



Linden Homes

Bartons Road, Havant

Extended Phase 1 Habitat Survey Report

19 June 2013

The Loft, St Clair's Farm, Wickham Road, Droxford, Hants, SO32 3PW

Tel: 01489 872929

Fax: 01489 872939

Email: ecology@wyg.com





Document Control

Project: Bartons Road, Havant

Client: Linden Homes

Job Number: A081595

File Origin: J:\Environmental Projects\A Projects - Awarded Projects\2012-2013 Ecology\A081595 Bartons Road\700 Reports\Phase 1

Document Checking:

Prepared by: Emily Hare
Assistant Ecologist

Signed:

Checked by: Vicky Coulthard
Consultant Ecologist

Signed:

Verified by: Eleanor Ballard
Principal Ecologist

Signed:

Issue	Date	Status
1	May 2013	FINAL
2		
3		
4		

WYG Environment Planning Transport Ltd. accept no responsibility or liability for the use which is made of this document other than by the Client for the purpose for which it was originally commissioned and prepared.



Contents Page

Executive Summary	1
1.0 Introduction	3
1.1 Background	3
1.2 Site Location and General Description	3
1.3 Development Proposals	3
1.4 Survey and Reporting Objectives	3
2.0 Desk Study	5
2.1 Methodology	5
2.2 Data Search Results	5
3.0 Survey Methodology.....	8
3.1 Habitats	8
3.2 Protected and Notable Species.....	8
3.3 Invasive Species	11
3.4 Limitations.....	11
4.0 Survey Results.....	13
4.1 Habitats	13
4.2 Protected and Notable Species.....	14
4.3 Invasive Species	25
5.0 Ecological Impacts and Recommendations.....	26
5.1 Statutory and Non-statutory Sites	26
5.2 Habitats	26
5.3 Protected and Notable Species.....	27
5.4 Invasive Species	31
5.5 Enhancements	32
6.0 Summary of Recommendations	33
6.1 Recommendations for avoidance:	33



6.2 Recommendations for further survey: 34

6.3 Recommendations for Enhancement 34

7.0 References.....35

Appendix Contents

- Appendix A - Figures
- Appendix B – Biodiversity and Environmental Legislation, Conventions & Threatened Lists
- Appendix C – Data Search Results.
- Appendix D – Wildlife Box
- Appendix E – Wildlife-friendly Planting



Executive Summary

Site Description and Scope of Works		
The site is located in Havant, Hampshire, just off Bartons Road. The site is centred on ordnance survey grid reference SU731080 and is approximately 1.5 hectares in area. The site visit found that the majority of the site, which we understand is being considered for development consists of a number of buildings surrounded by hardstanding, semi-improved grassland, scrub and mature scattered trees. The proposed development is for approximately 60 residential properties, with associated parking and access.		
Potential Constraints	Yes	No
Bats		
Has the site been assessed for bats?	✓	
Are there any structures or trees on site which have the potential to support roosting bats? (see section 5.3.3)	✓	
Breeding Birds including Barn Owls		
Has the site been assessed for breeding birds including barn owls?	✓	
Will areas of hedgerow, scrub, woodland, trees or other features likely to be used by nesting birds be affected by the proposal? (see section 5.3.7)	✓	
Badgers		
Has the site been assessed for badgers?	✓	
Is there any evidence of badgers on or near the application site including setts, foraging or commuting? (see section 5.3.4)		✓
Dormice		
Has the site been assessed for dormice?	✓	
Is there suitable habitat for dormice on, or close to the application site? (see section 5.3.7)		✓
Great crested newts		
Has the site been assessed for great crested newts?	✓	
Is there suitable habitat for great crested newts on, or close to the application site? (see section 5.3.1)		✓
Reptiles		
Has the site been assessed for reptiles?	✓	
Is there suitable habitat on the site for reptiles? (see section 5.3.2)	✓	
Other features of nature conservation interest		
Does the application site support Habitats of Principal Importance or Local Biodiversity Action Plan Priority Habitats?		✓
If 'Yes' list types of habitat		
Does the application site support Species of Principal Importance or Local Biodiversity Action Plan Species?	Potentially	
Pipistrelle bats Serotine bats		
Have details of biodiversity enhancements been included with the application?	✓	



Bartons Road, Havant: Extended Phase 1 Habitat Survey

Recommendations	Yes	No
Are further surveys recommended to inform the ecological impact assessment?	✓	
• Reptile presence / likely absence survey comprising 7 visits between March and October • Internal bat roost assessment of buildings with potential to support roosting bats which can be completed any time • Bat emergence / return survey of buildings if still deemed suitable for bats following the internal bat roost assessment can be completed between May and August • Bat emergence / return surveys of trees if any of the trees with features suitable to support roosting bats are to be removed can be completed between May and September • Bat activity survey once a season (spring, summer and autumn) • It is recommended that a Japanese knotweed Management Plan is produced. This document will be written in line with the overall site management objectives.		
Is mitigation (including avoidance/compensation) and enhancement recommended?	✓	
• It is recommended that multi-functional green space is incorporated into the development, to prevent any recreational pressure on the surrounding SINC sites. • It is recommended that mature trees are retained within the final development where possible and that native trees and shrubs are incorporated into the landscaping of the final design. • It is recommended that vegetation and building clearance take place between October and February wherever possible to avoid the breeding bird season. If this is not possible, then a thorough check for nesting birds should be completed immediately prior to site clearance. If any active nests are found they must be retained, together with a suitable vegetated buffer until all the young have fledged. • If any dead wood is found during site clearance, it is recommended that it be placed elsewhere within the site, to be retained within the final development. • Recommendations are made to direct lighting away from the adjacent scrub and mature trees where possible within the final development, to retain dark corridors for commuting bats within and around the final development. • Recommendations are made to provide additional nesting / roosting and feeding opportunities for birds, bats and invertebrates within the final design. It is recommended that bat and bird boxes are installed on trees and buildings and that native trees and shrubs are planted as part of the landscaping of the proposed development. Refer to Appendices D and E for further details. • Measures for Prevention of spread should be implemented immediately to stop Japanese knotweed from spreading. The situation should be monitored.		



1.0 Introduction

1.1 Background

WYG was commissioned by Linden Homes in April 2013 to undertake an extended Phase 1 habitat survey at Bartons Road ('the site') to inform a planning application. The site layout is shown in Figure 1, Appendix A.

1.2 Site Location and General Description

The site is located in Havant, Hampshire, just off Bartons Road. The site is centred on ordnance survey grid reference SU731080 and comprises approximately 1.5 hectares. To the north of the site lies Barton's Copse, to the east lies open fields which appear to be used for agricultural purposes. To the south of the site lies Bartons Road and Maidenhead Aquatics Garden Centre and to the west of the site is the railway line. The site visit found that the majority of the site, which we understand is being considered for development consists of a number of buildings surrounded by hardstanding, semi-improved grassland, scrub and mature scattered trees.

1.3 Development Proposals

The proposed development comprises the erection of approximately 60 residential properties, with associated access, car parking and landscaping.

1.4 Survey and Reporting Objectives

The ecological investigations undertaken by WYG included the following objectives:

- A desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest, and records of protected/notable species within the site and its environs;
- An extended Phase 1 habitat survey involving a walkover of the site to record habitat types and dominant vegetation, including invasive species, and a reconnaissance survey for evidence of protected fauna or habitats capable of supporting such species;
- An investigation of the buildings for their potential to support bats, including an external inspection of features; and



Bartons Road, Havant: Extended Phase 1 Habitat Survey

- An assessment of the potential ecological constraints to the proposed works at the site and recommendations for further survey, avoidance, mitigation and enhancement where appropriate.



2.0 Desk Study

2.1 Methodology

Information was gathered from the Hampshire Biodiversity Information Centre (HBIC), the ecological records centre for Hampshire, regarding the presence of nature conservation designations and protected and notable species within 2km of the proposed development site. In addition, a search for designations was made of Natural England's interactive, web-based MAGIC (Multi Agency Geographic Information for the Countryside) database.

The data search covers:

- Statutory nature conservation designations, such as National Nature Reserves and Sites of Special Scientific Interest;
- Non-statutory nature conservation designations, such as Wildlife Sites, locally known as Sites of Interest for Nature Conservation;
- Protected species, such as badgers, great crested newts and bats; and
- Notable species, such as those listed in the local Biodiversity Action Plan.

The data search does not cover Tree Protection Orders or Conservation Areas.

2.2 Data Search Results

2.2.1 Statutory Sites

There are no statutory sites situated within 2km of the proposed development site, the closest statutory site is the Brook Meadow Local Nature Reserve (LNR) which is located approximately 2.5km south east of the proposed development site.

2.2.2 Non-statutory Sites

A total of 18 Sites of Interest for Nature Conservation (SINC) are located within 2km of the proposed development site. The closest is Barton's Copse and The Slip, which is adjacent to the northern boundary of the site. This SINC is designated as it contains semi-natural ancient woodland. A further 11 SINC are



designated due to their woodland properties with the remaining 6 being designated due to providing habitat for notable species.

There are seven areas of semi-natural woodland present within 2km of the proposed site with the closest contained within Barton's Copse and The Slip. A further three areas of replanted ancient woodland are present within the search radius, with the closest contained within Southleigh Forest, located approximately 1.7km north east of the proposed development site.

2.2.3 Protected and Notable Species

Invertebrates (includes White-clawed Crayfish)

There were over 100 records of protected and notable species of invertebrate returned by the HBIC. Of these records 52 species are listed under the UK Biodiversity Action Plan, which includes the stag beetle (*Lucanus cervus*) which is also protected under Annex II of the Habitats directive. A further 9 species are listed under the Hampshire Biodiversity Action Plan with 4 species being classed as nationally scarce.

Great Crested Newts

There were no records of great crested newts (*Triturus cristatus*) within 2km of the site returned by the HBIC.

Reptiles

Two species of reptile were recorded within 2km of the site comprising including grass snake (*Natrix natrix*) and adder (*Vipera berus*). A total of 7 records were returned by the HBIC, with the closest record of adder located approximately 1km south west of the site.

Birds

There were several hundred records of protected or notable species of birds within 2km of the site. The following species are protected under Schedule 1 of the *Wildlife and Countryside Act 1981 (as amended)*: common kingfisher (*Alcedo atthis*), little plover (*Charadrius dubius*), peregrine falcon (*Falco peregrinus*), eurasian hobby (*Falco subbuteo*), brambling (*Fringilla montifringilla*), Mediterranean gull (*Larus melanocephalus*), common crossbill (*Loxia curvirostra*), red kite (*Milvus milvus*), whimbrel (*Numenius phaeopus*), European honey-buzzard (*Pernis apivorus*), black redstart (*Phoenicurus ochruros*), firecrest



Bartons Road, Havant: Extended Phase 1 Habitat Survey

(*Regulus ignicapilla*), dartford warbler (*Sylvia undata*), common greenshank (*Tringa nebularia*), green sandpiper (*Tringa ochropus*), redwing (*Turdus iliacus*), fieldfare (*Turdus pilaris*) and barn owl (*Tyto alba*).

Bats

Six species of bat have been recorded within 2km of the site comprising serotine (*Eptesicus serotinus*), whiskered bat (*Myotis mystacinus*), noctule bat (*Nyctalus noctula*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), long-eared bat (*Plecotus spp.*), brown long-eared bat (*Plecotus auritus*), and other unidentified records. A total of 26 records were returned with the closest record of a long-eared bat located approximately 860m south east of the site.

Badgers

One record of badger (*Meles meles*) was returned by the HBIC, located approximately 2.3km south west of the site.

Otter

No records of otter (*Lutra lutra*) within 2km of the site were returned by the HBIC.

Water Voles

No records of European water vole (*Arvicola terrestris*) within 2km of the site were returned by the HBIC.

Hazel Dormouse

No records of hazel dormouse (*Muscardinus avellanarius*) within 2km of the site were returned by the HBIC.



3.0 Survey Methodology

An extended Phase 1 habitat survey was conducted within the predicted zone of influence¹ on 18th April 2013. All areas of the site were investigated, including those parts that are not expected to be affected directly by the works but may be indirectly impacted upon. As recommended by English Nature's *Badgers and Development* (2002), a 30m buffer around the site was investigated for evidence of badger activity where possible, which included land the woodland to the north of the site only. The southern extent of the site was bordered by a busy road and the railway line ran along the western boundary. Access was not permitted to the field to the east of the site.

3.1 Habitats

The vegetation and habitat types within the site were noted during the walkover survey in accordance with the categories specified for a Phase 1 Vegetation and Habitat Survey (Joint Nature Conservation Committee, 2010). Dominant plant species were recorded for each habitat present.

3.2 Protected and Notable Species

The site was inspected for evidence of and its potential to support protected or notable species, especially those listed under the *Conservation of Habitats and Species (Amendment) Regulations 2012*, the *Wildlife & Countryside Act 1981* (as amended), including those given extra protection under the *Natural Environment and Rural Communities (NERC) Act 2006* and *Countryside & Rights of Way (CROW) Act 2000*, and listed on the UK and local Biodiversity Action Plans.

The following species were considered:

3.2.1 Great Crested Newts

The site was appraised for its suitability to support great-crested newts. The assessment was based on guidance outlined in the Joint Nature Conservation Committees' published *Herpetofauna Workers' Manual* (Joint Nature Conservation Committee, 2003) and the *Great Crested Newt Conservation Handbook* (Langton, Beckett & Foster, 2001).

¹ **Zone of influence:** the area that may be affected by the biophysical changes caused by the activities associated with the development.



Bartons Road, Havant: Extended Phase 1 Habitat Survey

As recommended by Natural England, the Oldham *et al.* (2000) Habitat Suitability Index (HSI) was applied to ponds on site and to those within 500m of the site, where access permitted; these were identified using Ordnance Survey maps and aerial images.

3.2.2 Reptiles

The site was appraised for its suitability to support reptiles. The assessment was based on guidance outlined in the Joint Nature Conservation Committees' published *Herpetofauna Workers' Manual* (Joint Nature Conservation Committee, 2003).

3.2.3 Bats

The buildings and trees within the boundary were appraised by an experienced ecologist from WYG for their suitability to support breeding, resting and hibernating bats using survey methods based on those outlined in the Bat Conservation Trust's *Bat Surveys: Good Practice Guidelines* (2012) and English Nature's *Bat Mitigation Guidelines* (2004). Buildings and trees were surveyed from the ground only, using binoculars.

Bat roost potential of trees is determined by a variety of factors including physical attributes of the tree, and proximity to good feeding sites and safe commuting routes. A brief summary of the known factors which influence a trees potential to support bats is provided in Table 1 below.

Table 1. Factors influencing potential for trees to be used by bats (adapted from Bat Conservation Trust, 2012)

Features of trees used by bats	Signs indicating possible use by bats
• Natural holes • Woodpecker holes • Cracks/splits in major limbs • Loose bark • Behind dense, thick-stemmed ivy • Hollows/cavities • Within dense epicormic growth • Bird and bat boxes	• Tiny scratches around entry point • Staining around entry point • Bat droppings in/around/below entrance • Audible squeaking at dusk or in warm weather • Flies around entry point • Distinctive smell of bats • Smoothing of surfaces around cavity

Trees were visually inspected for their bat roosting potential, including potential access points into the trees and connectivity to the wider environment. These were categorised in accordance with Table 2, and the

categorisation determined by a visual assessment of the trees to record the presence of features such as crevices, holes, fissures, split bark and arboreal ivy.

Table 2. Categories of trees, based on their potential to support bat roosts (taken from Bat Conservation Trust, 2012)

Tree category	Description
Known or confirmed roost	Confirmed bat roost tree with field evidence demonstrating bats are present e.g. droppings, scratch marks, grease marks or urine staining.
1*	Trees with multiple, highly suitable features capable of supporting larger roosts.
1	Trees with definite bat potential, supporting fewer suitable features than Category 1* trees or with potential for use by single bats.
2	Trees with no obvious potential although the tree is of a size and age that elevated surveys may result in cracks or crevices being found; or the tree supports some features which may have limited potential to support bats.
3	Trees with no potential to support bats

Please note that Tables 1 and 2 identify what are generally considered to be the most important influences on bat roost preferences. There are 18 species of bats in the UK, each with its own specific requirements. Additionally males generally have different roost preferences to females and, therefore, it is not practical to assess a feature against all the possible permutations of an 'ideal' roost.

3.2.4 Badgers

The site was surveyed for evidence of badger setts or other badger activity such as paths, latrines or signs of foraging. Methodologies used and any setts recorded were classified according to published criteria (Harris, Cresswell & Jefferies, 1989). A 30m buffer zone around the expected zone of influence was surveyed as recommended in English Nature's *Badgers and Development* (2002), however this was only possible to the northern boundary of the site.

3.2.5 Otters

Water courses on site were assessed for their suitability to support otters. This assessment was based on guidance outlined in Chanin (2003) *Monitoring the otter*.



3.2.6 Water Voles

Following methods set out in the *Water Vole Conservation Handbook* (Strachan & Moorhouse, 2011), an assessment of waterbodies within and adjacent to the site was undertaken to determine their suitability to support water voles and a search for evidence of activity was undertaken, including droppings, latrines, burrows, footprints and feeding lawns, of any areas considered suitable.

3.2.7 Other Species

The site was also appraised for its suitability to support other protected or notable fauna including mammals, birds and invertebrates in accordance with the Institute for Ecology and Environmental Management's *Guidelines for Preliminary Ecological Appraisal* (2012). Evidence of any current or historical presence of such species was recorded.

3.3 Invasive Species

The site was searched for evidence of invasive plant species, such as Japanese knotweed *Fallopia japonica*, Himalayan balsam *Impatiens glandulifera*, giant hogweed *Heracleum mantegazzianum*, New Zealand pygmyweed *Crassula helmsii*, horizontal cotoneaster *Cotoneaster horizontalis*, rhododendron *Rhododendron ponticum* and floating pennywort *Hydrocotyle ranunculoides* (see Appendix B Table B2 for full list).

3.4 Limitations

This survey was completed in April, which is within the optimum season for completing Extended Phase 1 habitat surveys.

To determine likely presence or absence of protected species usually requires multiple visits at suitable times of the year. As a result, this survey focuses on assessing the *potential* of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to the *National Planning Policy Framework (NPPF)*, especially those given protection under UK or European wildlife legislation.

This report cannot therefore be considered a comprehensive assessment of the ecological interest of the site. However, it does provide an assessment of the ecological interest present on the day of the visit and highlights areas where further survey work may be recommended.



Bartons Road, Havant: Extended Phase 1 Habitat Survey

The details of this report will remain valid for a period of two years. Beyond this period, if works have not yet been undertaken, it is recommended that a new review of the ecological conditions is undertaken.



4.0 Survey Results

An extended Phase 1 habitat plan showing the location of key ecological features is included in Appendix A.

4.1 Habitats

4.1.1 Broadleaved scattered trees

Within and along the boundaries of the site are a number of scattered trees, species present include; ash (*Fraxinus excelsior*), willow sp. (*Salix* sp.), elder (*Sambucus nigra*), sycamore (*Acer pseudoplatanus*), hawthorn (*Crataegus monogyna*) and pedunculate oak (*Quercus robur*). These will be discussed in more detail below in Section 4.2.3 in relation to bats.

4.1.2 Scattered scrub

Along the western boundary of the site are some strips of scrub, with a patch of scattered scrub present towards the northern extent of the site (TN1). Species present within this scrub habitat include; bramble (*Rubus fruticosus*), dock sp. (*Rumex* sp.), hogweed (*Heracleum sphondylium*), rosebay willowherb (*Chamerion angustifolium*), sorrel (*Rumex acetosa*) and common nettle (*Urtica dioica*).

4.1.3 Neutral semi-improved grassland

Much of the western half of the site comprises neutral semi-improved grassland which is fairly long and tussocky at the time of the survey. Species present within this habitat include; Yorkshire fog (*Holcus lanatus*), cock's foot (*Dactylis glomerata*), common nettle, dock sp., ragwort (*Senecio jacobaea*), dandelion (*Taraxacum officinale*), fescue sp. (*Festuca* sp.), lords and ladies (*Arum maculatum*), thistle sp. (*Cirsium* sp.), daisy (*Bellis perennis*), bristly ox-tongue (*Picris echioides*), ribwort plantain (*Plantago lanceolata*), cleavers (*Galium aparine*) and daffodil (*Narcissus* sp.). Within this area of grassland are a couple of damp areas which have rush and sedge (*Carex* spp.) species growing, these areas are quite small and were located towards the western boundary (TN2).

4.1.4 Amenity grassland

Surrounding the buildings are a number of areas of amenity grassland, including gardens, verges and exercise space within the land surrounding the dog kennels. Species present within these areas include;



Yorkshire fog, daisy, dandelion, clover sp. (*Trifolium* sp.), ribwort plantain and creeping buttercup (*Ranunculus repens*).

4.1.5 Introduced shrub

Within the garden areas surrounding the residential properties on site is some ornamental planting including shrubs and flower beds. Species within flower beds include; daffodil, rose species (*Rosa* sp.), dandelion, dock, common nettle and ornamental species (TN3). Small areas of Leyland cypress (*Cypress x leylandii*) trees are also present along the edges of the gardens.

4.1.6 Buildings

Buildings are discussed below in Section 4.2.3 in relation to bats.

4.1.7 Hardstanding

Surrounding the buildings are areas of hardstanding, mainly used for access and car parking.

4.2 Protected and Notable Species

4.2.1 Great Crested Newts

There are no waterbodies within the development site itself, however from a review of ordnance survey maps there are a number of waterbodies within 500 metres of the site. There is one waterbody which is present to the west of the site which is a concrete drainage ditch. This was flowing at the time of survey, making it unsuitable for great crested newts. The ditches within Barton's Copse were also assessed during the phase 1 survey. One of the ditches was flowing at the time of the survey and as such is deemed unsuitable for great crested newts. The other ditches were almost dry and as such are also considered unsuitable for great crested newts.

