

**LARCHWOOD AVENUE, BEDHAMPTON,
HAVANT, HAMPSHIRE**

PRELIMINARY ECOLOGICAL APPRAISAL

A Report to: Savills

Report No: RT-MME-122638-01

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REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development".

Report Version	Date	Completed by:	Checked by:	Approved by:
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The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

DISCLAIMER

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

VALIDITY OF DATA

The findings of this study are valid for a period of 24 months from the date of survey. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.

NON-TECHNICAL SUMMARY

Middlemarch Environmental Ltd was commissioned by Savills to carry out a Preliminary Ecological Appraisal at the site of a proposed new restaurant in Havant, Hampshire. To fulfil this brief an ecological desk study and a walkover survey (in accordance with Phase 1 Habitat Survey methodology) were undertaken.

The desk study exercise identified three European statutory sites within 5 km of the survey area, no UK statutory sites within 2 km and twelve non-statutory sites within 1 km. The site is not located within 10 km of a statutory site designated for bats. Three statutory sites are located 2 km south of the survey area. The closest non-statutory site is Littlepark Wood (East) located 180 m south from the development site. The desk study also provided records of protected and notable species including bats, hedgehog, dormouse, birds, invertebrates and plants.

The walkover survey was undertaken on 26th May 2016 by Penelope Holgate, Ecological Consultant. At the time of the survey, the site was dominated by a disused car park. Small patches of scrub and tall ruderal were present along the northern boundary with larger areas of scrub and scattered trees on the east and west boundaries. The southern boundary has a large retaining wall with an area of scrub and scattered trees present at the top of the bank.

The key ecological features on site in relation to the works proposed are the presence of notable habitats on site, including scattered trees and the suitability of the habitats on site to support notable/protected species including foraging bats, terrestrial mammals, nesting birds and reptiles. .

In order to ensure compliance with wildlife legislation and relevant planning policy, the following recommendations are made:

- R1 Habitat Loss and Enhancement:** In accordance with the provision of Chapter 11 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy, biodiversity enhancement measures should be incorporated into the landscaping scheme of any proposed works to maximise the ecological value of the site.
- R2 Trees:** Any trees on site, or overhanging the site, which are to be retained as a part of any proposed works should be protected in accordance with British Standard 5837: 2012 "Trees in relation to design, demolition and construction - recommendations". Protection should be installed on site prior to the commencement of any works on site. Any trees that are removed should be mitigated within the landscaping design, through the inclusion of appropriate native or wildlife attracting species of adequate size.
- R3 Foraging bats:** In line with paragraph 125 of the National Planning Policy Framework, the development should aim to limit the impact of light pollution on bats through the careful use of lighting in critical areas only and at a low level with minimum spillage. No lighting should impact on the retained scrub on the boundaries. Lighting should be designed using guidance from 'Landscape and Urban Design for Bats and Biodiversity' (Gunnell *et al*, 2012, Bat Conservation Trust).
- R4 Terrestrial Mammals including Badger and Hedgehog:** Any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape. Any open pipework with an outside diameter of greater than 120 mm must be covered at the end of each work day to prevent animals entering/becoming trapped.
- R5 Nesting Birds:** Vegetation clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). If this is not possible then any vegetation to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing.
- R6 Reptiles:** Although reptiles are unlikely to be present on site, the scrub that is to be removed should be cleared from the east to the west to allow any reptiles within the habitat to migrate to the areas of grassland and woodland adjacent to the western boundary. This should be completed when reptiles are active. This is weather dependent but generally extends between April and October inclusive.

CONTENTS

1. INTRODUCTION	4
1.1 PROJECT BACKGROUND	4
1.2 SITE DESCRIPTION AND CONTEXT	4
1.3 DOCUMENTATION PROVIDED	4
2. METHODOLOGIES	5
2.1 DESK STUDY	5
2.2 PHASE 1 HABITAT SURVEY	5
3. LEGISLATION AND POLICY	6
3.1 GENERAL BIODIVERSITY LEGISLATION AND POLICY	6
3.2 NATIONAL PLANNING POLICY FRAMEWORK AND PRACTICE GUIDANCE	7
3.3 LOCAL PLANNING POLICY	8
4. DESK STUDY RESULTS	10
4.1 INTRODUCTION	10
4.2 NATURE CONSERVATION SITES	10
4.3 PROTECTED / NOTABLE SPECIES	11
4.4 INVASIVE SPECIES	13
5. PHASE 1 HABITAT SURVEY	14
5.1 INTRODUCTION	14
5.2 SURVEY CONSTRAINTS AND LIMITATIONS	14
5.3 HABITATS	14
5.4 FAUNA	15
5.5 INVASIVE PLANT SPECIES	15
6. DISCUSSIONS AND CONCLUSIONS	16
6.1 SUMMARY OF PROPOSALS	16
6.2 NATURE CONSERVATION SITES	16
6.3 HABITATS	16
6.4 PROTECTED/NOTABLE SPECIES	17
6.5 INVASIVE PLANT SPECIES	18
7. RECOMMENDATIONS	19
7.1 NATURE CONSERVATION SITES	19
7.2 HABITATS	19
7.3 PROTECTED / NOTABLE SPECIES	20
7.4 INVASIVE PLANT SPECIES	20
8. DRAWINGS	21
9. PHOTOGRAPHS	22
REFERENCES AND BIBLIOGRAPHY	23
APPENDICES	24
APPENDIX 1	25
APPENDIX 2	30

1. INTRODUCTION

1.1 PROJECT BACKGROUND

In March 2016 Savills commissioned Middlemarch Environmental Ltd to undertake a Preliminary Ecological Appraisal of the site of a proposed development at Larchwood Avenue, Hampshire. This assessment is required to inform a planning application associated with the construction of a KFC restaurant building adjacent to the existing ASDA superstore.

To assess the existing ecological interest of the site an ecological desk study was carried out, and a walkover survey was undertaken on 26th May 2016. In addition, Middlemarch Environmental Ltd has been commissioned to undertake the following assessments:

- Pre-development Arboricultural Survey and Impact Assessment (RT-MME-122638-02); and,
- Arboricultural Method Statement (RT-MME-122638-03).

1.2 SITE DESCRIPTION AND CONTEXT

The development site is located at Larchwood Avenue in Bedhampton, Havant, centered at National Grid Reference SU 6961 0758. The site is generally flat in topography, roughly square in shape, measures approximately 0.23 ha in size and is situated in a commercial area. At the time of the survey, the site was dominated by a disused car park. Small patches of scrub and tall ruderal were present along the northern boundary with larger areas of scrub and scattered trees on the east and west boundaries. An area of scrub and scattered trees is also present in the centre of the site. The southern boundary has a large retaining wall with an area of scrub and scattered trees present at the top of the bank.

The site was bound to the east and west by Larchwood Avenue, beyond which Eaton Aerospace Systems and residential developments off Chestnut Avenue respectively. To the south, the site abuts the car park of the ASDA Havant Supercentre, whilst to the north the site extends to abut an existing McDonald's retail building. A south east facing grassy bank is present adjacent to the western boundary. The wider landscape is dominated by a mixture of residential dwellings, commercial units and areas of woodland and open grassland, interspersed with recreational grounds.

1.3 DOCUMENTATION PROVIDED

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.1.

Document Name / Drawing Number	Author
Proposed site plan– 0000/2011/b122/14-0062 H	@Architect
Proposed landscape plan – 000/2011/b215/14-0062	@Architect

Table 1.1: Documentation Provided by Client

The drawing 'Proposed site plan– 0000/2011/b122/14-0062' and 'Proposed landscape plan – 000/2011/b215/14-0062' is provided in Chapter 8.

2. METHODOLOGIES

2.1 DESK STUDY

An ecological desk study was undertaken to determine the presence of any designated nature conservation sites and protected species in proximity to the site. This involved contacting appropriate statutory and non-statutory organisations which hold ecological data relating to the survey area. Middlemarch Environmental Ltd then assimilated and reviewed the desk study data provided by these organisations.

The consultees for the desk study were:

- Natural England - *MAGIC* website for statutory conservation sites; and,
- Hampshire Biodiversity Information Centre.

The desk study included a search for European statutory nature conservation sites within a 5 km radius of the site (extended to 10 km for any statutory site designated for bats), UK statutory sites within a 2 km radius and non-statutory sites and protected/notable species records within a 1 km radius.

The data collected from the consultees is discussed in Chapter 4. Selected raw data are provided in Appendix 1. In compliance with the terms and conditions relating to its commercial use, the full desk study data is not provided within this report.

The desk study also included a review of relevant local planning policy with regard to biodiversity and nature conservation (see Chapter 3).

2.2 PHASE 1 HABITAT SURVEY

The walkover survey was conducted following the Phase 1 Habitat Survey methodology of the Joint Nature Conservation Committee (JNCC, 2010) and the Institute of Environmental Assessment (IEA, 1995). Phase 1 Habitat Survey is a standard technique for classifying and mapping British habitats. The aim is to provide a record of habitats that are present on site. During the survey, the presence, or potential presence, of protected species was noted.

