have been created, - Gaps under raised clay tiles	Under raised clay tiles	Building 4 can be classified as holding low to medium roosting potential for bats based on an external search. A full internal search was not possible as the roof void was sealed therefore the extent of roosting opportunities available is unknown. A number of access points are however available for bats.
Building 5 (Storage building)	- Via gaps in the cavity wall, - Gaps where elevations meet metal roof.	- In cavity wall on western elevation; - Ivy on the southern elevation,	Building 5 can be classified as holding low to medium roosting potential for bats due to roosting opportunities for crevasse dwelling

Building reference	Potential access points for bats	Roosting opportunities	Overall suitability
south of building 3)		• Crevices in timber frame.	bats available within the cavity wall and a couple of potential access points for bats.

Due to the general lack of access to roof voids within the building and a number of access points and roosting opportunities observed during the initial survey further surveys have been recommended in Section 5.1.

Survey limitations

Access to roof voids within the buildings was limited as the roof voids were predominantly sealed with wooden chip boards or access was not possible for health and safety reasons.

4.3.3 Protected species

Badgers

Despite a thorough search no evidence of badgers was found within the site.

No further recommendations have been made

Reptiles

The site was considered to hold negligible potential for reptiles. Small areas of scrub / ruderal habitat are present within the site, however the predominant habitat across the site is hardstanding. These small areas of scrub / ruderal habitat are isolated as the site is directly surrounded by hardstanding to the north, east and south and the site boundary is fenced.

No further recommendations have been made.

Great crested newts

One pond, Brockhampton Springs is located within approximately 150 metres of the site. Although the site is in relatively close proximity to this pond, the site itself has no ponds within the boundary and does not contain suitable foraging habitat or shelter for great crested newts.

No further recommendations have been made.

Nesting birds

Small areas of scrub / ruderal habitat are located along the site boundary and dense ivy is present on the southern elevations of buildings 2 and 5 providing potential bird nesting habitat. The stands of butterfly-bush and patches of bramble provide some, limited bird nesting habitat.

Further recommendations have been made in Section 5.2.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 *Bat s*

5.1.1 Summary of survey results

Building 1 (The office block)

The phase 1 survey assessed building 1 as holding **low / negligible potential** to support roosting bats. No evidence of bats was recorded during the internal and external search. The building has a flat roof therefore restricting its potential to support roosting bats.

Building 2 (Workshop south of the office block)

Building 2 was assessed as holding **low potential** to support roosting bats. A number of access points were identified during the external survey, however roosting opportunities within the roof void are unknown due to restricted access.

Building 3 (Joinery offices / workshop)

Building 3 was assessed as holding **low potential** to support roosting bats. No evidence of bats was recorded during the internal and external search however a full and thorough search was not conducted due to lack of access to areas with sealed roof voids.

Building 4 (Joinery workshop north of building 3)

Building 4 was assessed as holding **low / medium potential** to support roosting bats. A thorough internal search was not possible due to lack of access to sealed roof voids. A number of raised clay tiles are present on the building creating potential roosting opportunities for crevasse dwelling bats.

Building 5 (Warehouse south of building 3)

Building 5 was assessed as holding **low / medium potential** to support roosting bats. The building didn't contain a roof void, however a cavity wall is present on the western elevation providing potential roosting opportunities for crevasse dwelling bats.

5.1.2 Implications of survey findings and recommendations for further action

The results of the phase 1 survey are inconclusive as it was not possible to access all roof voids within buildings. It was therefore not possible to conduct a full and thorough survey. The Bat Conservation Trust's survey guidelines (2012) require that where a

building is assessed as providing low potential as bat roosting habitat that one evening dusk or dawn re-entry survey is undertaken. Where a building is assessed as holding low to medium bat roosting potential the guidelines require that two dusk emergence or dawn re-entry surveys are undertaken. Where bats are confirmed to be roosting within a building, according to the guidelines a total of three dusk emergence or dawn re-entry surveys must be undertaken.

In accordance with these guidelines a single evening emergence survey is therefore required on buildings 1, 2 and 3, and two evening emergence surveys are required on buildings 4 and 5.

Where bats are confirmed to be present a mitigation strategy will be required. The basis of a mitigation strategy has been presented below although this will be refined or removed based on the phase 2 survey results.