A further ditch was noted over 450 metres south west of the site beyond Bartons Road, however access could not be permitted to assess this waterbody at the time of the phase 1 habitat survey. However due to the distance of this waterbody from the site and through the use of the Natural England Risk Calculator Tool (shown below) it is considered unlikely that great crested newts would be present within the development site boundary.

**Table 3.** Natural England Risk Calculator Tool

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	1 - 5 ha lost or damaged	0.04
Individual great crested newts	No effect	0
Maximum:		0.04
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

4.2.2 Reptiles

The semi-improved grassland across the site provides suitable habitat for reptiles as the grass was long and tussocky, with scrub interfaces around the edges. Rubble piles were also noted near the buildings along the western boundary of the site (TN4) and a pile of wood was noted towards the northern boundary of the site (TN5).

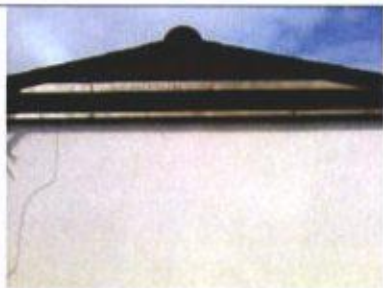
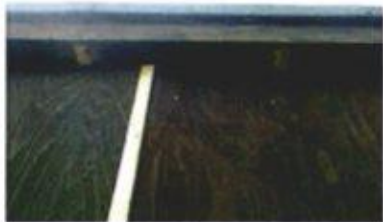
4.2.3 Bats

Roosting bats – buildings

The buildings located within the proposed development site boundary were assessed for their potential to support roosting bats. The majority of buildings did not exhibit any features that would offer suitability to support roosting bats. However, a number of buildings were identified as offering some potential to support roosting bats. These are detailed in Table 4.

Table 4: Bat roost potential of buildings at Bartons Road, Havant

Building number	Description	Photograph
Building 1	This is a garage type building of brick built construction with a sloped felt clad roof, with four rows of tiles to the southern elevation. The building was open to the front at the time of the survey. The building was viewed externally only however it was possible to see that the ceiling inside comprises wooden boarding, however no roof void appeared to be present. There did appear to be some small holes present along the western elevation of the building, as such this building is considered to be of Low potential to bats.	
Building 2	This is a workshop type building which is single storey and of brick and breeze block construction. It has a flat roof which is constructed from a corrugated metal material and is partially felt clad however this appeared to be intact. Windows are present and a large door was open to the north eastern elevation of the building. There did not appear to be any suitable roosting features within the building and as such the building is considered to be of Negligible potential to bats.	

Building 3	This is the K-9 Fun and Fitness Pool building which is single storey and of wooden construction with a corrugated roof and no apparent roof void present. This building appeared to be well sealed and as such is considered to be of Negligible potential to bats.	
Building 4	This building appears to be used for storage and is constructed from breeze blocks, with a corrugated metal roof and a corrugated open metal extension. There appeared to be no roof void present and the building was well sealed. This building is considered to be of Negligible potential to bats.	
Building 5	This is a static home which appeared to be new at the time of the survey, soffit boards were missing along the eastern and western elevations providing possible access into the building, otherwise the building appeared to be very intact. This building is considered to be of Low potential to bats.	
Building 6	This is a wooden shed with a flat felt clad roof, with a large window along the northern elevation. Possible access points for bats into the building are present beneath the roof and as such this building is considered to offer Low potential to bats.	

Building 7	This is store with three sides constructed from ply board, with a corrugated metal roof. The building is open to the southern elevation and as such is considered to be of Negligible potential to bats.	
Building 8	This is a store which is constructed from wooden panels and plastic sheeting with a corrugated metal roof. This building is considered to be of Negligible potential to bats.	
Building 9	This is a curved corrugated metal building with semi-opaque panels in the ceiling. This building is considered to be of Negligible potential to bats.	
Building 10	Group of three pigeon coops of wooden construction, with wire mesh on the western elevation. Two of the coops have pitched felt clad roofs and the third has a sloped roof. All appeared to be well intact and in current use by a number of pigeons, as such these buildings are considered to be of Negligible potential to bats.	

Building 11	This is a two storey semi-detached house with a single storey flat, felt clad roofed extension to the northern elevation. The house is constructed from brick and stone, with a pitched tiled roof with a chimney. Wooden soffit boards and UPVC windows appeared to be intact, however there were a couple of missing / broken tiles on the southern elevation. Hanging tiles are present on the southern gable end of the building; however these appeared to be fairly intact. There is another sloped roof extension on the western elevation, a hole is present leading into the building but there did not appear to be a roof void within the extension. This building is considered to be of Moderate potential to roosting bats.	
Building 12	This is the Mower shop which is predominantly a single storey flat roofed building with wooden cladding providing possible roosting places for bats. One part of the building has a pitched metal roof and large UPVC windows. There is a single storey extension to the eastern elevation which is of breeze block construction with a pitched tiled roof. Some of the tiles are broken / missing along the southern elevation of the extension and as such this building is considered to be of Low potential to bats.	

Building 13	These are two a metal shipping containers with flat roofs. These buildings are considered to be of Negligible potential to bats.	
Building 14	This is a wooden shed with a pitched tiled roof constructed from corrugated metal. There are possible access points into the building and as such this building is considered to be of Low potential to bats.	
Building 15	This is a residential property called 'The Brambles' and was built in 2011. It is a modern storey barn style house with a pitched tiled roof. Skylight windows are present within the roof so it is considered unlikely that there is a roof void present. The building appeared to be intact and well sealed and as such is considered to be of Negligible potential to bats.	
Building 16	This is a caravan which appeared to be of metal construction with a flat roof. This building is considered to be of Negligible potential to bats.	

Building 17	This is an office which appeared to be constructed from a metal shipping container, with wooden cladding and a felt, flat clad roof and UPVC doors and windows along the eastern elevation. This building appeared to be well sealed and as such is considered to be of Negligible potential to bats.	
Building 18	This is a store comprising a wooden shed with a pitched felt clad roof and frosted windows. This building appeared to be intact and as such is considered to be of Negligible potential to bats.	
Building 19	This is the dog kennels which are of brick built construction with a pitched tiled roof, running through the centre. There are metal mesh and brick extensions along both the eastern and western elevations. The building is considered to be of Low potential to bats.	 

Building 20	This is a rendered bungalow under a pitched tiled roof which appeared to be intact. There is a new single storey brick extension to the northern elevation, this extension has a felt clad flat roof, however this appeared to be intact. This building is considered to be of Low potential to bats.	
Building 21	This building is part of the kennels / cattery and is a single storey building of breeze block construction with a pitched felt clad roof which appeared to be fairly intact. As such, this building is considered to be of Negligible potential to bats.	

Roosting bats - trees

The more mature trees located within the site boundary were assessed for their potential to support roosting bats and many of these trees had features suitable to support roosting bats. These are detailed in Table 5 below.

Table 5: Bat roost potential of trees at Bartons Road, Havant

Number on plan	Tree species	Category (BCT 2012)	Description	Recommendations (if tree(s) require felling)
T1	Oak	1	Possible hole within cavity, south facing near to the top of the tree. Broken limbs also	Emergence / return surveys



Bartons Road, Havant: Extended Phase 1 Habitat Survey

			present.	
T2	Willow sp.	3	Thin and immature	No recommendations
T3	Ash	3	Thin and immature	No recommendations
T4	Elder	3	Quite thin, no suitable features	No recommendations
T5	Oak	1	Dead wood, broken limbs, holes / splits present	Emergence / return surveys
T6	Oak	1	Lots of holes and possible cavities	Emergence / return surveys
T7	Oak	1	Dead wood, split limbs, some small holes	Emergence / return surveys
T8	Ash	3	Some well healed pruning scars	No recommendations
T9	Ash	1	Large cavity approximately 1 metre tall, possible staining	Emergence / return surveys
T10	Ash	3	Some thin ivy though no obvious features	No recommendations
T11	Oak	1	Some thin ivy, dead wood, possible cracks and broken limbs	Emergence / return surveys
T12	Oak	2	No obvious holes but lots of ivy present so obscuring view	Emergence / return surveys
T13	Oak	1	Some thin ivy, some dead limbs, splits and cracks	Emergence / return surveys



T14	Dead oak	1	Dead tree with possible cracks and holes	Emergence / return surveys
-----	----------	---	--	----------------------------

4.2.4 Badgers

No badger setts or signs of badger activity, such as tracks, latrines or foraging holes were recorded within or adjacent to the proposed development site, however it was only possible to search a 30 metre buffer along the northern boundary of the site. A busy road runs along the southern boundary and the railway runs along the western boundary. To the east of the site lies another field for which access was not gained.

4.2.5 Otters

There are no watercourses or ditches which would offer potentially suitable habitat for otters on or adjacent to the proposed development site.

4.2.6 Water Voles

There are no watercourses or ditches which would offer potentially suitable habitat for water voles on or adjacent to the proposed development site.

4.2.7 Invertebrates

The semi-improved grassland, scattered trees, scrub and amenity grassland are likely to offer suitable habitat for invertebrate species. However, these habitats are widespread within the area, and throughout Great Britain, and it is considered that invertebrate species that may be present will be widespread and common. The site is assessed as offering **Negligible** potential for notable terrestrial invertebrate species.

4.2.8 Hazel Dormice

There is very limited dormouse habitat present within the development site boundary as there is only a small area of scattered bramble scrub along the western boundary of the site. There are also no dormouse records within 2km of the site and as such it is considered unlikely that dormice would be present within the development site boundary. The site is assessed as offering **Negligible** potential for this species.



4.2.9 Birds

The scattered trees, scrub and buildings on site offer potentially suitable habitat for nesting birds. No birds were recorded nesting on the site at the time of extended Phase 1 habitat survey. However, the survey was carried out during the middle of the day when nesting activity is less likely to be noted. A nest was noted within an oak tree along the northern boundary of the site, however it is unknown whether this is currently in use.

4.3 Invasive Species

No invasive species were identified within the site boundary during the extended Phase 1 habitat survey. However, the extended Phase 1 habitat survey was carried out early in the botanical survey season and therefore there is the potential that invasive species were not evident on the site at this time.

During an additional site visit on May 22nd Japanese knotweed was recorded within the semi-improved grassland on site (TN6) however the stand of Japanese knotweed appeared to only cover an area of approximately 2 metres x 3 metres.

5.0 Ecological Impacts and Recommendations

5.1 Statutory and Non-statutory Sites

There are no statutory designated sites situated within 2km of the proposed development site. The closest statutory designated site is the Brook Meadow Local Nature Reserve which is situated approximately 2.5km south east of the proposed development site. Due to the distance of this designated site it is not considered that there would be any direct or indirect impacts as a result of the proposed development.

A total of 18 SINC sites are located within 2km of the proposed development site. The closest is Barton's Copse and The Slip, which is adjacent to the northern boundary of the site; this SINC is designated as it comprises semi-natural ancient woodland. It appears that there are footpaths leading into this SINC from the proposed development site and as such it is considered that may be an increase in recreational pressure on this site. As such, it is recommended that areas of public open space are incorporated into the proposed development site in order to relieve any potential recreational pressure on the nearby SINC sites. It is also recommended that a 15 metre buffer from the edge of the SINC is maintained in order to reduce impacts on this designated site.

5.2 Habitats

The site mainly comprises semi-improved grassland and buildings surrounded by hardstanding, with scattered trees, scrub, amenity grassland and introduced shrub also present. The mature trees, buildings with bat roost potential and the semi-improved grassland are considered to have the highest intrinsic value of the habitats on site, as these offer potentially suitable habitat for a range of protected and notable species.

It is recommended that trees are retained on site where possible and that native trees and shrubs are planted as part of the development proposals. It is also recommended that bird and bat boxes are incorporated into the proposed development in order to enhance the habitats on site. Further details of this can be found in Appendix D and E.



5.3 Protected and Notable Species

5.3.1 Great Crested Newts

The great crested newt and its habitat are protected under the *Wildlife and Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species (Amendment) Regulations 2012* (see Appendix B).

There are no waterbodies present within the development site itself and the waterbodies which were assessed for their potential to support great crested newts are considered unsuitable as two of these waterboies were flowing at the time of the survey and the remainder of the waterbodies were almost dry. As such no further surveys are recommended for this species.

5.3.2 Reptiles

All species of native reptiles are under the *Wildlife and Countryside Act 1981* (as amended). The sand lizard *Lacerta agilis* and smooth snake *Coroenella austriaca* are further protected under *Conservation of Habitats and Species (Amendment) Regulations 2012*.

It is understood that the areas of suitable reptile habitat including the semi-improved grassland and scrub are likely to be impacted as part of the development works, as such it is recommended that a suite of reptile presence / likely absence surveys are completed. This would involve seven visits which can be completed between March and September in suitable weather conditions.

5.3.3 Bats

Breeding, Resting and Hibernating Bats

All species of British bats and their roosts are fully protected under the *Wildlife & Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species (Amendment) Regulations 2012* (see Appendix B).

It is understood that many of the buildings will need to be removed as part of the proposed development works. As such, for those buildings identified as holding low or greater value to bats, it is recommended that a detailed internal inspection is completed of these buildings (buildings 1, 5, 6, 11, 12, 14, 19 and 20). If following the internal inspection these buildings are still considered to hold bat roosting potential further nocturnal emergence / return surveys will need to be completed between May and August. The number of surveys required is dependant upon the potential for the building to support roosting bats and this will be



confirmed following the internal inspection. The nocturnal emergence / return surveys should be completed between May and August in suitable weather conditions.

A number of the mature trees within the development site boundary had features suitable to support roosting bats and as such if any of these are to be removed as part of the development works then nocturnal emergence / return surveys should be completed to try to determine if the features are being used by bats. These can be completed between May and September in suitable weather conditions.

Foraging and Commuting Bats

ODPM 06/2005: Biodiversity and Geological Conservation, the circular that accompanied the now redundant Planning Policy Statement 9 (PPS9) but which itself is still valid, requests that mitigating for impacts caused by developments to foraging and commuting routes should be considered when determining planning applications.

It is recommended that bat activity surveys are completed across the site. In accordance with the Bat Conservation Trust (BCT) Guidelines 2012, for medium sized sites (between 1 and 15 hectares) with low habitat quality it is recommended that one transect route is completed once per season (spring, summer and autumn) between March and September. In addition to this, if a secure site can be found, an automated bat detector should be left at one location on site for three consecutive nights once per season.

It is recommended that the lighting across the development footprint should be sensitively designed with bats in mind, so that valuable foraging and commuting areas are retained and existing/new roost sites are not impacted by ambient light. It is recommended that boundary vegetation is maintained and there is additional tree planting along boundaries if possible. If important foraging and commuting areas are present on site, these will be identified during the bat activity surveys. It is likely the recommendations will include:

Permanent lighting on site should be minimised in proximity to the following habitats:

- i) woodlands (including edges and woodland buffers);
- ii) mature trees;
- iii) boundary vegetation;



- iv) any existing roost sites;
- v) any new roost sites (e.g. bat boxes installed as part of the scheme); and

Where illumination is unavoidable, the following measures are to be considered within the lighting constraints assessment in order to avoid disrupting bat commuting corridors, foraging areas and any roosting bats present. Refer to the BCT 'Bats and Lighting' document for further details:

- i) Careful aiming, placement and mounting of luminaires
- ii) Minimising column heights and mounting of multiple luminaires on single columns in order to reduce column numbers
- iii) Use of shields and baffles
- iv) Post installation light monitoring

Other possible mitigation measures could include:

- v) illuminated road studs instead of lighting columns;
- vi) glass lantern covers to filter UV light;
- vii) flat lantern covers result in less light spill than dished covers;
- viii) reduced brightness of lights;
- ix) increased spacing of lanterns;
- x) timed lighting to provide dark periods;
- xi) directional lighting, using hoods, cowls, louvres and shields;
- xii) avoid using reflective surfaces under lights; and
- xiii) use temporary close boarded fencing to shield light until dense vegetation is established for screening.



5.3.4 Badgers

Badger and their setts are protected under the *Protection of Badgers Act 1992* and the NPPF (see Appendix B) stipulates that considering their welfare and mitigating for damage to their habitat are material considerations when considering planning applications.

No evidence of badgers was found during the phase 1 walkover however evidence of badgers should be noted whilst other surveys are completed on site to monitor any changes or new activity within the development site boundary.

5.3.5 Otters

The otter and its habitat are protected under *Wildlife and Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species (Amendment) Regulations 2012*. The European sub-species is listed as globally threatened in the IUCN Red List (see Appendix B).

There are no suitable waterbodies for otters on or adjacent to the site and as such no further recommendations are made with regards to this species.

5.3.6 Water Voles

Water voles and their habitat are protected under *Wildlife and Countryside Act 1981* (as amended) (see Appendix B).

There are no suitable waterbodies for water voles on or adjacent to the site and as such no further recommendations are made with regards to this species.

5.3.7 Other Species

Birds

All nesting birds are protected from disturbance whilst nesting by the *Wildlife and Countryside Act 1981* (as amended) (see Appendix B).

It is recommended that any necessary felling of trees or building demolition is undertaken outside nesting bird season (March to September inclusive). If this is not possible, it is recommended that a nesting bird



check is carried out by an ecologist immediately prior to felling. If an active bird nest is found, it must be retained along with a suitable buffer until the chicks have fledged.

Invertebrates

A number of invertebrate species are protected under the *Wildlife and Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species (Amendment) Regulations 2012*. The current Biodiversity Action Plan (BAP) contains 411 invertebrate species (see Appendix B).

As habitats on site are widespread within the area and throughout Great Britain and it is considered that invertebrate species that may be present will be widespread and common. No further surveys for invertebrates are recommended for the site.

It is recommended that native trees and shrubs are planted on site as part of the development proposals in order to enhance the site for invertebrates. Details of recommended species to plant can be found in Appendix E.

Dormice

Due to the limited suitable habitat within the development site boundary and the lack of records of dormice within the wider area it is considered likely that this species would be absent from the site and as such no further recommendations are made with regards to this species.

5.4 Invasive Species

The *Wildlife and Countryside Act 1981* (as amended) recognises several invasive plant species list in Schedule 9 of the Act (see Appendix B, Table B2).

As Japanese knotweed was noted on site it is recommended that a Japanese knotweed management plan is produced. Japanese knotweed is a very invasive species and it is an offence under section 14(2) of the *Wildlife and Countryside Act 1981* to "plant or otherwise cause to grow in the wild" Japanese knotweed. Given the legislative consideration, coupled with its potential for structural disturbance, Japanese knotweed is an important consideration for those developing or maintaining buildings and their surrounding land. For successful eradication, the full extent of the knotweed will need to be ascertained, not only above ground, but within the soil as the plant's rhizomes (lateral underground roots) can extend up to 7m from the parent plant to over 2m depth within the soil. As such, it is recommended that the extent of Japanese knotweed at



the site is mapped following new growth which will be during April and a management plan written which will make recommendations for suitable eradication techniques providing the most cost effective method given the timescales available.

It should be noted that under the Environmental Protection Act 1990, soil contaminated with Japanese knotweed could be classed as controlled waste and must be disposed of safely at an appropriately licensed landfill site.

5.5 Enhancements

In keeping with National Planning Policy, a number of potential biodiversity enhancements are proposed in Appendices D and E which could be incorporated into the final design where appropriate.

It is recommended that bat and bird boxes and native trees and shrubs are incorporated where possible within the final design. This could benefit species such as birds, bats, reptiles, and invertebrates.



6.0 Summary of Recommendations

6.1 Recommendations for avoidance:

- It is recommended that multi-functional green space is incorporated into the development, to prevent any recreational pressure on the surrounding non-statutory and statutory designated sites.
- It is recommended that mature trees are retained within the final development where possible and that native trees and shrubs are incorporated into the landscaping of the final design (Appendix D).
- It is also recommended that vegetation and building clearance take place between October and February wherever possible to avoid the breeding bird season (although this may change following the results of the bat survey). If this is not possible, then a thorough check for nesting birds should be completed immediately prior to site clearance, by a suitably qualified ecologist. If any active nests are found they must be retained, together with a suitable vegetated buffer until all the young have fledged.
- If any dead wood is found during site clearance, it is recommended that it be placed elsewhere within the site (in shade), to be retained within the final development as stag beetles have been recorded from the wider area.
- Recommendations are made to direct lighting away from the adjacent scrub and mature trees where possible within the final development, to retain dark corridors for commuting bats within and around the final development.
- It is recommended that a Japanese knotweed Management Plan is produced. This document will be written in line with the overall site management objectives.
- Measures for Prevention of spread should be implemented immediately to stop Japanese knotweed from spreading. The situation should be monitored.



6.2 Recommendations for further survey:

The following surveys are recommended to inform a planning application for the site:

- **Reptiles:** it is recommended that reptile presence / likely absence surveys are undertaken of the grassland within the development site boundary to inform the planning application which will involve seven visits to the site to ascertain if reptiles are likely to be present.
- **Bat Roost Assessment:** it is recommended that a detailed internal inspection is completed of the buildings with bat roost potential (buildings 1, 5, 6, 11, 12, 14, 19 and 20).
- **Bat Emergence / Return Surveys of Buildings:** if following the internal inspection these buildings are still considered to hold bat roosting potential further nocturnal emergence / return surveys will need to be completed between May and August. The number of surveys required is dependant upon the potential for the building to support roosting bats and this will be confirmed following the internal inspection. The nocturnal emergence / return surveys should be completed between May and August in suitable weather conditions.
- **Bat Emergence / Return Surveys of Trees:** a number of the mature trees within the development site boundary had features suitable to support roosting bats and as such if any of these are to be removed as part of the development works then nocturnal emergence / return surveys should be completed to try to determine if the features are being used by bats. These can be completed between May and September in suitable weather conditions.
- **Bat Activity:** in accordance with BCT (2012) guidelines for a medium sized site or low potential, a suite of bat activity surveys is recommended to take place during spring, summer and autumn at the site. In addition automated bat detectors must be left on site for three consecutive nights each season (spring, summer and autumn).