Whilst every effort is made to notify the client of any plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981, as amended) present on site, it should be noted that this is not a specific survey for these species.

Data recorded during the field survey are discussed in Chapter 5.

3. LEGISLATION AND POLICY

This chapter provides an overview of the framework of legislation and policy which underpins nature conservation and is a material consideration in the planning process in England. The reader should refer to the original legislation for the definitive interpretation.

3.1 GENERAL BIODIVERSITY LEGISLATION AND POLICY

Conservation of Habitats and Species Regulations 2010 (as amended)

The Habitats Regulations 2010 consolidate and update the Conservation (Natural Habitats, &c.) Regulations 1994 and all its various amendments. The Habitats Regulations 2010 are the principal means by which the EEC Council Directive 92/43 (The Habitats Directive) as amended is transposed into English and Welsh law.

The Habitats Regulations 2010 place duty upon the relevant authority of government to identify sites which are of importance to the habitats and species listed in Annexes I and II of the Habitats Directive. Those sites which meet the criteria are, in conjunction with the European Commission, designated as Sites of Community Importance, which are subsequently identified as Special Areas of Conservation (SAC) by the European Union member states. The regulations also place a duty upon the government to maintain a register of European protected sites designated as a result of EC Directive 79/409/EEC on the Conservation of Wild Birds (The Birds Directive). These sites are termed Special Protection Areas (SPA) and, in conjunction with SACs, form a network of sites known as Natura 2000. The Habitats Directive introduces for the first time for protected areas, the precautionary principle; that is that projects can only be permitted having ascertained no adverse effect on the integrity of the site. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest.

The Habitats Regulations 2010 also provide for the protection of individual species of fauna and flora of European conservation concern listed in Schedules 2 and 5 respectively. Schedule 2 includes species such as otter and great crested newt for which the UK population represents a significant proportion of the total European population. It is an offence to deliberately kill, injure, disturb or trade these species. Schedule 5 plant species are protected from unlawful destruction, uprooting or trade under the regulations.

The Habitats Regulations 2010 were amended in August 2012 to ensure clearer transposition of the provisions of Articles 2, 3, 4(4) (second sentence) and Article 10 of the Wild Birds Directive, by giving additional and specific duties to relevant bodies. A number of amendments were also made to transpose more clearly certain elements of the Habitats Directive.

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

The WCA, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Habitat Regulations 2010 (as amended), offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs).

Schedules of the act provide lists of protected species, both flora and fauna, and detail the possible offences that apply to these species.

The Countryside and Rights of Way (CROW) Act 2000

The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife legislation detailed in the WCA. It places a duty on government departments and the National Assembly for Wales to have regard for biodiversity, and provides increased powers for the protection and maintenance of SSSIs. The Act also contains lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

The Natural Environment and Rural Communities (NERC) Act 2006

Section 40 of the NERC Act places a duty upon all local authorities and public bodies in England and Wales to promote and enhance biodiversity in all of their functions. Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity. These lists superseded Section 74 of the CROW Act 2000.

The Hedgerow Regulations 1997

The Hedgerow Regulations make provision for the identification of important hedgerows which may not be removed without permission from the Local Planning Authority.

UK Post-2010 Biodiversity Framework

The UK Biodiversity Action Plan (BAP), published in 1994, was the UK Government's response to signing the Convention on Biological Diversity (CBD) at the 1992 Rio Earth Summit. The new UK Post-2010 Biodiversity Framework replaces the previous UK level BAP. The UK Post-2010 Biodiversity Framework covers the period 2011-2020 and forms the UK Government's response to the new strategic plan of the United Nations Convention on Biological Diversity (CBD), published in 2010 at the CBD meeting in Nagoya, Japan. This includes five internationally agreed strategic goals and supporting targets to be achieved by 2020. The five strategic goals agreed were:

- Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society;
- Reduce the direct pressures on biodiversity and promote sustainable use;
- To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity;
- Enhance the benefits to all from biodiversity and ecosystem services; and,
- Enhance implementation through participatory planning, knowledge management and capacity building.

The Framework recognises that most work which was previously carried out under the UK BAP is now focused on the four individual countries of the United Kingdom and Northern Ireland, and delivered through the countries' own strategies. Following the publication of the new Framework the UK BAP partnership no longer operates but many of the tools and resources originally developed under the UK BAP still remain of use and form the basis of much biodiversity work at country level. In England the focus is on delivering the outcomes set out in the Government's 'Biodiversity 2020: a Strategy for England's Wildlife and Ecosystem Services' (DEFRA, 2011). This sets out how the quality of our environment on land and at sea will be improved over the next ten years and follows on from policies contained in the Natural Environment White Paper.

Species and Habitats of Material Consideration for Planning in England

Previous planning policy (and some supporting guidance which is still current, e.g. ODPM Circular 06/2005, now under revision), refers to UK BAP habitats and species as being a material consideration in the planning process. Equally many local plans refer to BAP priority habitats and species. Both remain as material considerations in the planning process but such habitats and species are now described as Species and Habitats of Principal Importance for Conservation in England, or simply priority habitats and priority species under the UK Post-2010 Biodiversity Framework. The list of habitats and species remains unchanged and is still derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006. As was previously the case when it was a BAP priority species hen harrier continues to be regarded as a priority species although it does not appear on the Section 41 list.

3.2 NATIONAL PLANNING POLICY FRAMEWORK AND PRACTICE GUIDANCE

In early 2012, the National Planning Policy Framework (NPPF) replaced much previous planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. The government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, which accompanied PPS9, still remains valid. A presumption towards sustainable development is at the heart of the NPPF. This presumption does not apply however where developments require appropriate assessment under the Birds or Habitats Directives.

Chapter 11, on conserving and enhancing the natural environment, sets out how the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and, where possible, provide net gains in biodiversity. Opportunities to incorporate biodiversity gains into a development should be encouraged.

If a proposed development would result in significant harm to the natural environment which cannot be avoided (through the use of an alternative site with less harmful impacts), mitigated or compensated for (as a last resort) then planning permission should be refused.

In March 2014 the Department for Communities and Local Government released guidance to support the National Planning Policy Framework (NPPF), known as the National Planning Practice Guidance (NPPG).

This has been produced to provide guidance for planners and communities which will help deliver high quality development and sustainable growth in England. The guidance includes a section entitled 'Natural Environment: Biodiversity, ecosystems and green infrastructure' which sets out information with respect to the following:

- the statutory basis for minimising impacts on biodiversity and providing net gains where possible;
- the local planning authority's requirements for planning for biodiversity;
- what local ecological networks are and how to identify and map them;
- the sources of ecological evidence;
- the legal obligations on local planning authorities and developers regarding statutory designated sites and protected species;
- the considerations for local (non-statutory) designated sites;
- definition of green infrastructure;
- where biodiversity should be taken into account in preparing a planning application;
- how development can enhance biodiversity;
- how policy is applied to avoid, mitigate or compensate for significant harm to biodiversity and how mitigation and compensation measures can be ensured; and,
- the consideration of ancient woodlands and veteran trees in planning decisions.

3.3 LOCAL PLANNING POLICY

Havant Borough Council

<https://www.havant.gov.uk/planning-and-environment/planning-policy>

The Core Strategy

The Havant Borough Core Strategy is the principal document in the council's Local Plan. It sets out the spatial planning strategy for the area up to 2026 and was adopted by Havant Borough Council on the 1st March 2011. The Core Policy of relevance to ecology is:

Policy CS11 Protecting and Enhancing the Special Environment and Heritage of Havant Borough

Planning permission will be granted for development that:

1. Ensures the key landscape and built form principles set out in the Havant Borough Townscape, Landscape and Seascape Character Assessment are protected and where possible enhanced by partnership working with developers, groups and the wider community.
2. Protects and where possible enhances the borough's statutory and non-statutory designated landscape, habitats and features of biological, hydrological or geological interest. Protection and enhancement will be achieved by appropriate adaptation and mitigation measures including wardening, education and information and the creation of new habitats, water bodies/courses planting of new trees and woodland.
3. Has particular regard to the following hierarchy of nature conservation designations within the borough:
 - (i) Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar [International].
 - (ii) Sites of Special Scientific Interest (SSSI) and National Nature Reserves [National].
 - (iii) Sites of Importance for Nature Conservation (SINC), Local Nature Reserves (LNR), other Ancient Woodland not identified in (ii) above [Local].
4. Protects and where appropriate enhances the borough's statutory and non-statutory heritage designations by appropriately managing development in or adjacent to conservation areas, listed buildings, scheduled ancient monuments, historic parks and gardens, archaeological sites, buildings of local historic or architectural interest.
5. Supports an ongoing programme of survey of habitats and species and designation of Sites of Importance for Nature Conservation.
6. Incorporates partnership working with conservation organisations to improve public understanding of biodiversity and to manage public access to designated sites, particularly on the coast, to reduce harm to nature conservation interests.
7. Incorporates partnership working with landowners and developers to ensure land management practices restore, enhance and where appropriate create new valued landscapes, habitats and their soil structure, particularly the ancient woodland remnants of the Forest of Bere and coastal salt marsh.