Mitigation strategy

Permanent compensatory roost

- Buildings 4 and 5 have **low to medium** potential to support crevice dwelling bats and therefore suitable crevices can easily be incorporated into the design of the new / retained building to ensure that roosting opportunities remain at this site in the long-term. 1FR bat tubes can be installed on the external elevations the building to provide alternative roosting opportunities.
- The phase 2 survey may reveal other species of bat roosting within the buildings, if this is the case additional features specific to the requirements of these species of bat will be added.

Temporary roosting provision

- If bats are found to be present temporary roosting opportunities in the form species specific bat boxes will be erected on the yew tree within the site prior to the commencement of works.

Timing of works

- If only a small number of bats are found to be roosting within the buildings during the phase 2 survey there may be no timing restrictions. However, if the phase 2 survey indicates the presence of a more significant roost, works will be restricted to a time of year when bats are least likely to be present.

Pre-works survey and ecological watching brief

- A pre-works check will be required. The pre-works survey of the buildings will be undertaken by a licensed bat worker to check for presence of bats. If bats are found during the survey, a licensed bat worker wearing gloves will capture the bat(s) by hand or using a hand net and a cloth bag and relocate the bat(s) to the temporary roosts.
- The roof tiles will be dismantled by hand, whilst checking for roosting bats, under supervision of the licensed bat worker, until it is no longer suitable for roosting bats. The tiles will be removed by hand gently in a vertical rather than horizontal sliding motion. If any bats are encountered during dismantling of the roof, works will be halted until the bat(s) vacate the building or a licensed bat handler removes the bat(s) using gloves and a cloth bag. Once the area is clear of bats then works will proceed. The bats will then be relocated to one of the temporary bat boxes (see above) or released at dusk in the area if the weather conditions are suitable. Injured bats will be taken immediately into care (as directed by the Batworker's Manual, s.7.3, pp. 64-66; 3rd ed.2004).
- If a bat is discovered at other, unsupervised times, work will cease immediately and the licensed ecologist will be called for advice. This advice will include leaving the bat to disperse of its own accord, or wait for the licensed handler to appear and move the bat. Builders and contractors are explicitly forbidden from handling bats.

External lighting

- Any external lighting associated with the proposals will be sensitive to foraging bats through being kept to minimum, sodium lights will be hooded or cowled in order to avoid light spill and to direct light to where it is needed. These external security lights will be fitted with a movement sensor on a short timer that is only triggered by large objects moving at around waist height.

5.2 Nesting birds

The following precautions will negate risk of harming, injuring or contributing to the demise of these species:

- Any vegetation clearance, including the yew tree, scrub and the dense ivy on the southern elevation of buildings 2 and 5 should be conducted outside of the bird nesting season which is considered to run from March to September. Where this is not possible a suitably qualified ecologist should check potential nesting habitat immediately prior to clearance. Where nesting birds are encountered clearance must be postponed until the chicks have fledged.

6.0 REFERENCES

Bat Conservation Trust (2007). *Bat Surveys – Good Practice Guidelines 2nd edition*. Bat Conservation Trust, London.

Joint Nature Conservation Committee (2010). *Handbook for Phase I Habitat Survey*. JNCC.

Mitchell-Jones, A. J. (2004), *Bat Mitigation Guidelines*, English Nature.