6.3 Recommendations for Enhancement

Recommendations are made to provide additional nesting / roosting and feeding opportunities for birds, bats and invertebrates within the final design. It is recommended that bat and bird boxes are installed on trees and buildings and that native trees and shrubs are planted as part of the landscaping of the proposed development. Refer to Appendices D and E for further details.



7.0 References

- Bat Conservation Trust (2012). *Bat Surveys – Good Practice Guidelines*. Bat Conservation Trust, London.
- English Nature (2002). *Badgers and Development*. English Nature, Peterborough, UK.
- Chanin, P. (2003). *Monitoring the otter*. Conserving Natura 2000, Rivers Monitoring Series No. 10, English Nature, Peterborough
- Eaton, M.A., et al. (2009). *Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and Isle of Man*. British Birds 102:296-341
- Gent, T. & Gibson, S. (2003). *Herpetofauna Workers' Manual*. JNCC, Peterborough.
- Harris, S., Cresswell, P. & Jeffries, D. (1989). *Surveying Badgers. An occasional publication of the mammal society – No. 9*. Mammal Society, London.
- Institute for Ecology and Environmental Management (2012). *Guidelines for Preliminary Ecological Appraisal*.
- Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit*. JNCC, Peterborough.
- Langton, T.E.S., Beckett, C.L. and Foster, J.P. (2001). *Great Crested Newt Conservation Handbook*. Froglife, Halesworth.
- Mitchell-Jones, A.J. & McLeish, A.P. (Eds) (2004). *Bat Workers Manual, 3rd Edn*. JNCC, Peterborough.
- Oldham, R.S., Keeble, J., Swan, M.J.S. & Jeffcote, M. (2000). Evaluating the suitability of habitat for the great crested newt *Triturus cristatus*. *Herpetological Journal*, **10(4)**, 143-155.
- RSPB (2002). *The Population Status of British Birds in the UK: Birds of Conservation Concern 2002-2007*.
- Strachan, R. & Moorhouse, T. (2006). *Water Vole Conservation Handbook (2nd Edn)*. Wildlife Conservation Research Unit, Oxford.

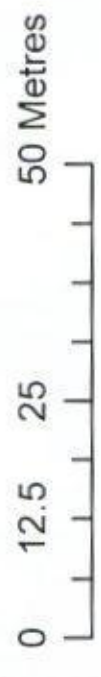


Appendix A - Figures



Legend

- Target note
- Broad leaved scattered trees
- Site boundary
- Introduced shrub
- Dense / continuous scrub
- Amenity grassland
- Buildings
- Hardstanding
- Neutral semi-improved grassland



The Loft, St Clair's Farm
Wickham Road
Droxford
hants
SO32 3PW
Tel: 01489 872929
Fax: 01489 872939
email: ecology@wyg.com



WYG Environment
creative minds. safe hands.

Bartons Road, Havant

Extended Phase 1 Habitat Survey Map

Drawn by: Date:	Checked By: Date:	Approved By: Date:
EH 14/05/13	VC 14/05/13	CM 22/05/13
Project No:	Office	Type
A081595	45	94
	Drawing No.	Revision
	Figure 1	

Base map provided by Hampshire Land Surveys Ltd





Appendix B – Biodiversity and Environmental Legislation, Conventions & Threatened Lists



Introduction

The UK has ratified a number of Conventions and implemented legislation pertaining to the protection of biodiversity and habitats, either independently or as member state of the European Union. These are defined and summarised below.

Lists of threatened, endangered and extinct species are also provided, together with a summary explanation of each.

Bern Convention (1982)

The *Convention on the Conservation of European Wildlife and Natural Habitats* (the *Bern Convention*) was adopted in Bern, Switzerland in 1979, and was ratified in 1982. Its aims are to protect wild plants and animals and their habitats listed in Appendices 1 and 2 of the Convention, and regulate the exploitation of species listed in Appendix 3. The regulation imposes legal obligations on participating countries to protect over 500 plant species and more than 1000 animals.

To meet its obligations imposed by the Convention, the European Community adopted the *EC Birds Directive* (1979) and the *EC Habitats Directive* (1992 – see below). Since the Lisbon Treaty, in force since 1st December 2009, European legislation has been adopted by the European Union.

Biodiversity Action Plan (BAP)

The UK *Biodiversity Action Plan* (UKBAP – UK Steering Group, 1995; UK Biodiversity Group, 1998 - 2000) lists and prioritises habitats and species and sets national targets to be achieved. The intent of the UKBAP, however, is much broader than the protection and enhancement of less common species, and is meant to embrace the wider countryside as a whole.

The UKBAP has recently undergone a review (Biodiversity Reporting and Information Group, June 2007) resulting in the identification of 391 'Priority' Species Action Plans (SAPs), 45 'Priority' Habitat Action Plans and 162 Local Biodiversity Action Plans.

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities.

Birds Directive (BD)

The *EC Directive on the Conservation of Wild Birds* (791409/EEC) or '*Birds Directive*' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Birds of Conservation Concern (BoCC)

This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2009 (Eaton *et al*, 2009) and identified 52 red list species, 126 amber species, and 68 green species. The criteria are complex, but generally:

- Red list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.
- Amber list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.
- Green list species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed

Bonn Convention

The Convention on the Conservation of Migratory Species of Wild Animals or '*Bonn Convention*' was adopted in Bonn, Germany in 1979 and came into force in 1985. Participating states agree to work together to preserve migratory species and their habitats by providing strict protection to species listed in Appendix I of the Convention. It also establishes agreements for the conservation and management of migratory species listed in Appendix II.



In the UK, the requirements of the convention are implemented via the *Wildlife & Countryside Act 1981* (as amended), *Wildlife (Northern Ireland) Order 1985*, *Nature Conservation and Amenity Lands (Northern Ireland) Order 1985* and the *Countryside and Rights of Way Act 2000* (CRoW).

Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

Habitats Directive

The *Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora*, or the '*Habitats Directive*', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the *Habitats Directive* is transposed into national law via the *Conservation of Habitats and Species (Amendment) Regulations 2012* in England, Scotland and Wales, and via the *Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended)* in Northern Ireland.

Protection of Badgers Act 1992 (PBA 1992)

The main legislation protecting badgers in England and Wales is the *Protection of Badgers Act 1992* (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger"



National Planning Policy Framework (2012)

Following the publication of the National Planning Policy Framework (NPPF) in March 2012, *Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation (2005)* has been withdrawn. However, *ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System* (the guidance document that accompanied PPS9) has not been withdrawn and, where more detailed guidance is required than is given within the NPPF, local planning authorities will continue to rely on ODPM 06/2005.

This guidance requires local planning authorities to take account of the conservation of protected species when determining planning applications and makes the presence of a protected species a material consideration when assessing a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.

In the case of European Protected Species such as bats, planning policy emphasises that strict statutory provisions apply (including the *Conservation of Habitats and Species (Amendment) Regulations 2012*), to which a planning authority must have due regard.

Where developments requiring planning permission are likely to impact upon protected species it is necessary that protected species surveys are undertaken and submitted to meet the requirements of paragraph 98 of ODPM Circular 06/2005 which states that:

'The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.'

General guidance within the body of the NPPF which are also potentially relevant to the possible presence of bats at the site includes the following statements:

"The planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, geological conservation interests and soils;*
- recognising the wider benefits of ecosystem services;*
- minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity,*



including by establishing coherent ecological networks that are more resilient to current and future pressures"

"Local planning authorities should set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged."

"When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;"*

Species of Principal Importance in England

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the *Natural Environment and rural Communities (NERC) Act 2006*, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 habitats of principal importance and 1,150 species of principal importance.

The Conservation of Habitats and Species (Amendment) Regulations 2012

The *Conservation of Habitats and Species (Amendment) Regulations 2012* came into force on 16th August 2012 and amend the *Conservation of Habitats and Species Regulations 2010* to ensure the various provisions of Directive 92/43/EC ('the Habitats Directive') are transposed in a clear manner.

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by the European Commission, are then designated as Special Protection Areas (SPAs) within six years. The 2012 amendments include that public bodies help preserve, maintain and re-establish habitats for wild birds.

The Regulations also make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5 (see Table B1).

Table B1 Schedules of the Conservation of Habitats and Species (Amendment) Regulations 2012

Schedule 2 – European Protected Species of Animals		Schedule 5 – European Protected Species of Plant	
Common name	Scientific name	Common name	Scientific name
Horseshoe bats	Rhinolophidae - all species	Dock, Shore	<i>Rumex rupestris</i>
Common bats	Vespertilionidae - all species	Killarney Fern	<i>Trichomanes speciosum</i>
Wild Cat	<i>Felis silvestris</i>	Early Gentian	<i>Gentianella anglica</i>
Dolphins, porpoises and whales	Cetacea – all species	Lady's-slipper	<i>Cypripedium calceolus</i>
Dormouse	<i>Muscardinus avellanarius</i>	Creeping Marshwort	<i>Apium repens</i>
Pool Frog	<i>Rana lessonae</i>	Slender Naiad	<i>Najas flexilis</i>
Sand Lizard	<i>Lacerta agilis</i>	Fen Orchid	<i>Liparis loeselii</i>
Fisher's Estuarine Moth	<i>Gortyna borelii lunata</i>	Plantain, Floating-leaved water	<i>Luronium natans</i>
Newt, Great Crested	<i>Triturus cristatus</i>	Yellow Marsh Saxifrage	<i>Saxifraga hirculus</i>
Otter	<i>Lutra lutra</i>		
Lesser Whirlpool Ram's-horn Snail	<i>Anisus vorticulus</i>		
Smooth Snake	<i>Coronella austriaca</i>		
Sturgeon	<i>Acipenser sturio</i>		
Natterjack Toad	<i>Bufo calamita</i>		
Marine Turtles	<i>Caretta caretta</i> , <i>Chelonia mydas</i> , <i>Lepidochelys kempii</i> , <i>Eretmochelys imbricata</i> , <i>Dermochelys coriacea</i>		

The Hedgerow Regulations 1997



The *Hedgerow Regulations 1997* were made under Section 97 of the *Environment Act 1995* and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.

Wildlife and Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the '*Bern Convention*' and the *Birds Directive* are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird,
- take, damage or destroy the nest of any wild bird while that nest is in use, or
- take or destroy an egg of any wild bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5,
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places.
- The Act also prohibits certain methods of killing, injuring, or taking wild animals

Finally, the Act also makes it an offence (subject to exceptions) to:

- intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant,
- unless an authorised person, intentionally uproot any wild plant not included in Schedule 8,
- sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.

Table B2 provides a comprehensive list of plant species listed in this schedule. It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

Table B2 Invasive plant species listed in Schedule 9 of the *Wildlife & Countryside Act 1981* (as amended)

Common name	Scientific name
Perfoliate alexanders	<i>Smyrniium perfoliatum</i>
Red algae	<i>Grateloupia luxurians</i>
Variagated yellow archangel	<i>Lamiastrum galeobdolon</i> subsp. <i>argentatum</i>
Yellow azalea	<i>Rhododendron luteum</i>
Himalayan balsam	<i>Impatiens glandulifera</i>
Cotoneaster	<i>Cotoneaster horizontalis</i>
Entire-leaved cotoneaster	<i>Cotoneaster integrifolius</i>
Himalayan cotoneaster	<i>Cotoneaster simonsii</i>
Hollyberry cotoneaster	<i>Cotoneaster bullatus</i>
Small-leaved cotoneaster	<i>Cotoneaster microphyllus</i>
False Virginia creeper	<i>Parthenocissus inserta</i>
Virginia creeper	<i>Parthenocissus quinquefolia</i>
Purple dewplant	<i>Disphyma crassifolium</i>
Fanwort or Carolina water-shield	<i>Cabomba caroliniana</i>
Water fern	<i>Azolla filiculoides</i>
Hottentot fig	<i>Carpobrotus edulis</i>
Three-cornered garlic	<i>Allium triquetrum</i>
Giant hogweed	<i>Heracleum mantegazzianum</i>
Water hyacinth	<i>Eichhornia crassipes</i>
Giant kelp	<i>Macrocystis</i> spp.
Giant knotweed	<i>Fallopia sachalinensis</i>



Bartons Road, Havant: Extended Phase 1 Habitat Survey

Common name	Scientific name
Hybrid knotweed	<i>Fallopia japonica</i> × <i>Fallopia sachalinensis</i>
Japanese knotweed	<i>Fallopia japonica</i>
Few-flowered garlic	<i>Allium paradoxum</i>
Water lettuce	<i>Pistia stratiotes</i>
Parrot's-feather	<i>Myriophyllum aquaticum</i>
Floating pennywort	<i>Hydrocotyle ranunculoides</i>
Duck potato	<i>Sagittaria latifolia</i>
Floating water primrose	<i>Ludwigia peploides</i>
Water primrose	<i>Ludwigia grandiflora</i>
Water primrose	<i>Ludwigia uruguayensis</i>
Rhododendron	<i>Rhododendron ponticum</i>
Rhododendron	<i>Rhododendron ponticum</i> × <i>Rhododendron maximum</i>
Giant rhubarb	<i>Gunnera tinctoria</i>
Japanese rose	<i>Rosa rugosa</i>
Giant salvinia	<i>Salvinia molesta</i>
Green seafingers	<i>Codium fragile</i>
Californian red seaweed	<i>Pilea californica</i>
Hooked asparagus seaweed	<i>Asparagopsis armata</i>
Japanese seaweed	<i>Sargassum muticum</i>
Laver seaweeds (except native species)	<i>Porphyra</i> spp
Australian swamp stonecrop or New Zealand pygmyweed	<i>Crassula helmsii</i>
Wakame	<i>Undaria pinnatifida</i>
Curly waterweed	<i>Lagarosiphon major</i>
Waterweeds	<i>Elodea</i> spp.



Appendix C – Data Search Results

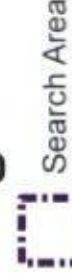


Hampshire Biodiversity Information Centre

HBIC Ref: 4100

Non-statutory designated
sites within 2km of Bartons
Road, Havant (SU732080):

Legend



Search Area

County Boundary (inc. LWM)



SINC (labelled)



Surrounding SINC

Ancient Woodland Inventory



Semi-Natural

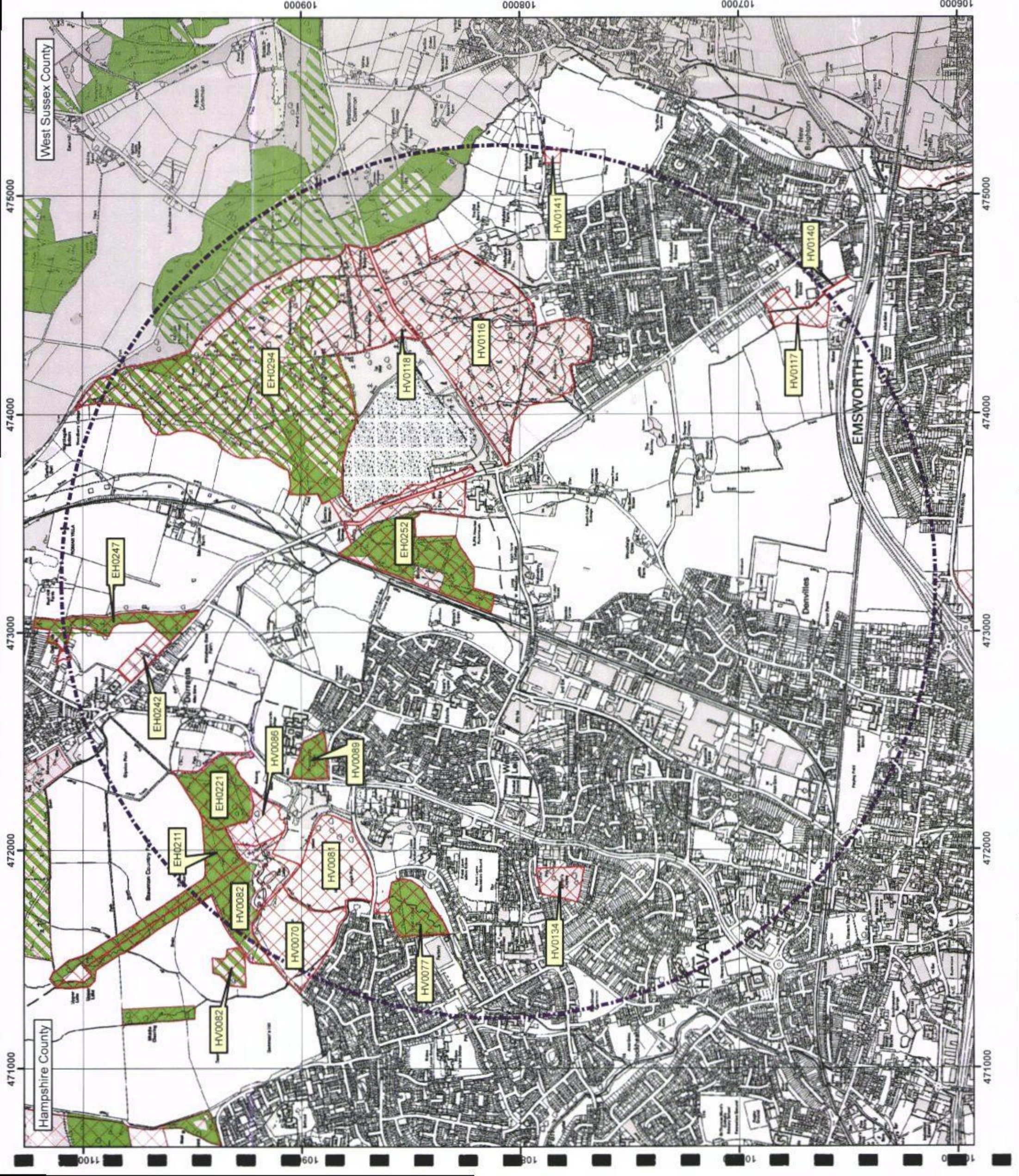


Replanted

Created: 22/04/2013
Scale at A3: 1:16,000



This map is reproduced from Ordnance Survey
material with the permission of Ordnance
Survey on behalf of the Controller of Her
Majesty's Stationery Office © Crown copyright.
Unauthorised reproduction infringes Crown
copyright and may lead to prosecution or civil
proceedings. HCC 100019180 2013





Hampshire Biodiversity Information Centre

HBIC Ref: 4100

Broad Habitat
Information within 2 km
of Bartons Road, Havant
(SU732080) based on
Hampshire County Council's
habitat/land use mapping

Legend

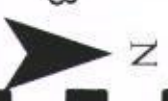
-  Search Area
-  County Boundary (inc. LWM)

Some Habitats may overlap.
Please see 'UK BAP Habitats
Legend' for full Legend, there
is a link to this within
your covering letter

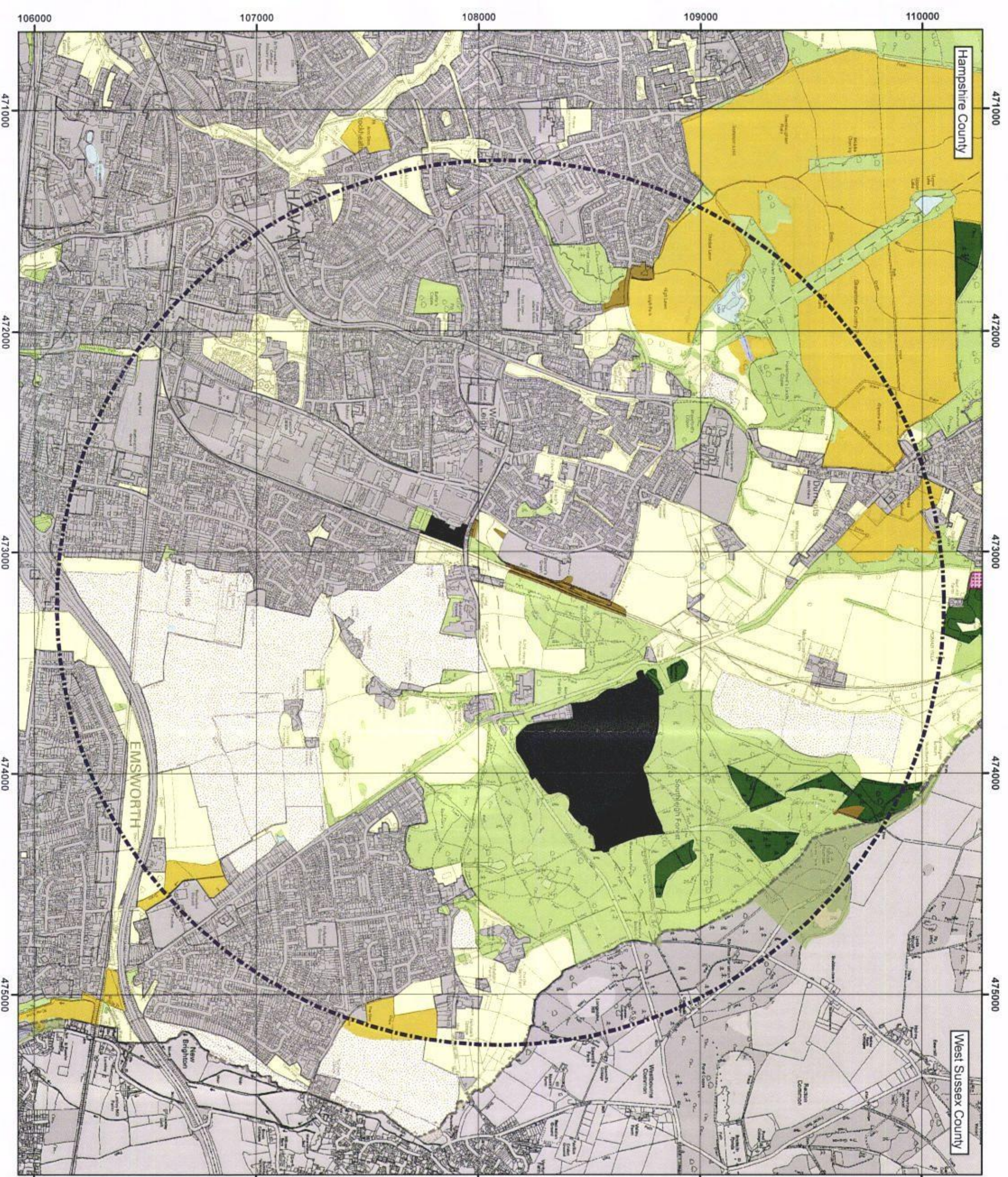
(see explanatory note for details of
the origin and accuracy of this data)