8. Protects wildlife habitats and wildlife corridors to prevent the fragmentation of existing habitats and to allow species, for example Brent Geese, to respond to the impacts of climate change by making provision for habitat adaptation e.g. coastal managed realignment and species migration.
9. Maintains undeveloped gaps between the settlements of Emsworth/Havant; Havant/Waterlooville; Havant/Portsmouth; Emsworth/Westbourne and Leigh Park/Rowlands Castle as shown on the Proposals Map.
10. Protects the best and most versatile agricultural land that has the greatest potential for local food security.
11. Responds to the emerging evidence from the Solent Disturbance and Mitigation Project, the published recommendations, and future related research.

The Havant Borough Local Plan (Allocations)

The Havant Borough Local Plan (Allocations), follows on from the Havant Borough Core Strategy and identifies sites for specific uses including, housing, employment, retail, recreation and green infrastructure up to 2026. The plan was adopted by the Council on the 23rd July 2014, and contains the following policies relevant to ecology:

Policy DM23 Sites for Brent Geese and Waders

Planning permission will be granted for developments that avoid important sites for Brent Geese and/or waders outside of the statutory designated areas.

Where this cannot be avoided, development proposals on or adjacent to an important Brent Goose and/or wader site outside of the statutory designated areas will need to demonstrate levels of impact, alone and in combination with other proposals subject to the tests of the Habitats Regulations. Where a negative impact upon a site cannot be avoided or satisfactorily mitigated, and the tests of the Habitats Regulations are met as necessary, replacement feeding/roosting habitat, on a no net loss basis, will be sought.

Where a negative impact upon an important site cannot be avoided or mitigated and replacement feeding/roosting habitat is not or cannot be provided on a no net loss basis, the proposal will be refused.

Planning permission will be granted for development on or adjacent to uncertain sites for Brent Geese and/or waders outside of the statutory designated areas, where appropriate surveys are undertaken and it is determined that the site has no importance.

Policy DM24 Recreational Disturbance to Special Protected Areas (SPAs) from Residential Development

Planning permission will be granted for residential developments that avoid or mitigate a likely significant effect on the SPAs, caused by recreational disturbance through the in combination effect of net additional dwellings. This mitigation can be provided through:

- a) A financial contribution.
- b) A developer provided package of measures associated with the proposed development designed to avoid or mitigate any significant effect on the SPAs subject to meeting the tests of the Habitats Regulations.
- c) A combination of measures in (a) and (b) above.

Where these measures cannot be provided development proposals will be refused, unless the applicant can show, subject to meeting the tests of the Habitats Regulations, that there would not be an adverse effect on the integrity of the SPAs.

The provisions of this policy do not exclude the possibility that some residential schemes, due to their size/and or location, may require individual assessment under the Habitats Regulations on advice from Natural England and additional site specific avoidance or mitigation measures.

4. DESK STUDY RESULTS

4.1 INTRODUCTION

The data search was carried out in June 2016 by Hampshire Biodiversity Information Centre. All relevant ecological data provided by the consultees was reviewed and the results from these investigations are summarised in Sections 4.2 to 4.4. Selected data are provided in Appendix 1.

4.2 NATURE CONSERVATION SITES

Statutory and non-statutory nature conservation sites located in proximity to the survey area are summarised in Table 4.1.

Site Name	Designation	Proximity to Survey Area	Description
European Statutory Sites			
Chichester and Langstone Harbours	RAMSAR/SPA	2 km south	Chichester and Langstone Harbours are located on the south coast of England in Hampshire and West Sussex. They are large, sheltered estuarine basins comprising extensive sand- and mud-flats exposed at low tide. The site is of particular significance for waterbirds, especially in migration periods and in winter. It also supports important colonies of breeding terns.
Solent Maritime	SAC	2 km south	The Solent encompasses a major estuarine system on the south coast of England with four coastal plain estuaries (Yar, Medina, King's Quay Shore, Hamble) and four bar-built estuaries (Newtown Harbour, Beaulieu, Langstone Harbour, Chichester Harbour).
Solent and Isle of Wight Lagoons	SAC	2 km south	The Solent on the south coast of England encompasses a series of Coastal lagoons, including percolation, isolated and sluiced lagoons. Species diversity in these lagoons is high and the fauna includes very high densities of <i>N. vectensis</i> .
Non-statutory Sites			
Littlepark Wood (East)	SINC	180 m south	No information provided
Neville's Park Areas 4-10	SINC	260 m north-east	Meadow Brome noted within this site.
Hulbert road meadow	SINC	290 m north	No information provided
Meadow adjacent to Johnston's Copse	SINC	320 m north-west	Dormouse noted within this site.
Littlepark Wood (West)	SINC	330 m west	Dormouse noted within this site.
Neville's Park East Wood	SINC	345 m north	No information provided
Gundymoor Wood (Main)	SINC	420 m west	No information provided
Johnston's Coppice	SINC	570 m north-west	Dormouse noted within this site.
Neville's Park West Wood	SINC	640 m north	No information provided
Bushy Lease	SINC	640 m north-east	No information provided
Gundymoor Wood (West)	SINC	650 m west	No information provided
Neville's Park Areas 2 & 3	SINC	770 m north	No information provided
Key: SAC: Special Area of Conservation SPA: Special Protection Area RAMSAR: Site listed on The Convention on Wetlands of International Importance (Ramsar Convention) SINC: Site of Importance for Nature Conservation			

Table 4.1: Summary of Nature Conservation Sites

Twenty ancient replanted and semi-natural woodlands were located within a 2 km radius of the survey area, the closest of which is an unnamed ancient semi-natural woodland (Theme I.D 1489389), located 200 m south of the survey area.

The survey area was found to be within a SSSI impact risk zone of multiple conservation sites, the closest of which is Langstone Harbour SSSI, located 2 km south. The risk categories of this risk zone comprise infrastructure, minerals, oil and gas, residential, rural residential, air pollution, combustion and water or liquid waste discharges.

4.3 PROTECTED / NOTABLE SPECIES

Table 4.2 and the following text provide a summary of protected and notable species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Legislation / Conservation Status
Mammals - bats					
Pipistrelle <i>Pipistrellus</i> sp.	6	2015	230 m south-east	#	ECH 4, WCA 5, WCA 6
Unidentified myotis <i>Myotis</i> sp.	5	2014	450 m south	-	ECH 4, WCA 5, WCA 6
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	5	2014	450 m south	✓	ECH 4, WCA 5, WCA 6
Common pipistrelle <i>Pipistrellus pipistrellus</i>	7	2014	550 m south	-	ECH 4, WCA 5, WCA 6, Local
Noctule <i>Nyctalus noctula</i>	1	2014	560 m north-west	✓	ECH 4, WCA 5, WCA 6
Brown long-eared bat <i>Plecotus auritus</i>	2	2014	560 m north-west	✓	ECH 4, WCA 5, WCA 6
Natterer's bat <i>Myotis nattereri</i>	1	2011	670 m west	-	ECH 4, WCA 5, WCA 6
Serotine bat <i>Eptesicus serotinus</i>	1	2011	750 m south	-	ECH 4, WCA 5, WCA 6
Long-eared bat <i>Plecotus</i> sp.	1	2012	840 m north-east	#	ECH 4, WCA 5, WCA 6
Mammals – other					
Hedgehog <i>Erinaceus europaeus</i>	3	2013	550 m south	✓	WCA 6
Dormouse <i>Muscardinus avellanarius</i>	7	2009	Within a 1 km radius*	✓	ECH 4, WCA 5, WCA 6, Local

Table 4.2: Summary of Protected/Notable Species Records Within 1 km of Survey Area (continues)