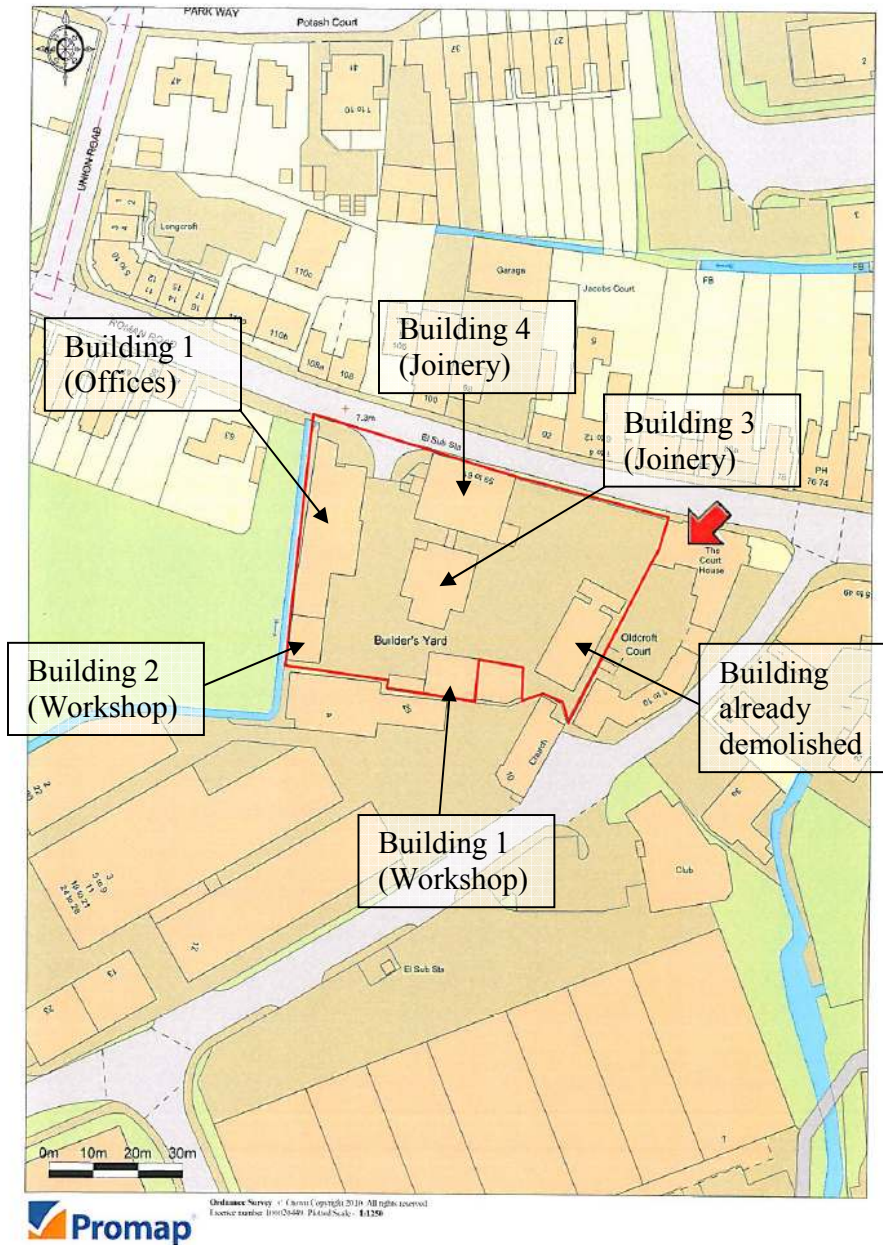
Mitchell-Jones A.J. & McLeish A.P. (2004) *The Bat Workers' Manual (3rd Edition)* Joint Nature Conservation Committee

National Biodiversity Network (NBN) Gateway Website at <http://www.searchnbn.net>

Office of the Deputy Prime Minister (2005). *Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System*.

APPENIDX I: Site location

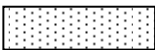
59-61 West Street, Havant
Location Plan



APPENIDX II: Phase 1 map



Phase 1 key

	Buildings
	Hardstanding
	Scrub / ruderal vegetation
	Yew tree

Target notes

1	Areas of scrub / ruderal habitat are present in and around the hardstanding along the site boundary. Species present comprise locally abundant hedge bindweed (<i>Calystegia sepium</i>), butterfly bush (<i>Buddleja davidii</i>), locally frequent cabbage sp (<i>Crucifer sp.</i>), annual meadow-grass (<i>Poa annua</i>), common mouse-ear (<i>Cerastium fontanum</i>), Canadian fleabane (<i>Conyza canadensis</i>), prickly sow-thistle (<i>Sonchus asper</i>), ivy-leaved toadflax (<i>Cymbalaria muralis</i>), Yorkshire-fog (<i>Holcus lanatus</i>), ribwort plantain (<i>Plantago lanceolata</i>), Oxford ragwort (<i>Senecio squalidus</i>) and smooth meadow-grass (<i>Poa pratensis</i>) with locally occasional groundsel (<i>Senecio vulgaris</i>), germander speedwell (<i>Veronica chamaedrys</i>), prickly lettuce (<i>Lactuca serriola</i>), white clover (<i>Trifolium repens</i>), dandelion (<i>Taraxacum agg.</i>), willowherb sp. (<i>Epilobium sp.</i>), common ragwort (<i>Senecio jacobaea</i>), spear thistle (<i>Cirsium vulgare</i>), cut-leaved crane's-bill (<i>Geranium dissectum</i>), bramble (<i>Rubus fruticosus</i>) and locally rare fern sp. (<i>Pteridophytes sp.</i>), greater mullein (<i>Verbascum thapsus</i>), common chickweed (<i>Stellaria media</i>), sycamore sapling (<i>Acer pseudoplatanus</i>) and cat's-ear (<i>Hypochaeris radicata</i>).
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