Created: 22/04/2013
Scale at A3: 1:16,000

0 125 250 500 750 1,000
Meter



This map is reproduced from Ordnance Survey
material with the permission of Ordnance
Survey on behalf of the Controller of Her
Majesty's Stationery Office © Crown copyright.
Unauthorised reproduction infringes Crown
copyright and may lead to prosecution or civil
proceedings. HCC 100019180 2013





Hampshire Biodiversity Information Centre

HBIC Ref: 4100

**Priority Habitat
Information within 2 km
of Bartons Road, Havant
(SU732080) based on
Hampshire County Council's
habitat/land use mapping**

Legend



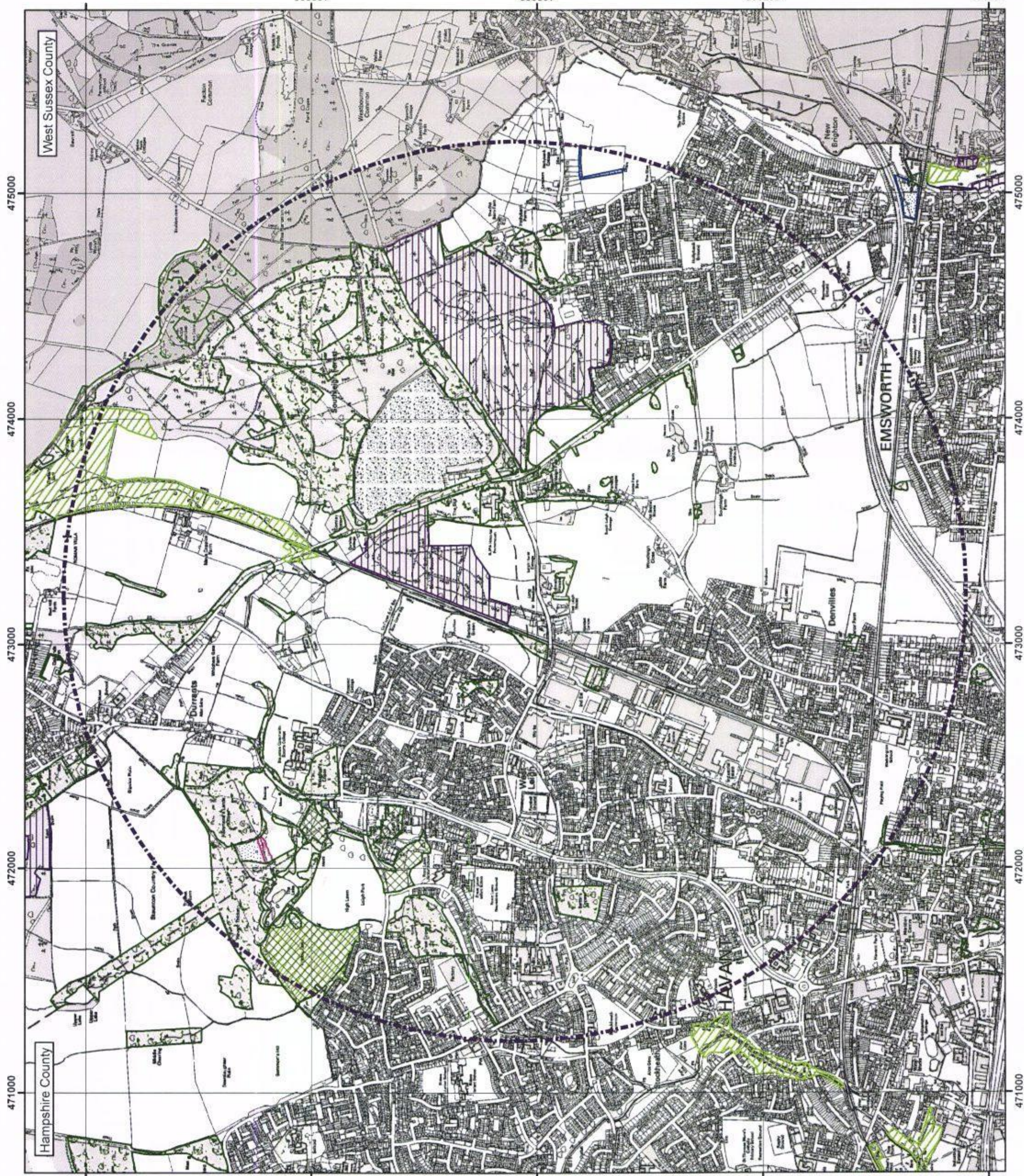
Some Habitats may overlap.
Please see 'UK BAP Habitats
Legend' for full Legend, there
is a link to this within
your covering letter

(see explanatory note for details of
the origin and accuracy of this data)

Created: 22/04/2013
Scale at A3: 1:16,000



This map is reproduced from Ordnance Survey
material with the permission of Ordnance
Survey on behalf of the Controller of Her
Majesty's Stationery Office © Crown copyright.
Unauthorised reproduction infringes Crown
copyright and may lead to prosecution or civil
proceedings. HCC 100019180 2013



Details of Sites of Importance for Nature Conservation (SINCs) within the search area:

Please see [Criteria for SINCs in Hampshire](#) for more information on Sites of Importance for Nature Conservation in Hampshire. If there are any criteria beginning with a 'P' in the SINC table below, these denote SINCs in Portsmouth, designated using different criteria (see accompanying document.)

SINC Ref	SINC Name	Central Grid Ref.	SINC Criteria	Species supported that meet Section 6 of SINC Selection Criteria	Area (ha)
EH0211	Thicket Bottom	SU71950936	1D		7.66
EH0221	Hammond's Lands Copse	SU72300940	1A		7.88
EH0242	Oaklands Meadows 1 & 2	SU72900970	2B/2D/6A	Potentilla anglica (Trailing Tormentil) [CS] Salix aurita (Eared Willow) [CS]	2.24
EH0247	Oaklands Woodland	SU73100990	1A/2B		5.24
EH0252	Barton's Copse & The Slip	SU73400850	1A		18.28
EH0294	Southleigh Forest	SU74400930	1D	Apatura iris (Purple Emperor) [CS] Illecebrum verticillatum (Coral Necklace) [NR]	79.10
HV0070	Thicket Lawn	SU71600900	2A/6A	Bromus racemosus (Smooth Brome) [CS]	11.11
HV0077	Great Copse, Havant	SU71800840	1A		5.16
HV0081	High Lawn	SU71900890	2B		11.80
HV0082	Thicket Bottom Woods & Lake	SU71900930	1A		16.10
HV0086	Lower Beacon Field	SU72110919	2A		3.65
HV0089	Wakefords Copse, Havant	SU72400890	1A		2.53
HV0116	Southleigh Forest (South)	SU74400830	1D		47.66
HV0117	Land West of Emsworth Recreation Ground	SU74450668	2B		3.15
HV0118	Southleigh Forest (North of Emsworth Common Road)	SU74550866	1D		3.79
HV0134	Battins Copse	SU71850780	1A		2.73
HV0140	Stream West of Emsworth Recreation Ground	SU74580656		Alisma lanceolatum (Narrow-Leaved Water-Plantain) [CR]	0.07
HV0141	Land East of 54 Long Copse Lane	SU75180785	2B		0.44

sharing information about Hampshire's wildlife

The Hampshire Biodiversity Information Centre Partnership includes local authorities, government agencies, wildlife charities and biological recording groups.

Protected and Notable Species Records

Search Area: 2km Search Radius of Bartons Road, Havant SU 732 080
Date: 22 April 2013
HBIC Ref: 4100

See this [Legislation Explanatory Document](#) for a document explaining notable species statuses and legislation.

HBIC has it's own extensive database of habitat and higher plant data for the County. In addition, HBIC hold copies of datasets belonging to partner organisations. Through data exchange agreements with these organisations HBIC is provided with regular database updates and can supply species information on their behalf. HBIC currently holds copies of the following datasets:

- Botanical Society of the British Isles' (BSBI) vascular plant database for Hampshire
- Butterfly Conservation's butterfly and moth database for Hampshire
- Hampshire Ornithological Society (HOS) bird records
- Hampshire Bat Group (HBG) Records of bat roost visits and sightings
- Data administered by the Hampshire Wildlife Trust (HWT) on behalf of the species recording groups below:
 - Hampshire Amphibian and Reptile Group (HARG)
 - Hampshire Mammal Group (HMG) (excluding records for bats and badgers)
- UK Bees, Wasps and Ants Recording Society (BWARS) the full dataset as of January 2012

It is important that these species recording groups (where relevant to the data provided) are acknowledged in any document produced by the data requester where data is incorporated into the document, as a matter of course.

The following are Protected and notable species records from the above datasets within the search area recorded in the last 15 years:

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Amphibians & Reptiles								
<i>Bufo bufo</i>	Common Toad	UKBAP	SU71700840 SU746079	Great Copse, Havant White Lodge Emsworth	2001 1999	2001 1999	1 2	0 1
<i>Natrix natrix</i>	Grass Snake	UKBAP WCA_s5s91(t)	SU719090 SU726095	North Of Leigh Park Havant Durrants Road Rowlands Castle	1999 1999	1999 1999	1 1	1 1

<i>Vipera berus</i>	Adder	UKBAP WCA_s5s91(t)	SU730070 SU746079 SU716086 su716086 SU730070	Havant Thicket White Lodge Emsworth Havant, Staunton Country Park Staunton Country Park, Havant Havant Thicket	1999 1999 2003 2006 1999	1 3 1 1 1	1 1 0 0 1
Birds							
<i>Alauda arvensis</i>	Sky Lark	BOCC_Red HBAP	SU7106 SU72340958	Havant Havant	2010 2006	1 1	0 5
<i>Alcedo atthis</i>	Common Kingfisher	WCA_s1s1	SU7106 SU7209 SU7210	Havant Ha Leigh Park Havant Sir George Staunton Cp - Havant	2005 2010 2008 2010 2003 2003	2 6 1 1	1 1 1 1
<i>Anas clypeata</i>	Northern Shoveler	CR	SU7408	Southleigh Forest	2005 2005	1 1	1 1
<i>Anthus trivialis</i>	Tree Pipit	BOCC_Red UKBAP	SU7106	Havant	2002 2002	1 1	1 1
<i>Bubo bubo</i>	Eurasian Eagle Owl		SU7106 SU746078	Havant Ch Emsworth	2008 2008 2008	1 1 1	1 1 1
<i>Caprimulgus europaeus</i>	European Nightjar	Sensitive BOCC_Red UKBAP HBAP CI	SU70E SU71F	Sensitive Sensitive	2010 1999 1999	2 1 1	4 1 1
<i>Carduelis cabaret</i>	Lesser Redpoll	BOCC_Red UKBAP	SU7106 SU7408	Havant Hollybank Woods	2005 1997 1997	1 1 1	1 1 1
<i>Carduelis cannabina</i>	Common Linnet	BOCC_Red HBAP	SU7207 SU7306 SU7309 SU7310 SU732066	Ha Leigh Park Havant Ch Warblington Mays Coppice Farm - Rowland's Castle Rowlands Castle Denvilles (havant)	1997 2009 2007 1998 2011	1 1 1 1 1	20 63 50 80 48
<i>Carduelis flammea</i>	Common Redpoll	CI	SU75000770	Hampshire Farm Pasture	2005 2005	1 1	0 0
<i>Carduelis spinus</i>	Eurasian Siskin	CI	SU7107 SU7109 SU71700840	Ha Leigh Park Havant Ha Leigh Park Havant Great Copse, Havant	2006 2002 2001	1 1 1	1 2 0

<i>Charadrius dubius</i>	Little Plover	Sensitive WCA_s1s1 CS	SU7209	Sir George Staunton Cp - Havant	2002	2002	1	6
			SU70E	Sensitive	2009	2009	1	2
<i>Cuculus canorus</i>	Common Cuckoo	BOCC_Red UKBAP	SU7108	Ha Leigh Park Havant	2010	2010	2	1
<i>Dendrocopos minor</i>	Lesser Spotted Woodpecker	BOCC_Red HBAP	SU7210	Rowlands Castle	1997	1997	2	1
			SU7210	Sir George Staunton Cp - Havant	2004	2004	1	1
			SU7310	Rowlands Castle	1997	1997	1	2
			SU7408	Hollybank Woods	1997	1997	1	1
			SU7106	Havant	2001	2003	2	1
<i>Egretta garzetta</i>	Little Egret	HBAP CR	SU7108	Ha Leigh Park Havant	2000	2009	16	8
			SU7109	Ha Leigh Park Havant	2000	2002	6	1
			SU7109	Havant	2006	2006	2	1
			SU714090	Ha Leigh Park Havant	2002	2002	1	1
			SU7206	Havant	2009	2009	1	1
			SU7308	Ha Little Leigh Farm	2002	2002	1	1
			SU7309	Havant	2004	2004	1	1
			SU7309	Rowlands Castle	1998	1998	1	1
			SU733088	Little Leigh Farm	2005	2005	1	1
			SU7406	Ch Emsworth River Ems	1999	1999	1	1
<i>Emberiza citrinella</i>	Yellowhammer	BOCC_Red UKBAP	SU7210 SU7408	Rowlands Castle Southleigh Forest	2011	2011	1	10
					2011	2011	1	2
<i>Emberiza schoeniclus</i>	Reed Bunting	UKBAP HBAP	SU732066	Denvilles (havant)	2011	2011	1	1
<i>Falco peregrinus</i>	Peregrine Falcon	Sensitive WCA_s1s1 CR	SU70	Sensitive	2000	2004	2	1
			SU70	Sensitive	2001	2001	4	1
			SU70	Sensitive	2002	2002	1	1
			SU70	Sensitive	2004	2004	1	2
			SU70	Sensitive	2005	2005	1	1
<i>Falco subbuteo</i>	Eurasian Hobby	Sensitive HBAP WCA_s1s1	SU70D	Sensitive	1999	2003	2	2
			SU70E	Sensitive	2006	2006	1	1
			SU70E	Sensitive	2007	2007	1	1

<i>Fringilla montifringilla</i>	Brambling	WCA_s1s1	SU70I SU70J SU70J SU71F	Sensitive Sensitive Sensitive Sensitive	1996 1995 1999 1999	2006 2007 2001 1999	4 2 2 1	2 4 1 1
<i>Gallinago gallinago</i>	Common Snipe	HBAP CS	SU7406 SU7106	Ch Emsworth Havant	2011 2010	2011 2010	1 1	2 0
<i>Haematopus ostralegus</i>	Eurasian Oystercatcher	CS	SU7106 SU7207	Havant Su70	2004 2000	2004 2000	1 1	1 3
<i>Larus argentatus</i>	Herring Gull	BOCC_Red CR	SU733088	Ha Little Leigh Farm	2001	2001	3	133
<i>Larus fuscus</i>	Lesser Black-backed Gull	CR	SU7207 SU733088 SU7407	Lavant Stream (west Leigh) Ha Little Leigh Farm Southleigh Farm	1998 2001 1999	1998 2001 2005	1 5 2	10 95 30
<i>Larus marinus</i>	Great Black-backed Gull	CR	SU7209 SU7308 SU7309 SU7309 SU733088 SU7407	Mays Coppice Farm - Rowland's Castle Ha Little Leigh Farm Havant Rowlands Castle Ha Little Leigh Farm Southleigh Farm	2001 2001 2000 2002 2001 1999	2001 2001 2004 2002 2001 2005	1 1 4 1 2 4	25 5 88 10 82 328
<i>Larus melanocephalus</i>	Mediterranean Gull	Sensitive HBAP WCA_s1s1 CR	SU70D SU70D SU70E SU70E SU70I SU70J SU70J SU70J SU71F	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	2001 2002 1993 1997 2002 1999 2001 2001 1998	2001 2002 2001 2001 2002 2001 2001 2001 2002	1 1 3 5 1 2 1 12 2	1 3 1 11 2 6 1 9 1
<i>Larus ridibundus</i>	Black-headed Gull	CR	SU7109 SU7109 SU7209	Ha Leigh Park Havant Ha Leigh Park Havant Mays Coppice Farm - Rowland's Castle	2001 2001 1997	2001 2001 1997	3 3 1	2000 2000 1000

				SU7209	Mays Coppice Farm - Rowland's Castle	1997	1997	1	1000
				SU7306	Ch Warblington	2004	2004	1	1000
				SU7306	Ch Warblington	2004	2004	1	1000
				SU7308	Havant	2005	2005	1	600
				SU7308	Havant	2005	2005	1	600
				SU7309	Havant	2000	2003	8	2500
				SU7309	Havant	2000	2003	8	2500
				SU7309	Mays Coppice Farm - Rowland's Castle	1999	1999	1	1200
				SU7309	Mays Coppice Farm - Rowland's Castle	1999	1999	1	1200
				SU7309	Rowlands Castle	2000	2002	4	1500
				SU7309	Rowlands Castle	2000	2002	4	1500
				SU733088	Ha Little Leigh Farm	2001	2001	5	6500
				SU733088	Ha Little Leigh Farm	2001	2001	5	6500
				SU7407	Southleigh Farm	2005	2005	1	3500
				SU7407	Southleigh Farm	2005	2005	1	3500
<i>Loxia curvirostra</i>	Common Crossbill	WCA_s1s1 CS		SU7209	Sir George Staunton Cp - Havant	2002	2002	1	6
<i>Luscinia megarhynchos</i>	Common Nightingale	HBAP CS		SU730065	Ch Warblington	2000	2000	1	1
<i>Milvus migrans</i>	Black Kite			SU7107	Havant	2009	2009	1	1
				SU70D	Sensitive	2010	2010	2	0
		Sensitive HBAP		SU70E	Sensitive	2009	2009	1	2
		WCA_s1s1 CR		SU70J	Sensitive	2004	2004	1	1
	Red Kite			SU70J	Sensitive	2009	2009	1	1
				SU70P	Sensitive	2003	2003	1	1
		BOCC_Red HBAP CR		SU7106	Havant	2002	2002	1	1
<i>Motacilla flava</i>	Yellow Wagtail			SU7210	Sir George Staunton Cp - Havant	2008	2008	1	1
<i>Muscicapa striata</i>	Spotted Flycatcher	BOCC_Red UKBAP HBAP		su734086	Southleigh Forest	2010	2010	1	1

<i>Numerius phaeopus</i>	Whimbrel	BOCC_Red WCA_s1s1	SU7206 SU7406	Havant Ch Emsworth Nore Barn	1998 2009	2008 2009	2	15
<i>Oenanthe oenanthe</i>	Northern Wheatear	CS	SU7109 SU7210	Havant Thicket Sir George Staunton Cp - Havant	2010 2008	2010 2008	1	0 1
<i>Passer domesticus</i>	House Sparrow	BOCC_Red UKBAP	SU7108 SU71700840 SU7210 SU7406 SU7408	Ha Leigh Park Havant Great Copse, Havant Rowlands Castle Ch Emsworth Southleigh Forest	2001 2001 2011 1999 2011	2006 2001 2011 2011 2011	4 1 1 2 2	50 0 17 50 13
<i>Pernis apivorus</i>	European Honey- buzzard	Sensitive HBAP WCA_s1s1 CR	SU70 SU70 SU70	Sensitive Sensitive Sensitive	1998 2000 2010	1998 2000 2010	1 1 1	1 1 0
<i>Phoenicurus ochruros</i>	Black Redstart	Sensitive WCA_s1s1 CR	SU70N	Sensitive	2009	2009	1	1
<i>Phylloscopus sibilatrix</i>	Wood Warbler	BOCC_Red UKBAP CI	SU7409	Southleigh Forest	1998	1998	1	2
<i>Pluvialis apricaria</i>	European Golden Plover	HBAP	SU7407	Southleigh Farm	1999	1999	1	50
<i>Poecile palustris</i>	Marsh Tit	BOCC_Red	SU7108 SU7109 SU7208 SU7209 SU7209 SU7210 SU7210 SU72340958 SU733061 SU7408 SU7408 SU7408 SU744082	Ha Leigh Park Havant Sir George Staunton Cp - Havant Ha Leigh Park Havant Ha Leigh Park Havant Rowlands Castle Havant Thicket Sir George Staunton Cp - Havant Havant Ch Warblington Castle Farm Cbc Ch Emsworth Hollybank Woods Southleigh Forest Hollybank Woods	2006 2003 2000 2008 1999 1999 2004 2006 1999 2005 2006 2006 1999	2006 2003 2000 2008 1999 2000 2004 2006 1999 2005 2006 2006 1999	2 1 1 1 1 2 1 1 1 1 1 1 1	1 2 1 1 1 2 2 2 1 1 1 1 1