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Legislation / Conservation Status
Birds					
Kingfisher <i>Alcedo atthis</i>	7	2013	880 m north-east	-	WCA1i
Eurasian hobby <i>Falco subbuteo</i>	2	2013	Within a 1 km radius*	-	WCA1i, Local
Brambling <i>Fringilla montifringilla</i>	1	2005	Within a 1 km radius*	-	WCA1i
White-tailed eagle <i>Haliaeetus albicilla</i>	1	2008	Within a 1 km radius*	-	WCA1i
Mediterranean gull <i>Larus melanocephalus</i>	5	2013	Within a 1 km radius*	-	WCA1i, Local
Red kite <i>Milvus milvus</i>	2	2014	Within a 1 km radius*	-	WCA1i, Local
Honey-buzzard <i>Pernis apivorus</i>	1	2000	Within a 1 km radius*	-	WCA1i, Local
Black necked grebe <i>Podiceps nigricollis</i>	1	2008	Within a 1 km radius*	-	WCA1i, Local
Firecrest <i>Regulus ignicapilla</i>	1	2004	Within a 1 km radius*	-	WCA1i, Local
Green sandpiper <i>Tringa ochropus</i>	9	2014	Within a 1 km radius*	-	WCA1i
Redwing <i>Turdus iliacus</i>	3	2011	Within a 1 km radius*	-	WCA1i
Fieldfare <i>Turdus pilaris</i>	3	2011	Within a 1 km radius*	-	WCA1i
Terrestrial invertebrates					
Stag beetle <i>Lucanus cervus</i>	1	2006	910 m north	✓	ECH 2, WCA 5 S9(5), Local
Key: #: Dependent on species. *: Grid reference provided was four figures only. ECH 2: Annex II of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation. ECH 4: Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest in need of strict protection. WCA 1i: Schedule 1 Part 1 of Wildlife and Countryside Act 1981 (as amended). Birds protected by special penalties at all times. WCA 5: Schedule 5 of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). WCA 5 S9(5): Schedule 5 Section 9(5) of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). Protection limited to selling, offering for sale, processing or transporting for purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from, such animal. WCA 6: Schedule 6 of Wildlife and Countryside Act 1981 (as amended). Animals which may not be killed or taken by certain methods. Species of Principal Importance: Species of Principal Importance for Nature Conservation in England. Local: Hampshire Biodiversity Action Plan Note. This table does not include reference to the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats), the Bonn Convention on the Conservation of Migratory Species of Wild Animals or the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).					

Table 4.2 (continued): Summary of Protected/Notable Species Records Within 1 km of Survey Area

Birds

The desk study provided records of fifteen species of bird listed as Species of Principal Importance including lapwing *Vanellus vanellus*, bullfinch *Pyrrhula pyrrhula* and yellow wagtail *Motacilla flava*.

A further three species of bird listed on the red RSPB list were identified within a 1 km radius comprising whinchat *Saxicola rubetra*, nightingale *Luscinia megarhychos* and pochard *Aythya ferina*.

Six species of bird listed on the amber RSPB list were also identified within a 1 km radius including redshank *Tringa tetanus*, shelduck *Tadorna tadorna* and oystercatcher *Haematopus ostralegus*.

Invertebrates

The desk study provided records of moths listed as Species of Principal Importance comprising cinnabar *Tyria jacobaeae* and dusky-lemon sallow *Xanthia gilvago* within a 1 km radius of the survey area.

Further records of notable *Lepidoptera* (moths and butterflies), *Coleoptera* (beetles), *Diptera* (true flies), *Hymenoptera* (ants, bees, sawflies and wasps) and *Hemiptera* (true bugs) were also identified within a 1 km radius of the survey area.

Plants

The desk study provided records of whorl-grass *Catabrosa aquatica* and lesser spearwort *Ranunculus flammula*, which are listed as vulnerable on the IUCN redlist (2001).

Records of a further three species listed as county scarce were also identified within a 1 km radius of the survey area comprising narrow-leaved pepperwort *Lepidium rederale*, round-leaved crane's-bill *Geranium rotundifolium* and meadow brome *Bromus commutatus*.

4.4 INVASIVE SPECIES

Table 4.3 provides a summary of invasive species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Legislation / Conservation Status
Rhododendron <i>Rhododendron ponticum</i>	2	2013	450 m south	WCA 9
Yellow archangel <i>Lamium galeobdolon</i> subsp. <i>argentatum</i>	1	2008	450 m south	WCA 9
Montbretia <i>Crocsmia x crocosmiiflora</i>	1	2008	450 m south	WCA 9
Water fern <i>Azolla filiculoides</i>	1	1998	700 m north	WCA 9
Himalayan balsam <i>Impatiens glandulifera</i>	1	2009	950 m east	WCA 9
Key: WCA9: Schedule 9 of Wildlife and Countryside Act 1981 (as amended). Invasive, non-native, plants and animals.				

Table 4.3: Summary of Invasive Species Records Within 1 km of Survey Area

5. PHASE 1 HABITAT SURVEY

5.1 INTRODUCTION

The results of the Phase 1 Habitat Survey are presented in the following sections. An annotated Phase 1 Habitat Survey Drawing (Drawing C122638-01-01) is provided in Chapter 8. This drawing illustrates the location and extent of all habitat types recorded on site. Any notable features or features too small to map are detailed using target notes. Photographs taken during the field survey are presented in Chapter 9.

The survey was carried out on 26th May 2016 by Penelope Holgate, Ecological Consultant. Table 5.1 details the weather conditions at the time of the survey.

Parameter	Condition
Temperature (°C)	16.5
Cloud (%)	10
Wind (Beaufort)	F1
Precipitation	Dry

Table 5.1: Weather Conditions During Field Survey

5.2 SURVEY CONSTRAINTS AND LIMITATIONS

There were no significant constraints experienced at the time of survey.

5.3 HABITATS

The following habitat types were recorded on site during the field survey:

- Amenity grassland;
- Hardstanding;
- Scattered scrub/ tall ruderal vegetation;
- Scrub with scattered trees; and,
- Wall.

These habitats are described below. They are ordered alphabetically, not in order of ecological importance.

Amenity grassland

A small patch of amenity grassland, dominated by perennial rye-grass *Lolium perenne*, was present in the north-west corner of the site (Plate 1).

Hardstanding

The site was dominated by a hardstanding carpark (Plate 2). This was generally in good condition and supported no significant vegetation.

Scattered scrub / tall ruderal vegetation

Small patch of scrub and tall ruderal habitat were present along the northern boundary, dominated by butterfly-bush *Buddleja davidii* with perennial rye-grass, dandelion *Taraxacum officinale* agg., ragwort *Senecio* sp. and cow parsley *Anthriscus sylvestris*.

Scrub with scattered trees

Larger areas of scrub with scattered trees were present on the southern, eastern and western boundaries of the survey area, with an area of scrub in the centre of the site (Plate 3). The trees were between young and mature in age. Scrub species comprise butterfly-bush and gorse *Ulex* sp. with tree species comprising hawthorn *Crataegus monogyna*, oak *Quercus* sp., ash *Fraxinus excelsior*, silver birch *Betula pendula* and cherry *Prunus* sp. Some areas of scrub on the southern and western boundary had understoreys of bramble *Rubus fruticosus* agg. and ivy *Hedera helix*.

Wall

A concrete retaining wall was present on the southern boundary (Plate 4). This was in good condition and supported vegetation from the adjacent scrub habitat.

5.4 FAUNA

During the survey no field signs of faunal species were recorded. The time of year at which the survey is undertaken will affect species or field signs directly recorded during the survey.

5.5 INVASIVE PLANT SPECIES

There were no invasive plant species noted on site at the time of survey.

6. DISCUSSIONS AND CONCLUSIONS

6.1 SUMMARY OF PROPOSALS

Proposals include the construction of a new restaurant building with associated hard and soft landscaping. The proposals will involve the clearance of most of the habitats on site; however, it is understood that the scrub along the southern boundary is to be retained.

6.2 NATURE CONSERVATION SITES

The desk study exercise identified three European statutory sites within 5 km of the survey area, no UK statutory sites within 2 km and twelve non-statutory sites and twenty ancient woodlands within 1 km. The site is not located within 10 km of a statutory site designated for bats. The significance of these sites to the proposed development is discussed below.

European Statutory Sites

Chichester and Langstone RAMSAR and SPA, Solent Maritime SAC and Solent and Isle of Wight Lagoons SAC are located approximately 2 km south of the survey area. Due to the small scale nature of the proposed development, the distance between the conservation site and the survey area and the built-up nature of the intervening habitats, it is considered unlikely that these conservation sites will be adversely impacted by the proposed development. Therefore, European statutory sites are not a notable consideration for the proposed development.

SSSI Impact Risk Zone

The survey area falls within the SSSI impact risk zone of several nature conservation sites. It is considered that the proposed development does not fall into the risk categories of these conservation sites (please see Appendix 1 for more information). Therefore, these conservation sites are not a notable consideration in regard to the proposed development.

Non-Statutory Sites

Littlepark Wood (East) SINC is the closest non-statutory conservation site located 180 m south of the survey area. The remaining conservation sites are located 260 m or more from the survey area. It is considered unlikely that these conservation sites will be adversely impacted by the proposed development due to the distance between the conservation sites and the survey area, the built-up nature of the intervening habitats and the small scale nature of the proposed development. Therefore, non-statutory sites are not a notable consideration in regard to the proposed development.

6.3 HABITATS

The ecological importance of the habitats present on site is determined by their presence on the list of Habitats of Principal Importance in England and on the Local BAP. It also takes into account the intrinsic value of the habitat. Those habitats which are considered to be of intrinsic importance and have the potential to be impacted by the site proposals are highlighted as notable considerations.

A discussion of the implications of the site proposals with regard to the habitats present on site is provided in the text below. A separate discussion of the value of the habitats on site to protected or notable species is provided in Section 6.4.

Scrub with scattered trees

The mature and semi-mature trees on site are of intrinsic value as they cannot be easily replaced in the short to medium term. It is understood that some trees will be removed to facilitate the proposed development. Those that are to be retained may be adversely impacted during the construction phase of the development, such as root compaction. Therefore, this habitat is a notable consideration and a recommendation regarding the protection and retention of the trees has been made in Section 7.2.

Amenity grassland, hardstanding, scattered scrub/ tall ruderal vegetation and wall

The remaining habitats on site are well represented locally, have low-species diversity or can easily be replaced within the new development. Therefore, they are not a notable consideration for the proposed development.

6.4 PROTECTED/NOTABLE SPECIES

The following paragraphs consider the likely impact of the site proposals on protected or notable species. This is based on those species highlighted in the desk study exercise (Chapter 4) and other species for which potentially suitable habitat occurs within or adjacent to the survey area.

Mammals

Bats

The desk study provided records of at least six species of bat within a 1 km radius of the survey area, with the closest record being located 230 m south-east. The trees within the survey area are in good condition and do not provide suitable habitat for roosting bats. Therefore, roosting bats are not a notable consideration for the proposed development.

The linear areas of scrub and scattered trees provide suitable foraging and commuting habitats for the bats. It is understood that the scrub on the southern edges of the survey area is to be retained. Any additional lighting, temporary or permanent that is to impact this habitat may cause a fragmentation of suitable habitat for bats. Therefore, foraging and commuting bats are a notable consideration for the proposed development.

Hedgehog

The desk study provided three records of hedgehog within a 1 km radius of the survey area, with the closest record being located 550 m south. The scrub may provide suitable refuge and foraging habitat for hedgehog and the surrounding woodland may provide suitable habitat. Hedgehog may therefore be present and site and may fall into any excavations required as part of the proposed development and become trapped. Therefore, hedgehogs are a notable consideration and a recommendation has been made in Section 7.3. Enhancement recommendations have also been made in Section 7.2.

Dormouse

The desk study provided seven records of dormouse potentially within a 1 km radius of the survey area. The limited areas of scrub within the survey area do not provide suitable habitat for dormouse. The survey area is also isolated from any potential suitable habitat within the surrounding landscaping by any built environment. Therefore, dormouse are not a notable consideration for the proposed development.

Badger

The desk study provided no records of badger within a 1 km radius of the survey area. No evidence of badgers using the site was noted at the time of survey, such as setts, foraging signs or latrines. The survey area provides sub-optimal sett building habitat for badger; however, the surrounding woodland may provide suitable habitat. Badger may therefore pass through the site to access the suitable habitat either side of the survey area. Badgers may therefore fall into any excavations required as part of the proposed development and become trapped. Badgers are a notable consideration for the proposed development and a precautionary recommendation has been made in Section 7.3.

Amphibians

The desk study provided no records of amphibians within a 1 km radius of the survey area. The built environment of the majority of the survey area does not provide suitable habitat for amphibians. The scrub and tall ruderal vegetation within the survey area may provide suitable terrestrial habitat for amphibians; however, this is isolated by the surrounding hardstanding. There are also no waterbodies on site and reference to Ordnance Survey data and aerial imagery indicates that there are no waterbodies within a 500 m radius of the survey area that may provide suitable breeding habitat for amphibians. Therefore, amphibians are not a notable consideration for the proposed development.

Reptiles

The desk study provided no records of reptiles within a 1 km radius of the survey area. The built environment of the majority of the survey area does not provide suitable habitat for reptiles. The survey area is generally isolated from suitable habitat in the wider landscape by hardstanding. The areas of scrub provide suitable foraging and refuge habitat for reptiles and the south-eastern facing bank outside of the site adjacent to the western boundary provides suitable basking opportunities. These are relatively small areas and therefore the likelihood of reptiles being present on site is low. However, as a precautionary measure, a recommendation has been made in Section 7.3.

Birds

The desk study provided record of twelve records of birds listed as Schedule 1 on the Wildlife and Countryside Act 1981 (as amended). Due to the specific habitat and breeding requirements of these species, it is considered unlikely that these species will be noted on site at the time of survey.

Numerous other notable bird species were also identified within the desk study, as well as various bird species being observed on site at the time of survey. The trees and areas of scrub provide suitable habitat for nesting birds within the survey area. If the proposed works are undertaken in the bird nesting season then there is potential for impact upon nesting birds and as such, a recommendation has been made in Section 7.3. Due to the limited extent of potential nesting and foraging habitat to be removed and the presence of alternative features within the local vicinity, it is considered that the works should not adversely impact birds in the long-term. Nevertheless, as some loss of habitat will occur, enhancement recommendations are provided within Section 6.2.

Invertebrates

The desk study provided a record of a stag beetle within a 1 km radius of the survey area, located 910 m north. It is considered unlikely that this species will be present on site due to the lack of log piles or standing dead wood. Therefore, stag beetles are not a notable consideration in relation to the proposed development.

The desk study provided numerous records of invertebrates within a 1 km radius of the survey area. It is considered unlikely that these species will be present on site due to the commonality of the scrub species on site. There is also similar habitat within the wider landscape and therefore any invertebrates within this habitat will not be adversely impacted in the long-term. Therefore, invertebrates are not a notable consideration for the proposed development.

Plants

The desk study provided numerous records of plants within a 1 km radius of the survey area. None of these species were noted on site at the time of survey. Given the habitats present on site, it is considered unlikely that these species will be present on site. Therefore, plants are not a notable consideration for the proposed development.

Other Species

The following protected species are not considered to be material considerations due to the lack of desk study records and absence of suitable habitats within the development site and its surroundings: water vole, otter and polecat.

Summary

Species considered to be of relevance to the proposed development are summarised in Table 6.1.

Species / Species Group	Species of Principal Importance?	Summary of Potential Impacts
Bats	#	Fragmentation of suitable habitat
Hedgehog	✓	Direct harm/injury
Badger	-	Direct harm/injury
Reptiles	#	Direct harm/injury
Birds	#	Loss of suitable habitat, direct harm/injury
#: Species dependent		

Table 6.1: Summary of Potential Impacts on Notable Species

6.5 INVASIVE PLANT SPECIES

The desk study provided records of five species of invasive plant species within a 1 km radius of the survey area. None of these species were noted on site at the time of survey and no other invasive species were not noted on site at the time of survey. Therefore, invasive plant species are not a notable consideration for the proposed development.

7. RECOMMENDATIONS

All recommendations provided in this section are based on Middlemarch Environmental Ltd's current understanding of the site proposals (please refer to the drawing Proposed site plan for planning – 000/2011/b122/14-0062 H provided in Chapter 8 for more information), correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

The ecological mitigation hierarchy should be applied when considering development which may have a significant effect on biodiversity. The ecological mitigation hierarchy, as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG) should follow these principles:

- **Avoidance** – development should be designed to avoid significant harm to valuable wildlife habitats and species.
- **Mitigation** – where significant harm cannot be wholly or partially avoided, it should be minimised by design or through the use of effective mitigation measures.
- **Compensation** – where, despite whatever mitigation would be effective, there would still be significant residual harm, as a last resort, compensation should be used to provide an equivalent value of biodiversity.

7.1 NATURE CONSERVATION SITES

No recommendations are made in regard to nature conservation sites.

7.2 HABITATS

The following recommendations are made regarding the habitats present on site:

- R1 Habitat Loss and Enhancement:** In accordance with the provision of Chapter 11 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy, biodiversity enhancement measures should be incorporated into the landscaping scheme of any proposed works to maximise the ecological value of the site:
- Planting of habitats which will be of value to wildlife, such as:
 - native seed/fruit bearing species to provide foraging habitat for mammals and birds;
 - nectar-rich species to attract bees, butterflies and moths;
 - wildflower grassland margins to provide larval food for caterpillars and to attract butterfly and moth species such as wall and small heath; and,
 - species which attract night flying insects which will be of value to foraging bats, for example: evening primrose *Oenothera biennis*, goldenrod *Solidago virgaurea*, honeysuckle *Lonicera periclymenum* and fleabane *Pulicaria dysenterica*.
 - Inclusion of hedgehog passes under any fence lines to allow connectivity between the site and the wider area.
 - Provision of nesting/roosting habitat, such as installation of nest boxes for species such as house sparrow, dense scrub for species such as song thrush, and bat boxes for species such as pipistrelle.
- R2 Trees:** Any trees on site, or overhanging the site, which are to be retained as a part of any proposed works should be protected in accordance with British Standard 5837: 2012 "Trees in relation to design, demolition and construction - recommendations". Protection should be installed on site prior to the commencement of any works on site. Any trees that are removed should be mitigated within the landscaping design, through the inclusion of appropriate native or wildlife attracting species of adequate size.