<i>Pyrrhula pyrrhula</i>	Common Bullfinch	HBAP	SU747084 SU7108 SU71700840 SU7206 SU7210	Ch Emsworth Havant Great Copse, Havant Denvilles (havant) Rowlands Castle	2004 2011 2001 2011 2011 2011	1 1 1 2 2	1 1 1 2 2	1 1 1 2 2
<i>Rallus aquaticus</i>	Water Rail	CS	SU733088	Ha Little Leigh Farm	2001	1	1	1
<i>Regulus ignicapilla</i>	Firecrest	Sensitive HBAP WCA_s1s1 CS	SU70D	Sensitive	2008	1	1	1
			SU70E	Sensitive	2011	3	1	1
			SU70J	Sensitive	2000	2	1	1
			SU70J	Sensitive	2002	1	1	1
			SU70P	Sensitive	2004	1	1	1
			SU71F	Sensitive	2006	3	2	2
<i>Saxicola rubetra</i>	Whinchat	HBAP CR	SU71F	Sensitive	2011	1	1	1
			SU7209	Mays Coppice Farm - Rowland's Castle	1997	1	1	1
			SU7209	Rowlands Castle - Gipsies Plain	2002	1	4	4
			SU7210	Sir George Staunton Cp - Havant	2008	1	1	1
			SU731088	Ha Leigh Park Havant	2010	1	0	0
<i>Sterna hirundo</i>	Common Tern	CR	su734086	Southleigh Forest	2010	1	0	0
<i>Sterna sandvicensis</i>	Sandwich Tern	CR	SU720074	Havant	2000	1	1	1
<i>Sturnus vulgaris</i>	Common Starling	BOCC_Red	SU7206	Ch Langstone	2005	1	1	1
			SU71700840	Great Copse, Havant	2001	1	0	0
			SU7207	Lavant Stream (west Leigh)	1995	3	1500	1500
			SU7210	Rowlands Castle	2011	1	8	8
			SU7309	Rowlands Castle	2002	1	300	300
<i>Sylvia undata</i>	Dartford Warbler	Sensitive HBAP WCA_s1s1 CI	SU7406	Ch Emsworth	1999	2	90	90
<i>Tadorna tadorna</i>	Common Shelduck	CI	SU70P	Sensitive	2006	1	1	1
<i>Tringa nebularia</i>	Common Greenshank	WCA_s1s1	SU741092	Southleigh Forest	1998	1	1	1
<i>Tringa ochropus</i>	Green Sandpiper	WCA_s1s1	SU7406 SU7106 SU7207	Ch Emsworth Nore Barn Havant Lavant Stream (west Leigh)	2009 2001 1997	1 3 2	2 5 1	2 5 1

<i>Tringa totanus</i>	Common Redshank	HBAP	SU7210 SU727077 SU7308 SU733088	Sir George Staunton Cp - Havant Havant Ha Little Leigh Farm Ha Little Leigh Farm	2000 2003 2002 2001	2000 2003 2002 2001	1 1 2 5	1 1 1 7
<i>Turdus iliacus</i>	Redwing	BOCC_Red WCA_s1s1	SU7206 SU7106 SU7107 SU7108 SU7206 SU7210 SU721063 SU7310	SU70 Havant Havant Ha Leigh Park Havant Denvilles (havant) Rowlands Castle Havant Rowlands Castle	2000 1996 2004 2005 2011 2011 1998 1996	2000 1998 2004 2005 2011 2011 1998 2007	1 2 2 1 1 1 1 3	2 131 10 2 0 2 46 30
<i>Turdus philomelos</i>	Song Thrush	BOCC_Red HBAP	SU71700840 SU7206 SU7210 SU72340958 SU7408	Great Copse, Havant Denvilles (havant) Rowlands Castle Havant Southleigh Forest	2001 2011 2011 2006 2011	2001 2011 2011 2006 2011	1 1 3 1 1	0 0 10 2 5
<i>Turdus pilaris</i>	Fieldfare	BOCC_Red WCA_s1s1	SU7106 SU7207	Havant Havant	2003 1997	2003 1997	1 1	6 90
<i>Tyto alba</i>	Barn Owl	WCA_s1s1	SU7309	Hedge Row Farm - Rowland's Castle	2005	2005	1	1
<i>Vanellus vanellus</i>	Northern Lapwing	BOCC_Red UKBAP HBAP	SU7206 SU7209 SU7209 SU733088 SU7407	Havant Mays Coppice Farm - Rowland's Castle Rowlands Castle - Gipsies Plain Ha Little Leigh Farm Southleigh Farm	2009 1997 2009 2001 1999	2009 1997 2009 2001 1999	1 1 1 1 1	13 60 1 100 250
Higher plants - Flowering Plants								
<i>Arabis hirsuta</i>	Hairy Rock-cress	CS	SU735083	Comley Hill	1997	1997	1	1
<i>Chamaemelum nobile</i>	Chamomile	IUCN_GB_2001:VU UKBAP HBAP	SU720090	Durrants	2009	2009	1	0
<i>Crepis biennis</i>	Rough Hawk's-beard	CR	SU7308	Comley Hill	1997	1997	1	1
<i>Euphorbia peplis</i>	Purple Spurge	IUCN_GB_2001:EX	SU71700840	Great Copse, Havant	2002	2002	1	0

<i>Geranium rotundifolium</i>	Round-leaved Crane's-bill	CS	SU7306 SU7406	Havant Town East Nr Emsworth Railway Station	2008 1997	2008 1997	1	0
<i>Misopates orontium</i>	Weasel's-snout	IUCN_GB_2001:VU	SU7206 SU723068 SU723068	Havant New Lane Allotments By New Lane In Havant Denvilles	2008 2005 1997	2008 2005 1997	2 1 1	0 0 1
<i>Orchis morio</i>	Green-winged Orchid	IUCN_GB_2001:NT HBAP	SU749078 SU749078	Nr Most Of Horndean Road Nr Most Of Horndean Road	1997 1997	1997 1997	2 2	1 1
<i>Orobanchae hederaceae</i>	Ivy Broomrape	CR	SU7106	Havant Town	2008	2008	1	0
<i>Ranunculus baudotii</i>	Brackish Water-crowfoot	CS	SU7106	Havant Town Centre	2008	2008	1	0
<i>Rorippa amphibia</i>	Great Yellow-cress	CS	SU7409	Woodberry Lane	1997	1997	1	1
<i>Salvia verbenaca</i>	Wild Clary	CR	SU749069	Christopher Way, Emsworth	2010	2010	1	24
<i>Sambucus ebulus</i>	Dwarf Elder	CR	SU7206	Havant Town	2008	2008	1	0
<i>Saxifraga tridactylites</i>	Rue-leaved Saxifrage	CS	SU7106 SU7206	Havant Town Havant Town	2008 2008	2008 2008	1 1	0 0
<i>Securigera varia</i>	Crown Vetch	CI	SU7208	Havant Leigh Park	2008	2008	1	0
<i>Spergula arvensis</i>	Corn Spurrey	IUCN_GB_2001:VU	SU722086 SU74790795	West Leigh Land North of Hollybank Lane and Long Copse Lane, Emsworth	1998 2011	1998 2011	1 1	1 0
<i>Spiranthes spiralis</i>	Autumn Lady's-tresses	IUCN_GB_2001:NT	SU749078	Nr Most Of Horndean Road	1997	1997	1	1
<i>Trifolium glomeratum</i>	Clustered Clover	NS CS	SU7306 SU732060	Havant East A27 Underpass Old A259 Alignment, Warblington	2008 2007	2008 2007	1 1	0 0
Invertebrates - Coleoptera								
<i>Lucanus cervus</i>	Stag Beetle	EU_Hab_2np NS UKBAP HBAP	SU7106 SU7106 SU718068 SU718080 SU719068 SU719069 SU719071 SU720064 SU720066 SU7206	Havant Area 7106 Su7106 Su718068 Su718080 Havant Borough Havant Borough Havant Borough Havant Borough Su720066 Su7206	2002 2002 2002 2007 1998 1998 1998 1998 2002 2007	2002 2002 2002 2007 1998 1998 1998 1998 2002 2007	1 1 1 1 3 1 1 2 1 1 1	1 1 1 1 2 2 1 1 1 1

			SU7208 SU7208 SU721063 SU721064 SU721065 SU722063 SU723076 SU724062 SU725062 SU726066 SU728071 SU733061 SU733061	Su7208 West Leigh, Havant, Hampshire. Havant Borough Havant Borough Havant Borough Su722063 Su723076 Su724062 Su725062 Su726066 Su728071 A259, Havant To Emsworth Rd, Warblington, Hants Su733061	1998 1998 1998 1998 1998 2007 2006 2002 2007 2002 2007 1998 1998	1998 1998 1998 1998 1998 2007 2006 2002 2007 2002 2007 1998 1998	1 1 2 3 1 1 1 2 1 1 1 1 1 1 1	1 1 2 3 1 1 1 2 1 1 1 1 1 1 1
Invertebrates - Diptera								
<i>Criorhina asilica</i>	Criorhina asilica	NN	SU745082	Hollybank Woods, Emsworth	2004	2004	1	1
Invertebrates - Lepidoptera								
<i>Acronicta psi</i>	Grey Dagger	UKBAP	SU7108 SU7210 SU7210	1-km Square Su7108 1-km Square Su7210 Havant Thicket	2000 2000 1991	2000 2000 1997	1 1 3	1 0 1
<i>Acronicta rumicis</i>	Knot Grass	UKBAP	SU7108 SU7210 SU7210 SU723096 SU7408 SU743083	1-km Square Su7108 1-km Square Su7210 Havant Thicket Gipsies Plain, Staunton Country Park 1-km Square Su7408 Southleigh Forest	2000 2000 1993 2008 2000 1999	2000 2000 1997 2008 2000 1999	1 1 3 1 1 1	0 0 0 1 0 1
<i>Agrochola litura</i>	Brown-spot Pinion	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Agrochola lychnidis</i>	Beaded Chestnut	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Allophyes oxyacanthae</i>	Green-brindled Crescent	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Amphipoea oculea</i>	Ear Moth	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Amphipyra tragopoginis</i>	Mouse Moth	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Apamea remissa</i>	Dusky Brocade	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0

<i>Apatura iris</i>	Purple Emperor	IUCN_GB_2001:NT HBAP CS	SU7408	Unknown	1998	1998	1	0
<i>Apoda limacodes</i>	Festoon	HBAP	SU7108	1-km Square Su7108	2000	2000	1	0
			SU7210	1-km Square Su7210	2000	2000	1	0
			SU7210	Havant Thicket	1997	1997	2	0
<i>Arcia caja</i>	Garden Tiger	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Argynnis aglaja</i>	Dark Green Fritillary	CS	SU721095	Staunton Country Park Transect: Section No 6	2008	2008	1	2
			SU722093	Staunton Country Park Transect: Section No 2	2008	2008	3	2
			SU723096	Staunton Country Park Transect: Section No 5	2008	2008	2	1
			SU724092	Staunton Country Park Transect: Section No 4	2008	2008	1	1
			SU7109	Staunton Country Park	2003	2003	1	0
<i>Argynnis paphia</i>	Silver-washed Fritillary	HBAP CI	SU717092	Staunton Country Park Transect: Section No 7	2008	2008	1	1
			SU721091	Staunton Country Park/leigh Park Gardens	2011	2011	1	3
			SU721095	Staunton Country Park Transect: Section No 6	2008	2010	13	9
			SU722088	Staunton Country Park Transect: Section No 1	2009	2010	3	1
			SU722093	Staunton Country Park Transect: Section No 2	2008	2009	2	1
			SU723092	Staunton Country Park Transect: Section No 3	2008	2010	4	5
			SU723096	Staunton Country Park Transect: Section No 5	2008	2010	12	6
			SU723097	Havant Thicket	2007	2007	1	5
			SU724092	Staunton Country Park Transect: Section No 4	2008	2010	4	4
			SU7408	Unknown	1998	1998	1	0
			SU743080	Southleigh Forest, Havant	2010	2010	1	4
			SU744080	Southleigh Forest, Havant	2011	2011	1	7

<i>Asteroscopus sphinx</i>	Sprawler	UKBAP CS	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Aethymia centrugo</i>	Centre-barred Sallow	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Boloria euphrosyne</i>	Pearl-bordered Fritillary	IUCN_GB_2001:EN UKBAP HBAP CS	SU7408	Southleigh Forest	2004	2004	1	2
<i>Brachylomia viminalis</i>	Minor Shoulder-knot	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Calamotropha paludella</i>	Bulrush Veneer	NS	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Caloptilia leucapennella</i>	Sulphur Slender	CR	SU7210	Havant Thicket	2001	2001	1	1
<i>Caloptilia populetorum</i>	Clouded Slender	CR	SU7210	Havant Thicket	2009	2009	1	0
<i>Caradina morpheus</i>	Mottled Rustic	UKBAP	SU7108 SU7210 SU7210	1-km Square Su7108 1-km Square Su7210 Havant Thicket	2000 2000 1997	2000 2000 1997	1 1 2	0 0 0
<i>Carpatolechchia alburnella</i>	Suffused Groundling	CR	SU7210	Havant Thicket	1997	1997	1	1
<i>Carpatolechchia fugitivella</i>	Elm Groundling	CR	SU7210	Havant Thicket	1997	1997	1	1
<i>Carpatolechchia proximella</i>	Black-speckled Groundling	CR	SU7210	Havant Thicket	1995	1997	2	1
<i>Catarhoe cuculata</i>	Royal Mantle	CS	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Celaena leucostigma</i>	Crescent	UKBAP CS	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Clostera pigra</i>	Small Chocolate-tip	CS	SU7210	Havant Thicket	2008	2008	1	1
<i>Coenonympha pamphilus</i>	Small Heath	IUCN_GB_2001:NT UKBAP	SU717091	Staunton Country Park Transect: Section No 8	2009	2009	3	1
			SU717092	Staunton Country Park Transect: Section No 7	2009	2010	2	1
			SU721088	Staunton Country Park	2010	2010	1	1
			SU721095	Staunton Country Park Transect: Section No 6	2009	2010	2	1
			SU722088	Staunton Country Park Transect: Section No 1	2010	2010	1	1
			SU723096	Staunton Country Park Transect: Section No 5	2008	2008	2	3
			SU724092	Staunton Country Park Transect: Section No 4	2009	2009	1	3

<i>Coleophora laricella</i>	Larch Case-bearer	CR	SU7109	Staunton Country Park	1997	1	0
<i>Cosmotes consortella</i>	Field Dwarf	CR	SU743083	Southleigh Forest	2000	1	1
<i>Cryphia muralis</i>	Marbled Green	CS	SU7108	1-km Square Su7108	2000	1	0
<i>Cupido minimus</i>	Small Blue	IUCN_GB_2001:NT UKBAP HBAP CS	SU71700840	Great Copse, Havant	2001	1 *	0
<i>Gymatophorima diluta</i>	Oak Lutestring	UKBAP	SU7108 SU7408 SU7408 SU743083	1-km Square Su7108 1-km Square Su7408 Southleigh Forest Southleigh Forest	2000 2000 2000 2000	1 1 1 1	0 0 3 0
<i>Deileptenia ribeata</i>	Satin Beauty	CS	SU7210	1-km Square Su7210	2000	1	0
<i>Diarsia rubi</i>	Small Square-spot	UKBAP	SU7108	1-km Square Su7108	2000	1	0
<i>Diloba caeruleocephala</i>	Figure of Eight	UKBAP CS	SU7108	1-km Square Su7108	2000	1	0
<i>Ecliptopera silaceata</i>	Small Phoenix	UKBAP	SU7108	1-km Square Su7108	2000	1	0
<i>Ectoedemia argyropeza</i>	Virgin Pigmy	CR	SU7109 SU7210	Staunton Country Park Havant Thicket	2006 1989	2 3	24 0
<i>Elaphria venustula</i>	Rosy Marbled	CS	SU7210	1-km Square Su7210	2000	1	0
<i>Elegia similella</i>	White-barred Knot-horn	NS HBAP	SU7210 SU7210	1-km Square Su7210 Havant Thicket	2000 1997	1 2	0 1
<i>Ennomos erosaria</i>	September Thorn	UKBAP	SU7108 SU7209	1-km Square Su7108 Staunton Country Park	2000 2005	1 1	0 1
<i>Ennomos fuscantaria</i>	Dusky Thorn	UKBAP	SU7108	1-km Square Su7108	2000	1	0
<i>Epinotia fraternana</i>	Silver-barred Bell	CR	SU7210	Havant Thicket	2000	1	1
<i>Epinotia tedella</i>	Common Spruce Bell	CR	SU7210 SU743083	Havant Thicket Southleigh Forest	1975 1999	5 1	1 0
<i>Epirrhoe rivata</i>	Wood Carpet	CS	SU7108	1-km Square Su7108	2000	1	0
<i>Erynnis tages</i>	Dingy Skipper	IUCN_GB_2001:VU UKBAP CI	SU723092	Staunton Country Park Transect: Section No 3	2008	1	1
<i>Eudonia delunella</i>	Pied Grey	NS	SU7210 SU7210	1-km Square Su7210 Havant Thicket	2000 1997	1 2	0 1

<i>Eulithis mellinata</i>	Spinach	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Eupithecia simpliciat</i>	Plain Pug	CS	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Eupithecia venosata</i>	Netted Pug	CS	SU7108 SU7210	1-km Square Su7108 1-km Square Su7210	2000	2000	1	0
<i>Euxoa tritici</i>	White-line Dart	UKBAP CS	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Gelechia sororcullella</i>	Dark-striped Groundling	CR	SU7210	Havant Thicket	1997	1997	1	1
<i>Hadena confusa</i>	Marbled Coronet	CS	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Heliozela hammoniella</i>	Birch Lift	CR	SU743083	Southleigh Forest	1999	1999	1	2
<i>Hemistola chrysoprasana</i>	Small Emerald	UKBAP	SU7108 SU7210 SU7210	1-km Square Su7108 1-km Square Su7210 Havant Thicket	2000	2000	1	0
<i>Hepialus humuli</i>	Ghost Moth	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Hipparchia semele</i>	Grayling	IUCN_GB_2001:VU UKBAP	SU71700840	Great Copse, Havant	2001	2001	1	0
<i>Hoplodrina blanda</i>	Rustic	UKBAP	SU7108 SU7209 SU7210 SU7408 SU743083	1-km Square Su7108 Staunton Country Park Havant Thicket 1-km Square Su7408 Southleigh Forest	2000	2000	1	0
<i>Hydraecia micacea</i>	Rosy Rustic	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Hydraecia petasitis</i>	Butterbur	CR	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Idaea emarginata</i>	Small Scallop	CS	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Lacanobia suasa</i>	Dog's Tooth	CS	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Lasiommata megera</i>	Wall	IUCN_GB_2001:NT UKBAP CS	SU729064	Warblington Station	2006	2006	1	1
<i>Leucoma salicis</i>	White Satin Moth	CS	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Leucoptera spartifoliella</i>	Broom Bent-wing	CR	SU743083	Southleigh Forest	1999	1999	1	0
<i>Limenitis camilla</i>	White Admiral	IUCN_GB_2001:VU UKBAP	SU7109 SU7210 SU721091	Staunton Country Park Havant Thicket Staunton Country Park/leigh Park Gardens	2003	2003	1	0
					2007	2007	1	2
					2011	2011	1	4

<i>Lycia hirtaria</i>	Brindled Beauty		UKBAP	SU7108 SU7210	Staunton Country Park Transect: Section No 6 1-km Square Su7108 1-km Square Su7210	2000 2000	1 1	0 0
<i>Macaria wauaria</i>	V-moth		UKBAP CR	SU7108	1-km Square Su7108	2000	1	0
<i>Malacosoma neustria</i>	Lackey		UKBAP	SU7108	1-km Square Su7108	2000	1	0
<i>Melanchra persicariae</i>	Dot Moth		UKBAP	SU7108 SU7210 SU7210	1-km Square Su7108 1-km Square Su7210 Havant Thicket	2000 2000 1997	1 1 2	0 0 0
<i>Mesoleuca albicillata</i>	Beautiful Carpet		CS	SU7108 SU7210	1-km Square Su7108 1-km Square Su7210	2000 2000	1 1	0 0
<i>Mesoligia literosa</i>	Rosy Minor		UKBAP	SU7108	1-km Square Su7108	2000	1	0
<i>Moma alpinum</i>	Scarce Merveille Du Jour	IUCN_GB_pre94:R HBAP		SU7210	1-km Square Su7210	2000	1	0
<i>Mythimna comma</i>	Shoulder-striped Wainscot		UKBAP	SU7108 SU7210	1-km Square Su7108 1-km Square Su7210	2000 2000	1 1	0 0
<i>Mythimna pudorina</i>	Striped Wainscot		CS	SU7210 SU7210	1-km Square Su7210 Havant Thicket	2000 1997	1 2	0 0
<i>Operophtera fagata</i>	Northern Winter Moth		CS	SU7210	Havant Thicket	1998	1	0
<i>Orthosia gracilis</i>	Powdered Quaker		UKBAP	SU7108	1-km Square Su7108	2000	1	0
<i>Parectopa ononidis</i>	Clover Slender		CR	SU7210	Havant Thicket	2008	1	0
<i>Perittia obscurepunctella</i>	Honeysuckle Dwarf		CR	SU7210	Havant Thicket	1982	2	2
<i>Phyllocnistis xenia</i>	Kent Bent-wing	IUCN_GB_pre94:VU		SU7109	Staunton Country Park	2011	1	0
<i>Phyllonorycter salictella</i>	Willow Midget		CR	SU7210	Havant Thicket	1979	4	0
<i>Plusia festucae</i>	Gold Spot		CS	SU7108	1-km Square Su7108	2000	1	0