7.3 PROTECTED / NOTABLE SPECIES

To ensure compliance with wildlife legislation and relevant planning policy [Havant Borough Council Core Strategy Policy CS11], the following recommendations are made:

- R3 Foraging bats:** In line with paragraph 125 of the National Planning Policy Framework, the development should aim to limit the impact of light pollution on bats through the careful use of lighting in critical areas only and at a low level with minimum spillage. No lighting should impact on the retained scrub on the boundaries. Lighting should be designed using guidance from 'Landscape and Urban Design for Bats and Biodiversity' (Gunnell *et al*, 2012, Bat Conservation Trust).
- R4 Terrestrial Mammals including Badger and Hedgehog:** Any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape. Any open pipework with an outside diameter of greater than 120 mm must be covered at the end of each work day to prevent animals entering/becoming trapped.
- R5 Nesting Birds:** Vegetation clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). If this is not possible then any vegetation to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally, for example via the implementation of an appropriate buffer zone (species dependent) around the nest in which no disturbance is permitted until the nest is no longer in use.
- R6 Reptiles:** Although reptiles are unlikely to be present on site, the scrub that is to be removed should be cleared from the east to the west to allow any reptiles within the habitat to migrate to the areas of grassland and woodland adjacent to the western boundary. This should be completed when reptiles are active. This is weather dependent but generally extends between April and October inclusive.

7.4 INVASIVE PLANT SPECIES

No recommendations are made in regard to invasive plant species.

8. DRAWINGS

Drawing C122638-01-01 – Phase 1 Habitat Map

Drawing 0000/2011/b122/14-0062 H – Proposed site plan for planning

Drawing 0000/2011/b215/14-0062 – Proposed landscaping plan



122638-01-01

Legend

- Scattered tree
- × Scattered scrub
- Wall
- A Amenity grassland
- X Dense scrub
- Hardstanding
- / Tall ruderal
- - - Phase 1 site boundary

Project
Larchwood Avenue, Bedhampton, Havant

Drawing
Phase 1 Habitat Map

Client
Savills

Drawing Number 122638-01-01	Revision 00
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Scale @ A4 1:500	Date June 2016
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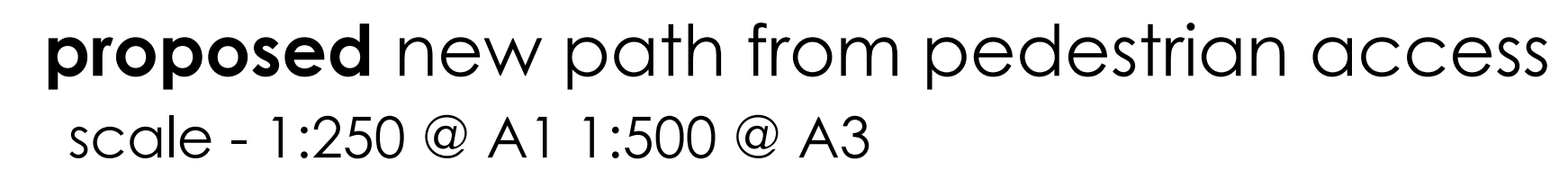
Approved By PH	Drawn By AM
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Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ
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E: admin@middlemarch-environmental.com

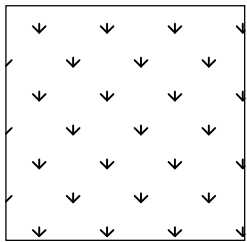
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proposed site plan scale - 1:250 @ A1 1:500 @ A3

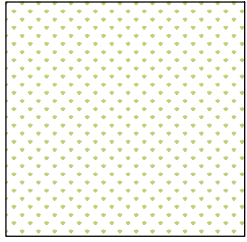


PLANNING

drawing no.	revision
0000/2011/B122/14-0062	H



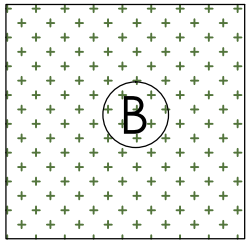
Existing Landscaping



Turfing / Seeding

Turfing: Area to be turfed to be prepared prior to laying. Rotate and level topsoil as required, remove builders debris and stones. Use a pre seeding fertiliser to manufacturers recommended rates. Use a cultivated, weed free amenity turf laid with broken joints, well butted up, work from plants so as not to damage the turf. Water within 24 hours of laying.

Seeding: Prepare for seeding as above. Rate of application 50g/msq. Best sowing times during spring or September. Lightly harrow or rake seeds after sowing.



Small shrub planting

Area indicated with this reference depicts planting to be of a small shrub type consisting of the following shrubs planted in groups of 12 shrubs at a rate of 5 per square metre

- Brachyglottis 'Sunshine'
- Symphoricarpos x chenaultii 'Hancock'
- lonicera 'maigreen'.

NEW TURF PROTECTION

PROTECTIVE FENCING FOR NEWLY SEEDED TURFED AREAS

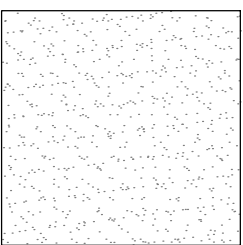
Protect newly seeded areas with 10m high chestnut pale fencing to BS1722 part4. Maintain fencing until grass is well established then remove and reinstate ground. Make good any damage to grass until area is accepted. The fencing will remain the property of the contractor.

NEW SHRUB PROTECTION

FENCE SPECIFICATION

Scaffold frame Chestnut Pale fencing to BS 1722 part 4, height 1.2m minimum to top of the fence, post and frame. Maximum set out of posts 3metres. Method of setting posts: rammed earth to a minimum depth of 600mm. Set out and erect fence in straight lines or smoothly flooring curves as shown on drawings, with tops of posts following profile of the ground, with posts set rigid, plumb and to specified depth end ensure adequate support with correct fastenings and all components securely fixed.

HARD LANDSCAPING SPECIFICATION

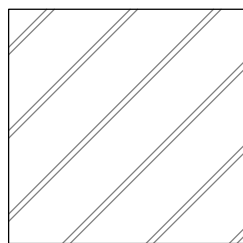


Light Vehicle Road Way / Parking

Area indicated thus represents the following drive through road construction:

40mm bituminous wearing course to suit 3mm aggregate size to meet with BS 4987 part 1 section 7.7 laid in accordance with BS 4987 part 2, binder to be 200 pen bitumen laid on 60mm 120mm dense base course/binder to be 150 pen bitumen.

300mm Dot type 1 road base laid in 2 equal layers as DfP specification clause 802 & 803 Tensar Geogrid SS30 on top of 150mm well crushed concrete interm laid on 1st layer of SS30 Geogrid directly laid on rolled formation.

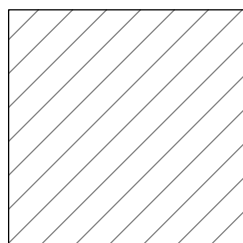


Heavy Vehicle Road Way / Parking

Area indicated thus represents the following drive through road construction:

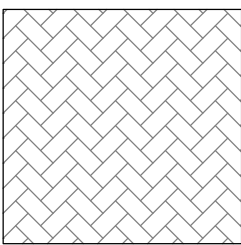
40mm bituminous wearing course to adopt 14mm Size grading wearing course to BS4987 Part 1 section 7.7 and laid in accordance with BS 4987 part 2, binder to be 200 pen bitumen laid on 60mm 120mm dense base course/binder to be 150 pen bitumen. 100mm Bituminous Road Base to be laid beneath.

300mm Dot type 1 road base laid in 2 equal layers as DfP specification clause 802 & 803 Tensar Geogrid SS30 on top of 150mm well crushed concrete interm laid on 1st layer of SS30 Geogrid directly laid on rolled formation.



FormPave

80mm aquaflex blocks laid on 50mm thick 2-6mm of clean crushed stone. Below this is a layer of Geotextile on a 200mm thick 20-5mm sub base stone. This sits above a 250mm thick 63-10mm sub base stone with 2 layers of SC intergrid and inbitex geotile all the structural engineers details (see SCA drawing 1387-T/3 for details)



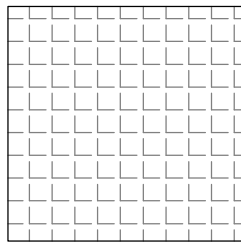
Block Paving

Area indicated thus represents the following footpath constructions:

200x100x65mm keyblock interlocking block pavers from marshals (colour and texture to be Marshall Brindle) to be laid on 50mm sand bedding interm laid on 300mm Dot type 1 compacted road base laid in 2 equal layers.

Tensar SS30 Geogrid laid on 100mm crushed concrete laid on 1st layer of SS30 Geogrid all laid on existing formation compacted with vibration roller On completion Joint filling sand to be brushed into joints and Marshals Keybond sand stabiliser applied and swept clean on completion.

Colour - Brindle BRI laid in herringbone pattern



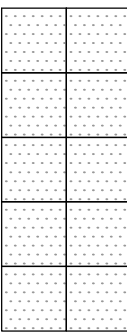
Printed Concrete

Area indicated thus represents the following drive through road construction:

150mm RC40 grade air entrained concrete with black brush finish to upper surface forming Pispave Sidewalk pattern with floated margins at kerbs and joints. Slab to be reinforced with 0.9kg of polypropylene fibrillated all applied in accordance with fibre mesh laid on 1200g visqueen dpm.

250mm Dot type 1 road base laid in 2 equal layers laid on Tensar Geogrid SS30 on top of 150mm well crushed concrete interm laid on 1st layer of SS30 Geogrid directly laid on rolled formation.

Expansion joints to be installed as structural engineers drawings and capped to match brushed surface



Tactile Paving

Area indicated represents the following:

450x450x38mm marshals paving slabs laid at all drop kerbs to be of a type incorporating tactile blister paving laid to fail to suit drop kerbs on 50mm sand bedding interm laid on 250mm Dot type 1-compacted road base laid in 2 equal layers.

Tensar SS30 Geogrid laid on 100mm crushed concrete laid on 1st layer of SS30 Geogrid all laid on existing formation compacted with vibration roller

On completion Joint filling sand to be brushed into joints and Marshals Keybond sand stabiliser applied and swept clean on completion

X1

Symbol indicates 100 x 255 half batter Marshals precast concrete kerb ref HB2 located in position on 275 x 150mm concrete base and 225 x 150mm concrete haunching all as structural engineers detail

X2

Symbol indicates 100 x 255/178 half batter Marshals precast concrete drop kerb (left and right handed) and or radius drop kerbs with 125 x 178mm centre stone located in position on 275 x 150mm concrete base and 225 x 150mm concrete haunching all as structural engineers detail

X3

Symbol indicates 50 x 200mm Marshals precast concrete flat top edging ref E1 located in position on 200 x 100mm concrete base and 200 x 150mm concrete haunching on both sides all as structural engineers detail

X4

Symbol indicates 125 x 255 half batter Marshall precast concrete kerbs laid back to back with 50mm gap all as X1 specification.

GENERAL

- P.C. not to supply and install planting until meets with the satisfaction of the Local Authority and KFC (GB) Ltd. Top soil shall be of good quality and shall be not less than 450mm deep throughout all areas of landscaping. Tree pits shall be not less than 900mm deep. 50mm vertical plastic ducts to be provided from surface to free root balls to aid watering.
- Planted areas to be covered with 50mm bark chippings.
- Plants, shrubs or trees shall be mature and low level but not to obscure signage etc
- All planted and landscaped areas shall be subject to a 12 months Defects Liability Period, to run from the date of Practical Completion of the Works.
- All tree, shrub planting and turfing work to be carried out in accordance with BS 3936 and 4428.
- Soil: Imported screened topsoil should be free from builder's rubble, subsoil and stones bigger than 50 mm. Topsoil areas to be cultivated by hand or by machine prior to planting.
- Compaction by machine is not acceptable.
- Topsoil planting, specified depths:
 - 450 mm: Ornamental shrub/tree beds.
 - 300 mm: Structural shrub beds.
 - 150 mm: For turfed areas.
- Tree Planting: All trees to be pit planted in a 1000 x 1000 x 1000 mm tree pit. Staked with a single stake set a minimum of 500 mm below GL, with a single tie. Tree pit to be back filled with imported topsoil and tree fertiliser, all firmed in after planting.
- Shrub Planting: All pot grown shrubs to be pit planted in a 300 mm square pit, or one large enough to fit the plants roots without damaging them. Use shrubs with a 3 litre pot, unless specified differently by landscape architect. Plants to be firmed in and well watered after planting. Dead or damaged branches to be removed.
- Mulching: All planted areas to be mulched with a dark wood chip or similar, to a minimum overall depth of 50 mm, taking care not to cover low ground cover shrubs. Water shrubs prior to mulching.
- Maintenance: All areas of new tree/shrub planting is to be subject to a twelve months defects liability period. At the end of this period any losses are to be replaced with a similar sized plant, unless theft, vandalism or any unreasonable weather conditions cause loss i.e. drought, frost etc. Turf to be cut at regular intervals to a minimum height of 50 mm. Keep all beds free from weeds either by hand or by the use of an approved contact weed killer. Prune shrubs if required, remove dead/damaged branches, check conditions of tree stakes and ties for wind rock and remove any litter from the beds. Where planting works occur outside the recommended periods, allow for additional watering as deemed necessary.
- All manhole covers to be of a recessed type as specified on the structural engineers drawings to suit traffic loading intended. Recessed covers to be filled with surface finish to match elsewhere
- Laying of block paving to conform with BS 6717:part 3: 1989 (4) code of practice for laying and manufacturers installation instructions
- P.C. to return to site 1 month after completion and remove any efflorescence and treat accordingly
- All road and footpath surfaces are laid to falls as indicated on the structural engineers drawings
- 150mm well consolidated hard-core compacted in position to be sandwiched between 2 layers of Tensar SS30 Geogrid with 300mm min lap joints all laid in accordance with manufacturers instructions
- Where excavation works are to be carried out to accommodate kerbs /edging abutting existing footpaths, P.C. to backfill back edge of kerb/edging and finish matching existing surface finish allowing for removal of spalling asphalt.
- Provide pedestrian galvanised barriers 1100mm high outside doors and around children's areas if/as shown on the drawings including for 450 x 450 x 600mm footings.
- Footpaths to and from the building to be minimum 1.2m wide to facilitate disabled person access, maximum 1:20 gradient.
- The finished level of paths and pavings is to be at the same level as the internal slab level at the position of all external doors.
- Construct service area and access/egress there to of heavy duty construction to accommodate 28 tonne articulated service, delivery and refuse vehicles, all as indicated on SWH tracking drawings and Structural Engineer's drawings.
- P.C. to excavate down to reduced levels to accommodate all statutory services including telephones, Gas, Water and electrical services as indicated on Ashworth UK drawings and backfill on completion with as dug material finished with surface material as spec elsewhere.
- All dims indicated are to be checked on site prior to works commencing and confirmed back to the architect
- NOTE: all dims are taken from the back of the kerb/ edging line
- All works to be excavated down to reduced levels to accommodate all surface treatments as contained on this drawing and Shear Design
- 7-Laying of block paving to conform with BS 6717:part 3: 1989 (4) code of practice for laying and manufacturers installation instructions
- All planted and landscaped areas shall be subject to a 12 months Defects Liability Period, to run from the date of Practical Completion of the Works. Include for the site to be maintained in a tidy, weed free condition for the 12 months following Practical Completion. The contractor will ensure visits are spread throughout the season to ensure the site looks neat, healthy and tidy throughout. Maintenance shall include the watering and spraying of all trees, plants and shrubs as required by the particular species and the prevailing weather conditions.
- 3No. vehicle deflection loops to be provided by the clients direct supplier to be cast into drive thru lane at the speaker box position, and the window, the kerb edging to the drive thru lane at both drive thru window positions will be 300mm from the face of the wall. minimum internal radii to drive thru lane to be 4m.- refer to diagram elsewhere.
- P.C. to read this drawing in conjunction with mechanical and electrical contractors drawings and king securities drawings for locations of car park lighting and external CCTV cameras including installing all ducts and the provision of all draw strings supplied by client direct contractors.
- Construct concrete bases and supply and fix 4 no 'glasdon combo' cool light gray bins with white kfc logo ref: 55510 complete with plastic flap and concrete fixing kit to be obtained from glasdon uk ltd, preston new road, blackpool, lancashire. fy4 4ul. tel: 01253 600410. positions tba with (gbl) ltd.
- All road and footpath surfaces are laid to falls as indicated on the structural engineers drawings.
- P.C. to allow for all electrical service entries feeding proposed signage and barriers all as detailed on the relevant architectural drawings.

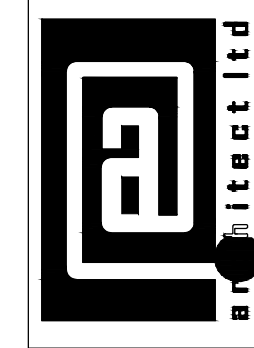
SITE DESIGN SIGNOFF

Name / Title	
Signature	Date

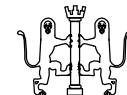
ALL DIMENSIONS TO BE CHECKED ON SITE.