<i>Polymixis flavicincta</i>	Large Ranunculus	CS	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Psychoides verhuella</i>	Hart's-tongue Smut	CR	SU7310	Rowland's Castle	2008	2008	1	0
<i>Ptilodon cucullina</i>	Maple Prominent	CS	SU7210	1-km Square Su7210	2000	2000	1	0
<i>Rhizedra lufosa</i>	Large Wainscot	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Scopula marginipunctata</i>	Mullein Wave	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Shargacucullia lychnitis</i>	Striped Lychnis	UKBAP HBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Sitochroa palealis</i>	Sulphur Pearl	NN	SU7108 SU7210 SU7210	1-km Square Su7108 1-km Square Su7210 Havant Thicket	2000 2000 1997	2000 2000 1997	1 1 2	0 0 2
<i>Sophronia semicostella</i>	White-shouldered Sober	CR	SU7210	Havant Thicket	1997	1997	1	1
<i>Spilosoma lubricipeda</i>	White Ermine	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Spilosoma luteum</i>	Buff Ermine	UKBAP	SU7108 SU7210 SU7210	1-km Square Su7108 1-km Square Su7210 1-km Square Su7210 Havant Thicket	2000 2000 2000 1995	2000 2000 2000 1997	1 1 1 3	0 0 0 1
<i>Spilosoma urticae</i>	Water Ermine	HBAP CR	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Stigmella assimilella</i>	Aspen Pigmy	CR	SU7210	Havant Thicket	1986	2008	3	2
<i>Telechrysis tripuncta</i>	Treble-spot Tubic	CR	SU7210	Havant Thicket	2007	2007	1	1
<i>Tethea or</i>	Poplar Lutestring	CS	SU7108 SU7210 SU7210	1-km Square Su7108 1-km Square Su7210 Havant Thicket	2000 2000 1997	2000 2000 1997	1 1 2	0 0 0
<i>Tholera cespitis</i>	Hedge Rustic	UKBAP CS	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Tholera decimalis</i>	Feathered Gothic	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Timandra comae</i>	Blood-Vein	UKBAP	SU7108 SU7210	1-km Square Su7108 1-km Square Su7210	2000 2000	2000 2000	1 1	0 0
<i>Tyria jacobaeae</i>	Cinnabar	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Watsonalla binaria</i>	Oak Hook-tip	UKBAP	SU7108 SU7209 SU7408 SU743083	1-km Square Su7108 Staunton Country Park 1-km Square Su7408 Southleigh Forest	2000 2005 2000 1999	2000 2005 2000 1999	1 1 1 1	0 1 0 1

<i>Xanthia ictertia</i>	Sallow	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Xanthorhoe ferrugata</i>	Dark-barred Twin-spot Carpet	UKBAP	SU7108	1-km Square Su7108	2000	2000	1	0
<i>Xestia baja</i>	Dotted Clay	CS	SU7108	1-km Square Su7108	2000	2000	1	0
Mammals - Terrestrial (bats)								
<i>Eptesicus serotinus</i>	Serotine	Sensitive EU_Hab_4 HBAP WCA_s5s94b WCA_s5s94c HabReg_s2	SU7107	Sensitive	2010	2010	5	21
<i>Myotis mystacinus/brandtii</i>	Whiskered/Brandt's Bat	Sensitive WCA_s5s94b WCA_s5s94c HabReg_s2	SU7107	Sensitive	2001	2001	1	1
<i>Nyctalus noctula</i>	Noctule Bat	Sensitive EU_Hab_4 UKBAP WCA_s5s94b WCA_s5s94c HabReg_s2	SU7107 SU7109	Sensitive Sensitive	2010 2003	2010 2003	1 1	1 1
<i>Pipistrellus</i>	Pipistrellus	Sensitive WCA_s5s94b WCA_s5s94c HabReg_s2	SU713073 SU716082 SU727100 SU732071 SU745079 SU746079	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	2010 2002 2003 2002 2008 1999	2010 2002 2003 2002 2008 1999	1 1 1 1 1 1	1 1 1 0 1 1
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	Sensitive EU_Hab_4 HBAP WCA_s5s94b WCA_s5s94c HabReg_s2	SU717084 SU717084 SU717084 SU724087 SU724087 SU749078 SU749078	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	2001 2001 2001 2007 2007 2010 2010	2001 2001 2001 2010 2010 2010 2010	2 2 1 2 2 1 1	0 0 0 6 6 13 13

<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle	Sensitive EU_Hab_4 UKBAP HBAP WCA_s5s94b WCA_s5s94c HabReg_s2	SU718069 SU718069 SU749078 SU749078	Sensitive Sensitive Sensitive Sensitive	2010 2010 2010 2010	1 1 1 1	1 1 2 2
<i>Plecotus</i>	Plecotus	Sensitive WCA_s5s94b WCA_s5s94c HabReg_s2	SU745079	Sensitive	2008	2	0
<i>Plecotus auritus</i>	Brown Long-eared Bat	Sensitive EU_Hab_4 UKBAP WCA_s5s94b WCA_s5s94c HabReg_s2	SU723093 SU726099 SU727097 SU737073 SU746079	Sensitive Sensitive Sensitive Sensitive Sensitive	1997 1999 1999 2002 1999	1 1 1 1 1	1 0 25 0 0
Mammals - Terrestrial (non-bats)							
<i>Meles meles</i>	Eurasian Badger	Sensitive	SU7206	Sensitive	2006	1	2

* Indicates some of these records are unconfirmed

Confidential records

HBIC holds a small number of records that are to be treated as confidential. Confidentiality can be for a variety of reasons and may relate to a whole site or only to specific species. These records may be withheld or released depending on the nature of the data request and in accordance with the Environmental Information Regulations 2004.

Sensitive species

A small number of species are considered as sensitive by the relevant specialist species recording groups and will be indicated as such on all lists. Species may be considered sensitive for a variety of reasons. Location details for these records will not be disclosed unless the relevant species recording group has given their permission. Grid references will be altered to give a less precise position. Contact HBIC if further information is needed on these records.

Further notes

sharing information about Hampshire's wildlife

The Hampshire Biodiversity Information Centre Partnership includes local authorities, government agencies, wildlife charities and biological recording groups.

- Records of species such as the Nationally Rare Box (*Buxus sempervirens*) may not appear on the list as there may be many records but their provenance is not known.
- The location names, where shown, are the originals given by the recorders and may not match any formal name for the location or other colloquial names by which the location may also be known.
- The grid references, where shown, are the originals given by the recorders and may indicate the specific location of the species, a central grid reference representing a larger survey area, or a grid square.
- Where species have been deemed as 'sensitive' by the relevant specialist species recording group the location name will not be shown and the grid reference will have been altered to give a less precise position specified by the species recording group.
- Many of the records have been supplied by specialist species recording groups. Whilst every reasonable effort is made to validate information supplied to the Hampshire Biodiversity Information Centre the accuracy or comprehensiveness of this information cannot be guaranteed.
- Records do not necessarily represent evidence of breeding at a site; please contact HBIC if further details are required for any of these records.
- Whilst a species may have been recorded at a site, this does not indicate that the species is still present. Equally, the absence of a species from a site does not signify that it is absent, only that it has not been recorded, that the site has not been surveyed for this species, or that HBIC has not been informed of its presence.
- Quantities of '0' (zero) indicate that the species was 'present' but the number of individuals seen was not recorded. Negative quantities correspond to the DAFOR scale (plus very rare and 'locally' criteria) as follows:
 - -1 = Dominant (DAFOR)
 - -2 = Abundant (DAFOR)
 - -3 = Frequent (DAFOR)
 - -4 = Occasional (DAFOR)
 - -5 = Rare (DAFOR)
 - -6 = Very Rare
 - -21 = Locally Dominant
 - -22 = Locally Abundant
 - -23 = Locally Frequent
- Negative quantities of '-7' (minus seven) indicates that the species was 'not found'. These records are not included in protected and notable species lists.
- Max_Count values of '0' (zero) indicate that none of the records had a positive quantity count and hence the highest count numerical value was '0' (indicating 'present'). Max_Count values of blank indicate that none of the records had a numerical count value and instead they all had frequency values (e.g. using the DAFOR scale).

Status codes and abbreviations:

EU_Bird_1	Annex I of the Birds Directive
EU_Hab_2	Annex II of the Habitats Directive (priority species)

EU_Hab_2np	Annex II of the Habitats Directive (non-priority species)
EU_Hab_4	Annex IV of the Habitats Directive
EU_Hab_5	Annex V of the Habitats Directive
IUCN_(pre 94)	See IUCN (pre 1994) guidelines
IUCN_(1994)	See IUCN (1994) guidelines
IUCN_(2001)	See IUCN (2001) guidelines
BOCC_Red	Birds of Conservation Concern Red list
NR	Nationally rare (occurring in 15 or fewer 10km squares in Great Britain)
NS	Nationally scarce (occurring in 16 - 100 10km squares in Great Britain)
NN	Nationally notable (occurring in 16 - 100 10km squares in Great Britain or less than 20 Vice Counties)
UKBAP	UK Biodiversity Action Plan priority species
HBAP	Hampshire Biodiversity Action Plan species
NERC_s41	Section 41 of the Natural Environment and Rural Communities Act 2006
WCA_s1p1	Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended)
WCA_s5s91(k)	Schedule 5 Section 9 Part 1 (killing/injuring) of the Wildlife and Countryside Act 1981 (as amended)
WCA_s5s91(t)	Schedule 5 Section 9 Part 1 (taking) of the Wildlife and Countryside Act 1981 (as amended)
WCA_s5s94a	Schedule 5 Section 9 Part 4a of the Wildlife and Countryside Act 1981 (as amended)
WCA_s5s94b	Schedule 5 Section 9 Part 4b of the Wildlife and Countryside Act 1981 (as amended)
WCA_s5s94c	Schedule 5 Section 9 Part 4c of the Wildlife and Countryside Act 1981 (as amended)
WCA_s8	Schedule 8 of the Wildlife and Countryside Act 1981 (as amended)
HabReg_2	Schedule 2 of Conservation of Habitats and Species Regulations 2010 (European Protected Species animal)
HabReg_5	Schedule 5 of Conservation of Habitats and Species Regulations 2010 (European Protected Species plant)
PBA	Protection of Badgers Act 1992
NI	National Interest
CR	County Rare
CS	County Scarce
CI	County Interest
nHR	North Hampshire Rare (VC12)
sHR	South Hampshire Rare (VC11)
nHS	North Hampshire Scarce (VC12)
sHS	South Hampshire Scarce (VC11)

sharing information about Hampshire's wildlife

The Hampshire Biodiversity Information Centre Partnership includes local authorities, government agencies, wildlife charities and biological recording groups.



Appendix D – Wildlife Boxes



Introduction

The information in this appendix relates to bat and bird boxes that can be easily incorporated into building and landscape plans. The information provided is not exhaustive and provides examples of some of the types of boxes available.

Including bat and bird boxes throughout the development site has a number of benefits:

- Any roosting or resting places lost as a result of the work will be replaced;
- The ecological value of the site will be enhanced;
- Priority species within the UK and local Biodiversity Action Plans (BAPs) will be encouraged.

Bats

For Buildings

The inclusion of a variety of bat bricks, tubes and boxes for buildings is recommended to encourage a diversity of bat species. Bat bricks and tubes require no maintenance.

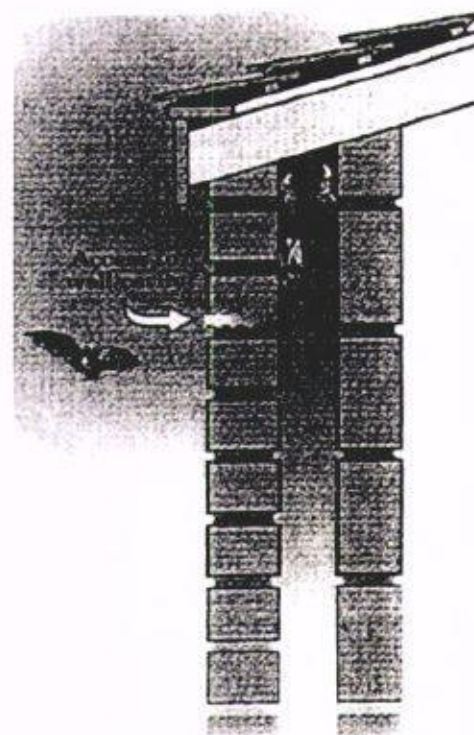
Bat Access and Roost Bricks

Source: Marshalls Clay Products (approved by the Bat conservation Trust)

'... Marshall Clay Products have been producing a Bat Access Brick specially designed to help the country's badly depleted bat population by provided access to wall cavities or roof spaces where most bat colonies tend to be (see diagram). In recent years bats have been declining at an alarming rate. Nearly all colonies tend to be on the outside of houses, in wall cavities, under slates, flashing or tiles, et c. ... Contrary to popular opinion, bats do not make pests and do absolutely no damage to buildings or roof timbers, indeed many people encourage bat colonies in their area because of the large number of insect pests, woodworm, et c. which they eat. Most colonises will use a house for only a few weeks in summer before dispersing in autumn.'



Marshall's Bat Access Brick, which is now also available in stone.



A Bat Brick should ideally be placed as high as possible at the gable apex or close to the soffit.

Marshalls Clay Products - Quarry Lane,
Howley Park, Woodkirk, Dewsbury, West
Yorkshire, WF12 7JJ – Tel: (01132) 203535,
Fax: (01132) 203555.

Bat Tube

Brick bat tubes are designed for buildings, or underneath bridges, arches or tunnels, where conditions are relatively humid. They are particularly useful for new buildings or bridges to attract bats, or to provide new roost sites where existing buildings with bats are being renovated.

This long box can be installed within brick masonry, beneath plasterwork or wood panelling, or incorporated into concrete structures such as factory buildings or bridges. Inside it contains a woodcrete surface, a roughened wood board, and a metal mesh, providing a choice of roosting areas depending on the weather conditions and the bats' habits. This box is maintenance-free as the entrance slit is at the bottom.

No painting required, but if painting is necessary a natural breathable paint should be used.

Width: 20cm; Height: 47.5cm; Depth: 12.5cm; Entrance Width: 15cm; Entrance Depth: 2cm; Weight: 13kg



Bat Box

This type of box is made of woodcrete and is expected to last approximately 25 years. It has a narrow crevice-like internal space to attract Pipistrelle and Noctule bats. Woodcrete (75% wood sawdust, concrete and clay mixture).

Width: 27cm; Height: 43cm; Weight: 8.3kg.



For Trees

Woodcrete boxes have the highest rates of occupation of all box types. The 75% wood sawdust, concrete and clay mixture allows natural respiration, stable temperature, and durability. They are long lasting (approx. 25 years) and are rot- and predator-proof. Hang from a tree branch near the trunk, or fix to a trunk with the supplied 'tree-friendly' aluminium nail. Attractive to smaller British bats.

Material: Woodcrete (75% wood sawdust, concrete and clay mixture); Diameter: 16cm; Height: 33cm; Weight: 4kg.



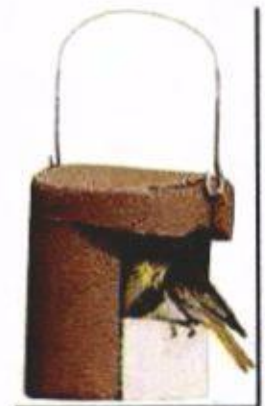
Bird Boxes

A variety of bird box designs could be installed throughout the development site to attract a diversity of species. Open fronted boxes will attract species such as robins, pied wagtails and spotted flycatchers, while boxes with entrance holes will attract tits, wrens and tree sparrows. Roost pockets will be used by roosting birds over the winter and by smaller species, such as wrens, for nesting in the spring.

Open Fronted Boxes

This box is attractive to robins, pied wagtails, spotted flycatcher, wrens and black redstarts and is best sited on the walls of buildings with the entrance on one side.

These woodcrete boxes are designed to mimic natural nest sites and provide a stable environment for chick rearing and winter roosting. They can be expected to last 25 years or more without maintenance.



Boxes with Entrance Holes

This box is attractive to smaller birds such as tits, wrens and tree sparrows. Sparrow terraces are also available.



Insect Boxes

As with the bat and bird boxes, a variety of insect boxes is recommended to encourage a diversity of species.

Wooden Insect House

A general insect habitat for beneficial insects in summer and, later in the year, overwintering ladybirds and lacewings. Locate in a sheltered place near nectar or pollen plants or by a pond.

Durable and strong construction in acacia, oak or larch with no maintenance necessary. Dimensions: 22 × 13.5 × 13.5cm.



Woodcrete Insect House

An insect nest made from long-lasting, insulating, woodcrete, with holes of different sizes providing homes for a variety of beneficial insects such as bees and solitary wasps.

Dimensions: 14 × 8 × 26cm; Weight: 3.65kg



Insect House with Inspection Tubes

This nesting and hibernation box for insects has a woodcrete exterior with a wooden front panel which can be removed for observation. Through the transparent tubes you can see the usually hidden lifecycle of many solitary types of bees and hymenoptera including egg-laying, development of larvae and sealing of brood chambers.

Typical inhabitants are wild bees and thread-waisted wasps. All the species attracted to this box are harmless non-aggressive pollinating insects. Dimensions: 33 × 21 × 51 cm; Weight: 7.1kg.





Appendix E – Wildlife-friendly Planting

Table E1 Shrub species of native origin or generally thought to be beneficial to wildlife

(Source: 'Gardening with wildlife in mind', Natural England, 2008)

Common name	Scientific name
Hazel	<i>Corylus avellana</i>
Elder	<i>Sambucus nigra</i>
Goat willow	<i>Salix caprea</i>
Hawthorn	<i>Crataegus monogyna</i>
Dog rose	<i>Rosa canina</i>
Butterfly bush	<i>Buddleia davidii</i>
Guelder rose	<i>Viburnum opulus</i>
Gorse	<i>Ulex europaeus</i>
Broom	<i>Cytisus scoparius</i>
Wayfaring tree	<i>Viburnum lantana</i>
Shrubby cinquefoil	<i>Potentilla fruticosa</i>
Raspberry	<i>Rubus idaeus</i>
Alder buckthorn	<i>Frangula alnus</i>
Wild privet	<i>Ligustrum vulgare</i>
Barberry	<i>Berberis x stenophylla</i>
Barberry	<i>Berberis vulgaris</i>
Bell heather	<i>Erica cinerea</i>
Bilberry	<i>Vaccinium myrtillus</i>
Black currant	<i>Ribes nigrum</i>
Blackthorn	<i>Prunus spinosa</i>
Buckthorn	<i>Rhamnus catharticus</i>
Butcher's-broom	<i>Ruscus aculeatus</i>
Cherry laurel	<i>Prunus laurocerasus</i>
Cowberry	<i>Vaccinium vitis-idaea</i>
Cross-leaved heath	<i>Erica tetralix</i>
New Zealand holly	<i>Olearia macrodonta</i>
Daphne	<i>Daphne odora</i>
Dogwood	<i>Cornus sanguinea</i>
Field rose	<i>Rosa arvensis</i>
Firethorn	<i>Pyracanthus angustifolia</i>
Flowering Currant	<i>Ribes sanguineum</i>
Gooseberry	<i>Ribes uva-crispa</i>
Hebe 'Midsummer Beauty'	<i>Hebe species</i>
Hedgehog Rose	<i>Rosa rugosa</i>
Himalayan honeysuckle	<i>Leycesteria formosa</i>
Holly	<i>Ilex aquifolium</i>
Japanese quince	<i>Chaenomeles japonica</i>
Lilac	<i>Syringa vulgaris</i>
Mexican orange	<i>Choisya ternata</i>
Mezereum	<i>Daphne mezereum</i>
Midland Hawthorn	<i>Crataegus laevigata</i>
Oregon Grape	<i>Mahonia aquifolium</i>
Osier	<i>Salix viminalis</i>
Portugal laurel	<i>Prunus lusitanica</i>
Privet	<i>Lustrum ovalifolium</i>
Purple Willow	<i>Salix purpurea</i>

Common name	Scientific name
Snowy Mespilus	<i>Amelanchier canadensis</i> , <i>Amelanchier lamarckii</i>
Spindle	<i>Euonymus europaeus</i>
Spurge laurel	<i>Daphne laureola</i>
Sweet briar	<i>Rosa rubiginosa</i>
Wild privet	<i>Ligustrum vulgare</i>

Table E2 Tree species of native origin or generally thought to be beneficial to wildlife

(Source: 'Gardening with wildlife in mind', Natural England, 2008)

Common name	Scientific name
Pedunculate oak	<i>Quercus robur</i>
Ash	<i>Fraxinus excelsior</i>
Wych Elms	<i>Ulmus glabra</i>
Whitebeams	<i>Sorbus aria</i> agg.
Rowan	<i>Sorbus aucuparia</i>
Aspen	<i>Populus tremula</i>
Apple	<i>Malus domestica</i>
Bird Cherry	<i>Prunus pardus</i>
Common Alder	<i>Alnus glutinosa</i>
Crab apple	<i>Malus sylvestris</i>
Crack Willow	<i>Salix fragilis</i>
Downy Birch	<i>Betula pubescens</i>
False Acacia	<i>Robinia pseudoacacia</i>
Field Maple	<i>Acer campestre</i>
Hornbeam	<i>Carpinus betulus</i>
Juniper	<i>Juniperus communis</i>
Large-leaved lime	<i>Tilia platyphyllos</i>
Small-leaved lime	<i>Tilia cordata</i>
Pear	<i>Pyrus communis</i>
Scots Pine	<i>Pinus sylvestris</i>
Sessile oak	<i>Quercus petraea</i>
Silver birch	<i>Betula pendula</i>
Sweet chestnut	<i>Castanea sativa</i>
Wild Cherry	<i>Prunus avium</i>
Wild service-tree	<i>Sorbus torminalis</i>
Yew	<i>Taxus baccata</i>

**Table E3 Gardening for bats**

Aim at having flowers in bloom throughout the year, including both annuals and herbaceous perennials. Below are some suggestions, but this is not an exhaustive list. Flowering times are approximate, varying dependent on region. Regular dead-heading extends flowering period in many flowers.