DO NOT SCALE FROM THIS DRAWING EXCEPT FOR THE PURPOSES OF LOCAL AUTHORITY PLANNING

rev	date	description



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hornchurch
essex, rm12 6jl
tel: 01708 477899
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e.: office@architect.ltd.uk
web: www.architect.ltd.uk



NEW BUILD.

store address

KFC BEDHAMPTON

Larchwood Avenue
P09 3QW

drawing title

PROPOSED

Proposed Landscape plan

drawn by	checked	date
NS		JUN 2016
store no.	scale	
0000	1:200 @A1	

drawing no.	revision
0000/2011/B215/14-0062	

9. PHOTOGRAPHS



Plate 1: Amenity grassland



Plate 2: Hardstanding



Plate 3: Dense scrub



Plate 4: Retaining wall with scrub and trees

REFERENCES AND BIBLIOGRAPHY

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APPENDICES

APPENDIX 1: Summary of Statutory Nature Conservation Sites

APPENDIX 2: Overview of Relevant Species Specific Legislation

APPENDIX 1

Summary of Statutory Nature Conservation Sites

Site Check Report Report generated on Mon Jun 13 2016

You selected the location: Centroid Grid Ref: SU696075

The following features have been found in your search area:

Ramsar Sites (England)

Name

CHICHESTER AND LANGSTONE HARBOURS

Reference

UK11013

Hectares

5810.96

Special Areas of Conservation (England)

Name

SOLENT MARITIME

Reference

UK0030059

Hectares

11243.81

Hyperlink

<http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?eucode=UK0030059>

Name

SOLENT & ISLE OF WIGHT LAGOONS

Reference

UK0017073

Hectares

38.06

Hyperlink

<http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?eucode=UK0017073>

Special Protection Areas (England)

Name

CHICHESTER AND LANGSTONE HARBOURS

Reference

UK9011011

Hectares

5810.96

Ancient Woodland (England)

Wood Name

Theme Name

Ancient & Semi-Natural Woodland

Theme ID

1488487

Area (Ha)

0.637451

Wood Name

Theme Name

Ancient & Semi-Natural Woodland

Theme ID

1488333

Area (Ha)

1.535602

Wood Name

Theme Name

Ancient & Semi-Natural Woodland

Theme ID

1488523

Area (Ha)

5.754138

Wood Name

Theme Name

Ancient & Semi-Natural Woodland

Theme ID

1487661

Area (Ha)

0.938692

Wood Name

Theme Name

Ancient & Semi-Natural Woodland

Theme ID
1487194
Area (Ha)
0.302268
Wood Name
Theme Name
Ancient & Semi-Natural Woodland
Theme ID
1487282
Area (Ha)
0.512991
Wood Name
Theme Name
Ancient & Semi-Natural Woodland
Theme ID
1487795
Area (Ha)
1.174705
Wood Name
Theme Name
Ancient & Semi-Natural Woodland
Theme ID
1487521
Area (Ha)
4.971264
Wood Name
Theme Name
Ancient & Semi-Natural Woodland
Theme ID
1487890
Area (Ha)
1.196443
Wood Name
Theme Name
Ancient & Semi-Natural Woodland
Theme ID
1489660
Area (Ha)
0.13124
Wood Name
Theme Name
Ancient & Semi-Natural Woodland
Theme ID
1489383
Area (Ha)
6.850186
Wood Name
Theme Name
Ancient & Semi-Natural Woodland
Theme ID
1489389
Area (Ha)
1.13361
Wood Name
Theme Name
Ancient Replanted Woodland
Theme ID
1487374
Area (Ha)
2.001965
Wood Name
Theme Name
Ancient Replanted Woodland
Theme ID
1489282
Area (Ha)

3.244188

Wood Name

Theme Name

Ancient Replanted Woodland

Theme ID

1488854

Area (Ha)

0.458005

Wood Name

Theme Name

Ancient Replanted Woodland

Theme ID

1489661

Area (Ha)

0.491842

Wood Name

BUSHY LEASE

Theme Name

Ancient & Semi-Natural Woodland

Theme ID

1488631

Area (Ha)

2.871602

Wood Name

PURBROCK PARK WOOD

Theme Name

Ancient & Semi-Natural Woodland

Theme ID

1489536

Area (Ha)

0.175978

Wood Name

PURBROCK PARK WOOD

Theme Name

Ancient & Semi-Natural Woodland

Theme ID

1489537

Area (Ha)

0.247504

Wood Name

PURBROCK PARK WOOD

Theme Name

Ancient & Semi-Natural Woodland

Theme ID

1489538

Area (Ha)

0.4849

Local Nature Reserves (England)

No Features found

National Nature Reserves (England)

No Features found

Sites of Special Scientific Interest (England)

No Features found

SSSI Impact Risk Zones – to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?

2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications

Infrastructure

Airports, helipads and other aviation proposals.

Wind & Solar Energy

Minerals, Oil & Gas

Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.

Rural Non Residential

Residential

Any residential developments with a total net gain in residential units.

Rural Residential

Any residential developments outside of existing settlements/urban areas with a total net gain in residential units.

Air Pollution

Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, pig & poultry units, slurry lagoons > 750m³ & manure stores > 3500t).

Combustion

General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.

Waste

Composting

Discharges

Any discharge of water or liquid waste that is more than 5m³/day. The water needs to either be discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Discharges to mains sewer are excluded.

Water Supply

GUIDANCE – How to use the Impact Risk Zones

[/Metadata for magic/SSSI IRZ User Guidance v2.5 MAGIC 10Mar2016.pdf](#)

APPENDIX 2

Overview of Relevant Species Specific Legislation

Bats

Bats and the places they use for shelter or protection (i.e. roosts) receive European protection under The Conservation of Habitats and Species Regulations 2010, as amended (Habitats Regulations 2010, as amended). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2010 (as amended), states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2010 (as amended) for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, or *obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

*Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

The following bat species are Species of Principal Importance for Nature Conservation in England: Barbastelle Bat *Barbastella barbastellus*, Bechstein's Bat *Myotis bechsteinii*, Noctule Bat *Nyctalus noctula*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auritus*, Greater Horseshoe Bat *Rhinolophus ferrumequinum* and Lesser Horseshoe Bat *Rhinolophus hipposideros*.

Barbastelle bat, serotine bat, Bechstein's bat, pipistrelle bat, grey long-eared bat and greater horseshoe bat are all listed as Priority Species on the Hampshire Local Biodiversity Action Plan.

The reader should refer to the original legislation for the definitive interpretation.

Birds

The Conservation of Habitats and Species Regulations 2010 (as amended) places a duty on public bodies to take measures to preserve, maintain and re-establish habitat for wild birds.

Nesting and nest building birds are protected under the Wildlife and Countryside Act WCA 1981 (as amended).

Subject to the provisions of the act, if any person intentionally:

- kills, injures or takes any wild bird;
- takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Some species (listed in Schedule 1 of the WCA) are protected by special penalties. Subject to the provisions of the act, if any person intentionally or recklessly:

- disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird, he shall be guilty of an offence.

Several bird species are Species of Principal Importance for Nature Conservation in England, making them capable of being material considerations in the planning process.

Hedgehog

Hedgehogs receive some protection under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended); this section of the Act lists animals which may not be killed or taken by certain methods, namely traps and nets, poisons, automatic weapons, electrical devices, smokes/gases and various others. Humane trapping for research purposes requires a licence.

Hedgehogs are a Species of Principal Importance for Nature Conservation in England and are thus capable of being material considerations in the planning process.

Reptiles

All of the UK's native reptiles are protected by law. The two rarest species – sand lizard (*Lacerta agilis*) and smooth snake (*Coronella austriaca*) – benefit from the greatest protection.

Common lizard (*Zootoca vivipara*), slow-worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix natrix*) are protected under the Wildlife and Countryside Act 1981 as amended from intentional killing or injuring.

Sand lizard and smooth snake are protected under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2010 which together make it illegal to kill, injure, capture, handle or disturb these animals. Places they use for breeding, resting, shelter and protection are protected from being damaged or destroyed. It is also illegal to obstruct these animals from using such areas.

In England and Wales, this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions and increases penalties. All native reptiles are Species of Principal Importance for Nature Conservation in England.

The reader is referred to the original legislation for the definitive interpretation.

This is a simplified description of the legislation. In particular, the offences mentioned here may be absolute, intentional, deliberate or reckless. Note that where it is predictable that reptiles are likely to be killed or injured by activities such as site clearance, this could legally constitute intentional killing or injuring.

English Nature (2004) has stated that:

Reptiles are likely to be threatened, and the law potentially breached, by activities such as the following:

- *Archaeological and geotechnical investigations*
- *Clearing land, installing site offices or digging foundations*
- *Cutting vegetation to a low height*
- *Laying pipelines or installing other services*
- *Driving machinery over sensitive areas*
- *Storing construction materials in sensitive areas*
- *Removing rubble, wood piles and other debris.*

In general English Nature would expect reasonable avoidance to include measures such as altering development layouts to avoid key areas, as well as capture and exclusion of reptiles.

For sand lizards and smooth snakes, licences may be issued for some activities (such as disturbance and capture) that would otherwise be prohibited.