A=annual, HA= hardy, annual, HHA=half-hardy annual, P=perennial, W=wild flower.

Flowers for borders			
St. John's Wort	<i>Hypericum</i>	P	March
Marigolds	<i>Calendula</i>	H/A	March-October
Aubrietia	<i>Aubrietia deltoidea</i>	P	March-June
Honesty	<i>Lunaria rediviva</i>	HB	March
Forget-me-not	<i>Myosotis</i> sp.	A/P	March-May
Elephant ears	<i>Bergenia</i>	P	April
Wallflowers	<i>Erysimum</i>	B	April-June
Cranesbills	<i>Geranium</i> sp.	P	May-September
Yarrow	<i>Achillea</i>	P	May-
Poppies	<i>Papaver</i> sp.	A	May- July
Dames violet	<i>Hesperis matronalis</i>	P	May-August
Red Valerian	<i>Centranthus ruber</i>	P	May-Sept
Poached egg plant	<i>Limnanthes</i>	HA	June-August
Knapweed	<i>Centaurea nigra</i>	P	June-September
Phacelia		HA	June-September
Ox-eye daisy	<i>Leucanthemum vulgare</i>	P	June-August
Evening primrose	<i>Oenothera biennis</i>	B	June-September
Candytuft	<i>Iberis umbellata</i>	HA	June-September
Sweet William	<i>Dianthus barbatus</i>	B	June-July
Blanket flowers	<i>Gaillardia</i>	P	June -
Verbena	<i>Verbena bonariensis</i>	HHA	June-October
Scabious	<i>Knautia arvensis</i>	P	July-August
Night-scented stock	<i>Mattiola bicornia</i>	HA	July-August
Pincushion flower	<i>Scabious</i> sp.	A/P	July-September
Cherry pie	<i>Heliotrope</i>	HHA	July-October
Mexican aster	<i>Cosmos</i> sp.	A/P	July-October
Cone flower	<i>Rudbeckia</i> sp.	A/P	August-November
Mallow	<i>Lavatera</i> sp.	P	August-October

Bartons Road, Havant: Extended Phase 1 Habitat Survey

Michaelmas daisy	<i>Aster sp.</i>	P	August-September
Ice plant 'Pink lady'	<i>Sedum spectabile</i>	P	September
Herbs – both leaves and flowers are fragrant			
Fennel	<i>Foeniculum vulgare</i>		July-September
Bergamont	<i>Monarda didyma</i>		June-September
Sweet Cicely	<i>Myrrhis odorata</i>		April-June
Hyssop	<i>Hyssopus officinalis</i>		July-September
Feverfew	<i>Tanacetum parthenium</i>		June-September
Borage	<i>Borago officinalis</i>		May-September
Rosemary	<i>Rosmarinus officinalis</i>		March-May
Lemon balm	<i>Melissa officinalis</i>		
Coriander	<i>Coprianrum sativum</i>		June-August
Lavenders	<i>Lavendula sp.</i>		
Marjoram	<i>Origanum sp.</i>		
Trees, shrubs and climbers important to insects			
Oak	<i>Quercus sp.</i>		large gardens only
Silver birch	<i>Betula pendula</i>		
Common alder	<i>Alnus glutinosa</i>		Suitable for coppicing
Hazel	<i>Corylus avellana</i>		Suitable for coppicing
Elder	<i>Sambucus nigra</i>		Small
Goat willow	<i>Salix caprea</i>		Suitable for coppicing
Hawthorn	<i>Crataegus monogyna</i>		Suitable for coppicing
Honeysuckle	<i>Lonicera sp.</i>		Grow a variety for succession
Dog rose	<i>Rosa canina</i>		Climber
Bramble	<i>Rubus fruticosus</i>		Climber
Ivy	<i>Hedera helix</i>		Climber
Buddleia	<i>Buddleja davidii</i>		Shrub
Guelder rose	<i>Viburnum opulus</i>		Shrub
Gorse	<i>Ulex sp.</i>		Shrub
Plants for pond edges and marshy areas			
Purple loosestrife	<i>Lythrum salicaria</i>	W	June-August
Meadow sweet	<i>Filipendula ulmaria</i>	W	June-September
Lady's smock	<i>Cardamine pratensis</i>	W	April-June
Water mint	<i>Mentha aquatica</i>	W	July-September
Angelica	<i>Angelica sylvestris</i>	W	July-September
Hemp agrimony	<i>Eupatorium cannabinum</i>	W	March-May



Bartons Road, Havant: Extended Phase 1 Habitat Survey

Marsh marigold	<i>Caltha palustris</i>	W	June-September
Creeping Jenny	<i>Lysimachia nummularium</i>	W	May-August
Fringed water lily	<i>Nymphoides peltata</i>	W	June-September
Water forget-me-not	<i>Myosotis scorpioides</i>	W	June-September

Allow part lawns to grow long in summer and cut in autumn, removing the clippings. Avoid using fertilisers. Compost heaps are food producers of insects too.

(Source: 'Gardening for bats', Bat Conservation Trust, 2004)



ANDREW MALCOLM ASSOCIATES Ltd.
15 Wild Rose Crescent
Locks Heath
Southampton
SO31 6TG
Tel/fax 01489 605526
Email amassoc@ntlworld.com

HAVANT BOROUGH
COUNCIL

18 AUG 2014

RECEIVED

August 2014

UTILITIES REPORT
PROPOSED RESIDENTIAL DEVELOPMENT,
BARTONS ROAD, HAVANT

Please note the following comments regarding utility services for the above site. Copies of correspondence and service records are attached at the end of the report.

1). Water.

Portsmouth Water have provided details of their existing mains and services in the vicinity of the site. These confirm that there is a 30 inch main along the site frontage with Bartons Road, together with a 6 inch main on the opposite side of the road. They have confirmed that these mains have sufficient capacity to serve the proposed development without the need for off-site reinforcement works.

With respect to on-site works, without more detailed proposals for the site, Portsmouth Water will not provide an estimate for the cost of new mains and services.

No diversions are necessary, but it should be noted that the 30inch main is a trunk main and has the benefit of an easement which prohibits certain works in the easement area including the following:

- i). Not to erect any structure, boundary wall, fence or to plant any trees or shrubs.
- ii). Not to raise the surface of the land by more than 300mm or lower it by more than 75mm.

The easement shown on the Portsmouth Water records does not appear to coincide with the actual position of the main, so prior to planning the site layout, further legal enquiries should be made to establish the exact extent of the easement.

2). Gas

Southern Gas Networks have provided details of their existing mains and services in the vicinity of the site. These confirm that there is an existing 180mm PE main running along the site frontage with Bartons Road and a 63mm PE main within the site on the eastern boundary serving some of the existing properties.

Given the size and proximity of this main, it is anticipated that it will have sufficient capacity to serve the proposed development.

It is not anticipated that any diversions are necessary, however the existing 63mm main will need to be disconnected and abandoned prior to commencing works on site.

3). Electricity

Scottish and Southern Energy have provided details of their existing HV and LV cables in the vicinity of the site. These confirm that there are existing LV and HV Cables in the footway on the opposite side of Bartons Road from the proposed development, together with an existing LV Cable that crosses Barton Road to supply the existing properties within the site. There is also an existing sub-station located in Bartons Road on the opposite side of the road from the south eastern corner of the site.

Scottish and Southern Energy have confirmed that their existing LV mains will not have sufficient capacity to serve the proposed development. To provide an electricity supply to the site, they have advised that the existing sub-station transformer will have to be replaced and a new LV Cable laid to the site using the existing ducts crossing Barton Road. An overall budget estimate of £45,500 for the cost of these works, together with on-site mains and services, has been provided.

No diversion works are necessary.

4). British Telecom

British Telecom have provided details of their existing plant in the vicinity of the site. These confirm there are existing underground cable ducts along the frontage of the site with Bartons Road, together with overhead cables that serve the existing properties on the site.

The underground apparatus will be affected by the construction of the new access and will require diverting/lowering. An allowance of £15k should be made by the developer for the cost of these works. The overhead cables appear to serve the existing properties and can therefore be removed, although it may be necessary to maintain services to the two properties that will be retained.

5). Virgin Media

Virgin Media have provided details of their existing apparatus in the vicinity of the site. These confirm that they have existing cable ducts in the footway on the opposite side of Bartons Road.

No diversion works are necessary.

8th March 2013

For the Attention of Mr. A Malcolm
Andrew Malcolm Associates Ltd.
15 Wild Rose Crescent
Locks Heath
Southampton
SO31 6TG



100 years of quality service
Registered Office:
Portsmouth Water Ltd
PO Box 8
Havant
Hampshire PO9 1LG

Tel: 023 9249 9888
Fax: 023 9245 3632
Web: www.portsmouthwater.co.uk

Please ask for Mr Hayler
Our Ref JAH/E275
Your Ref AJM/Bartons Road

Dear Mr Malcolm,

PROPOSED RESIDENTIAL DEVELOPMENT AT EASTLEIGH COTTAGES, BARTONS ROAD, HAVANT, HAMPSHIRE PO9 5NA

Thank you for your recent payment of £69.60 (Inc VAT) paid as a standard charge for an initial enquiry in respect of water mains at the above location. Our official invoice has been forwarded under separate cover.

In response to your enquiry I would comment as follows:-

1. On-Site Mains

I regret that I am unable to give any guidance regarding costs and terms for on-site mains, until you are in a position to provide me with:

A payment of £282.00 plus VAT.

Two no. 1:500 (or larger) true-to-scale plans, showing the layout of the development including all buildings, roads, plot numbers, utility strips / footpaths and widths. These must be free of colour, dark shading or any proposed service layouts. They should also include a scaling pole and have contours and spot-level layers removed. In addition, the drawings need to show existing infrastructure to enable us to accurately plot our existing mains. If these drawings are to be emailed, they should be compatible with Autocad 2010 or PDF and saved to scale at your end. Emails are to be sent to j.hayler@portsmouthwater.co.uk.

A further plan marked up to confirm the extent of the highway to be adopted by the local authority.

A Soil Report, including ground analysis.

2. Off-Site Mains

I do not foresee any necessity for off-site mains in relation to this development.

3. Diversionary Work

There is a 30" pre-stressed concrete water main in an easement that crosses your development near the southern boundary. The main is shown as a black line and the easement is indicated as a broken grey line on the enclosed plan. Within the easement the following restrictions apply:

- Not to erect a boundary wall, fence or any structure nor plant trees or shrubs within the easement except in special circumstances and with the prior written consent of the Company (such consent only to be given in exceptional circumstances, but otherwise not to be unreasonably withheld or delayed).
- Not to raise the surface of the land by more than 300 mm nor to lower it by more than 75 mm, except in the course of ordinary agricultural cultivation, without the prior written consent of the Company.

Cont'd/...

- Not to withdraw the natural right of support hitherto enjoyed by the land.
- Not to allow any piling operations nor to allow tipping.
- Not to do or cause or permit to be done anything on the land which may endanger or damage the main or render access thereto more difficult or expensive.

To avoid a diversion, you may wish to reconsider the location of the proposed units that encroach upon this area.

The provision of an estimated cost for a diversion is outside of the scope of this initial enquiry. I would be pleased to provide this service upon receipt of a design fee of £338.40 plus VAT.

4. Pressure

We advise that properties constructed higher than 2 storeys should consider a storage and booster arrangement to maintain constant water supplies.

5. Terms and Conditions

Once I have sufficient information to determine the total cost of on-site mains, I will then be able to offer you terms and conditions for provisions of mains.

You will be offered two options:

- To enter into an agreement, in accordance with section 42 of the Water Industry Act, 1991, to guarantee for twelve years, a fixed return of our total estimated mainlaying costs and depositing this sum with us for a period of twelve years, or
- making a once and for all contribution towards the cost of the mains, in accordance with section 91 of the Water Industry Act 2003.

When we calculate the amount to be paid under each option, we take account of our income (in the form of water charges) from the new properties concerned.

Please note that the terms and conditions would exclude individual service connections and building water. Statements of Cost for these would only be prepared, on application from yourselves, once the new mains were commissioned. A Scheme of Charges is available on our website www.portsmouthwater.co.uk

VAT is charged according to the type of development concerned.

- We are also able to offer developers a 'self lay' option. Please see our website www.portsmouthwater.co.uk for details.

6. Existing Mains and Services

The enclosed extract of Ordnance Survey sheet shows our existing water mains in a black line. I regret that I am unable to indicate any other water services that have been taken from these mains but wherever there are surface stopcock or meter boxes, it should be assumed that a service has been connected to the main.

Should accurate information regarding the Company's installation be required, then trial holes should be taken by hand digging and no mechanical plant should be used within two metres of the Company's mains.

Please note that all enquiries regarding drainage should be directed to Southern Water, who is the responsible undertaker in this area.

Cont'd/...

7. Contaminated Land

I have no reason to suspect that there is contaminated land at this location. Certain contaminants can permeate polyethylene water pipes. If these are found, any mains and services would be laid in barrier pipe or some other protective material. We would also require that your underground supply pipes be laid in an impermeable material such as barrier pipe. Please note that if the communication pipes are laid in protected material, our standard scheme of charges for services would not apply.

I would request a copy of the soil report when it becomes available.

8. Private Water Mains/Long Supply Pipes

This initial enquiry relates to the provision and installation of water mains which will become the property and responsibility of Portsmouth Water. The terms and financial arrangements are strictly regulated in accordance with the Water Industry Act 1991.

The site layout may necessitate the installation of private water mains and long supply pipes which normally the developer will install. We are pleased to be able to offer specialist pipework services, which includes the installation of private mains, supply pipes, fire mains and hydrants. I have enclosed a brochure summarising these services. Should they be of interest to you please contact the undersigned at these offices.

When you are in a position to provide the information requested above, I will be pleased to offer you terms and conditions for the development.

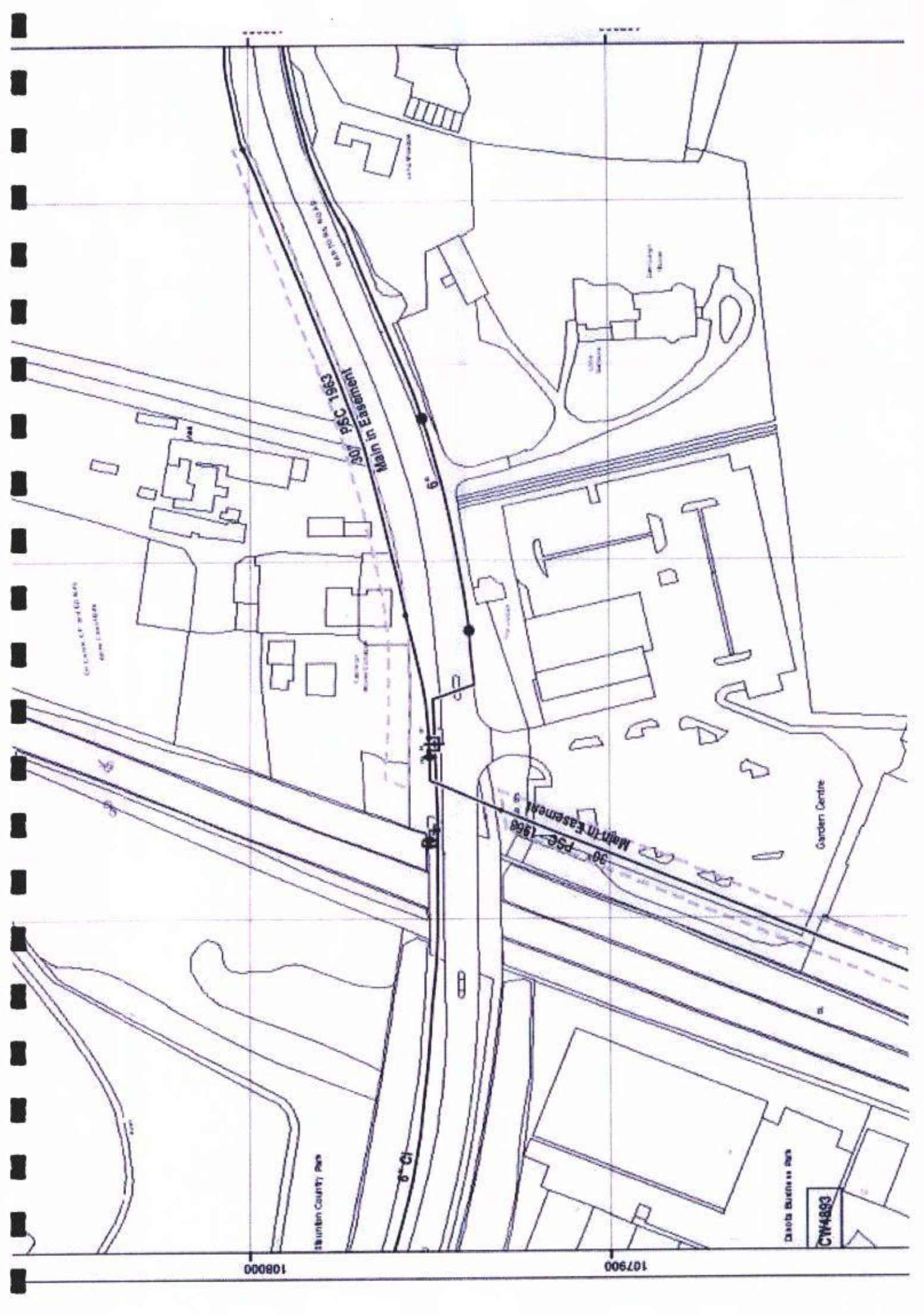
Yours faithfully,

I C Davies
Distribution Engineer
02392 249 337

i.davies@portsmouthwater.co.uk



Encs.



Our Ref: SC/15.03.13/AM549/264182
Your Ref: AJM/BARTONS ROAD
Date: 15 March 2013
Email:



95 Kilbirnie Street
Glasgow
G5 8JD

Andrew Malcolm
A M A
15 Wild Rose Crescent
Locks Heath
Southampton, SO31 6TG.

Fax:

Dear Sir / Madam

Re: Land At Rear Of Eastleigh Cottages, Bartons Road, Havant Po9 5na.

Southern Gas Networks (SGN) acknowledges receipt of your notice of your intention to carry out work at the above location. We enclose an extract from our mains records in the location of the area covered by your proposals together with a comprehensive list of precautions for your guidance. This plan shows only those pipes owned by SGN in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GT's and also privately owned may be present in this area. Information with regard to such pipes should be obtained from the owners. The information shown on this plan is given without obligation, or warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, siphons, stub connections, etc., are not shown but their presence should be anticipated. Your attention is drawn to the information and disclaimer on these plans. The information included on the enclosed plan should not be referred to beyond a period of 28 days from the date of issue.

You will note the presence of our Low/Medium/Intermediate Pressure gas main in the proximity to your site. NO mechanical excavations are to take place above or within 0.5 m of the Low pressure and medium pressure system and 3metres of the intermediate pressure system. You should where required CONFIRM THE POSITION of mains using HAND DUG TRIAL HOLES.

A colour copy of these plans and the gas safety advice card should be passed to the senior person on site in order to prevent damage to SGN plant and potential direct or consequential costs to your organisation.

Safe digging practices, in accordance with HSE publication HSG47 "Avoiding Danger from Underground Services", must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. In addition please follow the advice given on the gas safety card.

It must be stressed that both direct and consequential damage to gas plant can be dangerous both for your employees and the general public, repairs to any such damage will incur a charge. Your works should be carried out in such a manner that we are able to gain access to our apparatus throughout the duration of your operations.

If you have any further enquires please contact the telephone number below.

Yours faithfully,

Angela Morgan
Admin Assistant
0141 418 4093

Andrew Malcolm Associates Ltd
Fao Mr Andrew Malcolm
15 Wild Rose Crescent
Locks Heath
Southampton
SO31 6TG

Mr A T Doe
Portsmouth Depot
PO BOX 93
Portsmouth
Hampshire
PO6 2PB

Phone: 02392 624123
Fax: 023 92 624 548

E-mail andy.doe@sse.com

12.4.2013

Your reference: Eastleigh Cottages Barton's Road Havant Hants PO9 5NA
Our reference: **DYG430**

Dear Sir,

Subject: New Supplies @ Eastleigh Cottages Site Barton's Road Havant.

Thank you for your recent enquiry regarding the above development, I am pleased to provide a **BUDGET** quotation for x 52 Single Phase Services to Plots Only. The budget quote figure is based on a desk top survey.

Budget Costs

Budget Connection Charge	£44,500.00	to	£45,500.00
---------------------------------	-------------------	-----------	-------------------

These costs are based on the following conditions;

You will be responsible for all on Site Ducting & Excavation & Reinstatement on site at no cost to SSE.

Power Distribution SSE will Undertake Excavation/Traffic Management on the Highway.

Detailed to scale plan with service positions and any plant rooms.

Any wayleaves and legal consents to carry out the work as planned being forthcoming from third parties.

All ADMD loads to be confirmed.

Any generation (i.e. Solar Panels, etc) to be confirmed.

Site Safety Requirements

If your project will require work in the vicinity of our equipment, you are advised to refer to the following documents before commencement of your works:

- *Health & Safety Executive's Guidance Notes HS (G)47
Avoiding Danger from Underground Services.
- *Health & Safety Executive's Guidance Note GS6
Avoiding Danger from Overhead Electricity Lines.
- *Electricity at Work Regulations 1989.

Please note that all SSE Power Distribution plant or equipment should be treated as live until specifically proved otherwise by our authorised personnel.

If you damage our equipment then the cost of repair, and any claims on us, will be invoiced to you or your contractors. If you intend to employ contractors, it is essential that you inform them of the up to date details of our plant and the contents of this letter. Southern Electric does not relinquish its rights to any of its property, including land, disconnected cables or recovered materials.

We trust you find the above in order,

Yours sincerely,

Mr A T Doe
Network Connections Designer



BARTON'S RD, HAXANT
LINDEN HOMES
 SITE TEST LAYMT 2D
 FEBRUARY 2013
 1:500 @ A3

BroadwayMalyan™
 Architecture Urbanism Design
 100 Haxant, 10 Haxant Street
 Haxant, Hants RG27 5AN
 T: +44 (0)118 932 3466
 F: +44 (0)118 932 3461
 E: Reg@broadwaymalyan.com

2nd D:
 170 trees added
 500m² area added
 1.5m³ removed



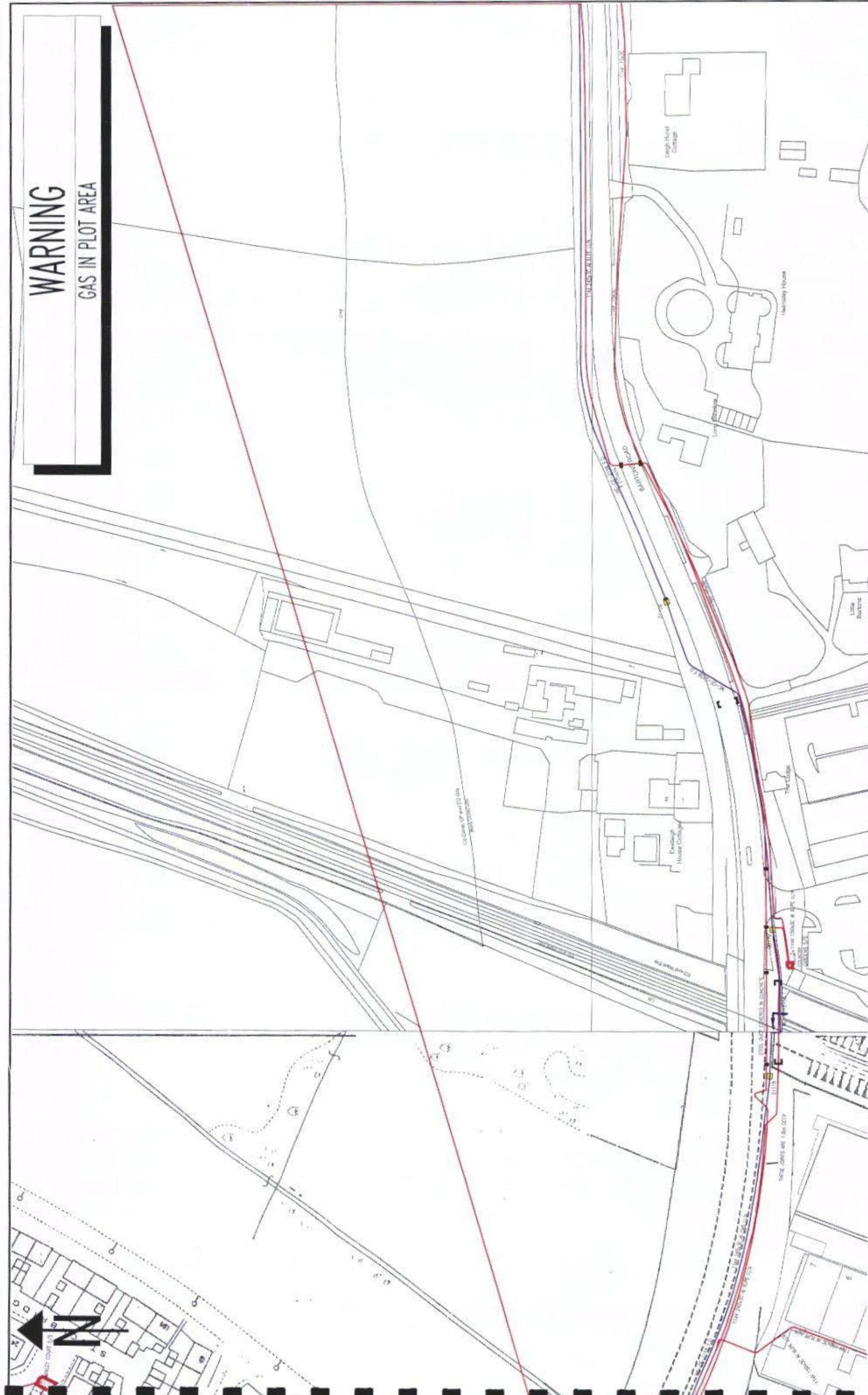
Customer to do all on site Excavation

AFORDABLE	PLOT NO.	ROADWAY	STREET	NEED SQ. FT.
5 x 20	44, 45, 46	1/2	2	750
7 x 20	47, 48, 49	1/2	2	750
8 x 20	50, 51, 52	1/2	2	750
2 x 40	53, 54	1/2	2	1076
20 NO. AFFORDABLE DWELLINGS				
2 NO. RETAINED COTTAGES PLOTS 53 & 54 (4 PARKING SPACES)				
TOTAL PRIVATE + AFFORDABLE + EXTQ RETAINED = 54 DWELLINGS				

PRIVATE	PLOT NO.	ROADWAY	STREET	NEED SQ. FT.
1 x 15	50	2	2	750
1 x 20	51	2	2	750
11 x 20	52, 53, 54	1/2	2	900
10 x 30	55, 56, 57	2	2	1600
9 x 40	58, 59, 60	3	2	
32 NO. PRIVATE DWELLINGS				

WARNING

GAS IN PLOT AREA



WARNING

There may have been subsequent alterations to the surface levels. Trial holes must be taken to determine positions and depth of cables. IIS (G) 47 Booklet from the Health and Safety Executive - Avoiding Danger from Buried Cables - should be consulted before commencing excavation work. (available from HMSO)

WHEN WORKING IN THE VICINITY OF OVERHEAD LINES THE HEALTH AND SAFETY GUIDANCE NOTE CSE SHOULD BE CONSULTED (AVAILABLE FROM HMSO)

NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID			
services	l.v.	h.v.	e.h.v.
FOOTPATH/UNMADE	0.45m	0.60m	0.80m
ROAD CROSSING	0.60m	0.60m	0.90m
AGRICULTURAL	1.00m	1.00m	1.10m
l.v./services	- up to 1000V.		
	- over 1000V. to 11.000V.		

BASED UPON THE ORIGINATOR'S SURVEY MAP WITH THE SANCTIONS OF THE CONTROLLER OF S.M. STATIONARY OFFICE. CROWN COPYRIGHT RESERVED

This map has been made by or with the authority of the Controller of S.M. Stationary Office. It is not to be used for any purpose other than that for which it was made. It is not to be used for any purpose other than that for which it was made. It is not to be used for any purpose other than that for which it was made.

Land at rear of Eastleigh Cottages
Burtons Road, Havant

UNCONTROLLED COPY
Subject to Revision Master held at



H.V. MAINS RECORD	Grid Ref: SU73120805
If you are unsure & need to seek advice before commencing excavations please contact PORTSMOUTH	Scale: 1:1250
023-9262-4200	Date: 01/03/2013
	MSS247395

GAS IN PLOT AREA

ABNORMAL. DEPTH TO THE TOP OF THE CABLE WHEN LAID

services	lv.	h.v.	ch.v.
1. <i>Chamaeleon</i>	1	1	1
2. <i>Chamaeleon</i>	1	1	1
3. <i>Chamaeleon</i>	1	1	1
4. <i>Chamaeleon</i>	1	1	1
5. <i>Chamaeleon</i>	1	1	1
6. <i>Chamaeleon</i>	1	1	1
7. <i>Chamaeleon</i>	1	1	1
8. <i>Chamaeleon</i>	1	1	1
9. <i>Chamaeleon</i>	1	1	1
10. <i>Chamaeleon</i>	1	1	1
11. <i>Chamaeleon</i>	1	1	1
12. <i>Chamaeleon</i>	1	1	1
13. <i>Chamaeleon</i>	1	1	1
14. <i>Chamaeleon</i>	1	1	1
15. <i>Chamaeleon</i>	1	1	1
16. <i>Chamaeleon</i>	1	1	1
17. <i>Chamaeleon</i>	1	1	1
18. <i>Chamaeleon</i>	1	1	1
19. <i>Chamaeleon</i>	1	1	1
20. <i>Chamaeleon</i>	1	1	1
21. <i>Chamaeleon</i>	1	1	1
22. <i>Chamaeleon</i>	1	1	1
23. <i>Chamaeleon</i>	1	1	1
24. <i>Chamaeleon</i>	1	1	1
25. <i>Chamaeleon</i>	1	1	1
26. <i>Chamaeleon</i>	1	1	1
27. <i>Chamaeleon</i>	1	1	1
28. <i>Chamaeleon</i>	1	1	1
29. <i>Chamaeleon</i>	1	1	1
30. <i>Chamaeleon</i>	1	1	1
31. <i>Chamaeleon</i>	1	1	1
32. <i>Chamaeleon</i>	1	1	1
33. <i>Chamaeleon</i>	1	1	1
34. <i>Chamaeleon</i>	1	1	1
35. <i>Chamaeleon</i>	1	1	1
36. <i>Chamaeleon</i>	1	1	1
37. <i>Chamaeleon</i>	1	1	1
38. <i>Chamaeleon</i>	1	1	1
39. <i>Chamaeleon</i>	1	1	1
40. <i>Chamaeleon</i>	1	1	1
41. <i>Chamaeleon</i>	1	1	1
42. <i>Chamaeleon</i>	1	1	1
43. <i>Chamaeleon</i>	1	1	1
44. <i>Chamaeleon</i>	1	1	1
45. <i>Chamaeleon</i>	1	1	1
46. <i>Chamaeleon</i>	1	1	1
47. <i>Chamaeleon</i>	1	1	1
48. <i>Chamaeleon</i>	1	1	1
49. <i>Chamaeleon</i>	1	1	1
50. <i>Chamaeleon</i>	1	1	1
51. <i>Chamaeleon</i>	1	1	1
52. <i>Chamaeleon</i>	1	1	1
53. <i>Chamaeleon</i>	1	1	1
54. <i>Chamaeleon</i>	1	1	1
55. <i>Chamaeleon</i>	1	1	1
56. <i>Chamaeleon</i>	1	1	1
57. <i>Chamaeleon</i>	1	1	1
58. <i>Chamaeleon</i>	1	1	1
59. <i>Chamaeleon</i>	1	1	1
60. <i>Chamaeleon</i>	1	1	1
61. <i>Chamaeleon</i>	1	1	1
62. <i>Chamaeleon</i>	1	1	1
63. <i>Chamaeleon</i>	1	1	1
64. <i>Chamaeleon</i>	1	1	1
65. <i>Chamaeleon</i>	1	1	1
66. <i>Chamaeleon</i>	1	1	1
67. <i>Chamaeleon</i>	1	1	1
68. <i>Chamaeleon</i>	1	1	1
69. <i>Chamaeleon</i>	1	1	1
70. <i>Chamaeleon</i>	1	1	1
71. <i>Chamaeleon</i>	1	1	1
72. <i>Chamaeleon</i>	1	1	1
73. <i>Chamaeleon</i>	1	1	1
74. <i>Chamaeleon</i>	1	1	1
75. <i>Chamaeleon</i>	1	1	1
76. <i>Chamaeleon</i>	1	1	1
77. <i>Chamaeleon</i>	1	1	1
78. <i>Chamaeleon</i>	1	1	1
79. <i>Chamaeleon</i>	1	1	1
80. <i>Chamaeleon</i>	1	1	1
81. <i>Chamaeleon</i>	1	1	1
82. <i>Chamaeleon</i>	1	1	1
83. <i>Chamaeleon</i>	1	1	1
84. <i>Chamaeleon</i>	1	1	1
85. <i>Chamaeleon</i>	1	1	1
86. <i>Chamaeleon</i>	1	1	1
87. <i>Chamaeleon</i>	1	1	1
88. <i>Chamaeleon</i>	1	1	1

FOOTPATH/UNMADE	0.45m	0.45m	0.60m	0.80m

ROAD CROSSING	0.60m	0.60m	0.75m	0.90m
ROAD CROSSING	0.60m	0.60m	0.75m	0.90m

AGRICULTURAL	1.00M	1.00M	1.00M	1.10M
l.v./services	-	up to 1000V.		

- over 1000V to 11,000V.

There may have been subsequent alterations to the surface levels. Trial holes must be taken to determine positions and depths of cables. HS (C) 47 Booklet from the Health and Safety Executive - Avoiding Danger from Buried Cables - should be consulted before commencing excavation work (available from HMSO).

WHEN WORKING IN THE VICINITY OF OVERHEAD LINES THE HEALTH AND SAFETY GUIDANCE NOTE CSR SHOULD BE CONSULTED (AVAILABLE FROM INMSO)

BASED UPON THE ORDINANCE SURVEY MAP WITH THE SANCTION OF THE

This copy has been made by or with the authority of 2007/07024 (L25750) p.l.a. pursuant to section 47 of the Copyright, Designs and Patents Act 1988 (the Act). Unless the Act provides a relevant exception to copyright, the copy must not be copied without the prior permission of the copyright owner.

Land at rear of Eastleigh Cottages
Eastleigh Road Havant

UNCONTROLLED COPY

Subject to Revision Master held at



Scottish and Southern
Energy

L.V. MAINS RECORD

If you are unsure & need to seek advice before commencing excavations please contact

PORTSMOUTH

023-9202-4200

Grid Ref: SU73120805

Scale: 1:1250

Date: 01/03/2013

MSS247395



Date of Report: 04-02-2013

Search Type: British Telecom

Property Address: Land and Buildings at Bartons Road Havant
PO9 5NA

Your Reference: RJL/SS/L1245/0024

Our Reference: 10843898

We have completed the above search as requested. Please find attached the plan for the area which shows BT apparatus located within the area. The map includes a boundary area of 500 metres from the centre point of the map.

We trust you find this search in order. If you have any queries please contact the helpdesk on 0844 249 9200. If you require a search on the area relating to any Wayleave agreements please order via the TM website.

While every effort is made to obtain as much information as possible TM Group is dependent on the data provider for the accuracy and extent of the information supplied and accordingly, cannot be held liable for inaccurate or incomplete information supplied to TM Group.

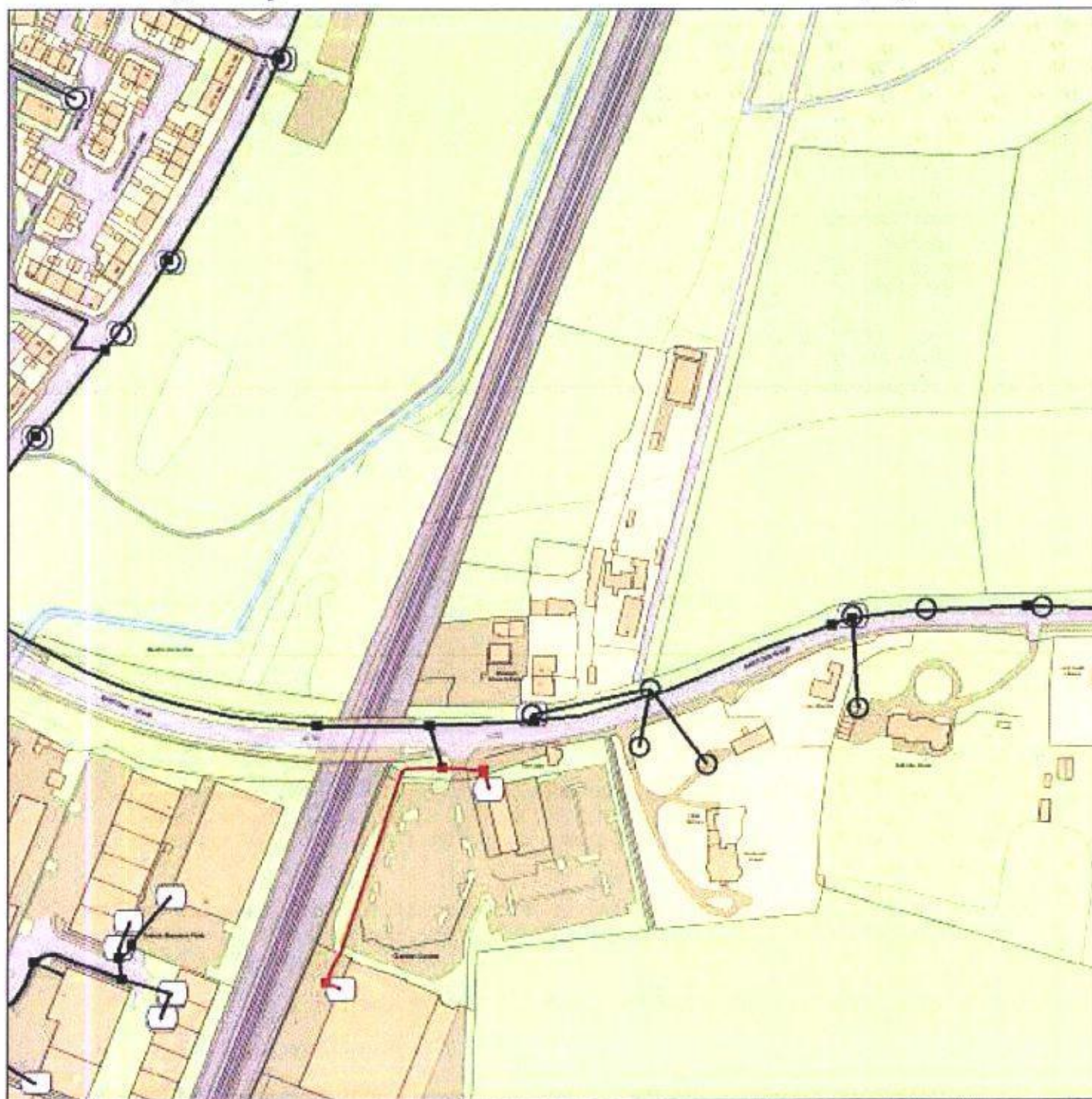
1200 Delta Business Park | Swindon | Wiltshire | SN5 7XZ

t 0844 249 9200 | e helpdesk@tmgroup.co.uk | www.tmgroup.co.uk

TM Property Searches Limited (company number 03775703) and TM Search Choice Limited (company number 05281723) are wholly owned subsidiaries of TM Group (UK) Limited (company number 05278187). TM Group and its subsidiaries are registered in England: 1200 Delta Business Park, Swindon, Wiltshire, SN5 7XZ and are appointed representatives of First Title Insurance plc and Conveyancing Liability Solutions Limited which are authorised and regulated by the Financial Services Authority.



Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy.

It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.

DIAL BEFORE YOU DIG

FOR PROFESSIONAL ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS

ADVANCE NOTICE REQUIRED
(Office hours: Monday-Friday 08:00 to 17:00)

Tel: 0800 9173993
E-mail: dbyd@openreach.co.uk
Website: www.dialbeforeyoudig.com

Reproduced from the Ordnance Survey map by BT by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office
(C) Crown Copyright British Telecommunications plc 100028040

KEY TO BT SYMBOLS

	UNDERGROUND PLANT		POLE
	OVERHEAD PLANT		CABINET
	JOINT BOX		BURIED JOINT
	DISTRIBUTION POINT		JOINTING POST
	MANHOLE		PROPOSED U/G
	DP BOUNDARY		PROPOSED O/H
	OTHER BT BOUNDARY		PROPOSED BO

Other proposed plant is shown using dashed lines. BT symbols not listed above may be disregarded. Existing BT plant may not be recorded. Information valid at the time of preparation.

openreach

a BT Group business



BT Ref: QYH025690

Map Reference: (centre) SU7309408025

Easting/Northing: (centre) 473094, 108

Issued: 04/02/2013 14:56:51

FOOTNOTE: WARNING IT IS ESSENTIAL THAT YOU CONTACT NATIONAL NETWORK HANDLING CENTRE BY EMAIL



Adam Booth
York Place
White Rose House
28a York Place
Leeds
LS1 2EZ

Virgin Media
National Plant Enquiries Team
Scimitar Park
Courtauld Road
Basildon
Essex
SS13 1ND

Tel: 0800 408 0088 (option 1)
Fax: 01268 468557

Plant Enquiry Ref: VM/CIP/140081
Your Letter Date: 5 February 2013
Your Ref: 10843895
Date: 15/02/2013

Dear Mr Booth

Enquiry Location: **Land & Buildings at Bartons Rd Havant PO9 5NA**

Thank you for your enquiry regarding work at the above location.

I enclose a copy of our above referenced drawing, marked to show the approximate position of plant owned and operated by Virgin Media.

You will be aware that you have a duty to ensure that no damage results to this equipment as a result of your proposed works. Please note that this apparatus may contain Fibre Optic, Coaxial and/or 240v Power Cables and as such, special care must be taken when excavating this area.

Should you require Virgin Media apparatus to be diverted to accommodate your works and require a detailed estimate, please send a cheque to the value of £720.00 (Bus) / £240.00 (Res) Inc VAT to:

Diversionary Works, Virgin Media, 1 Dove Wynd, Strathclyde Business Park Bellshill ML4 3AL

Or Call the Diversionary Team on: 0800 408 0088 Option 1

Should your request be in relation to a new development and you require an estimate to be prepared for Virgin Media to service your proposed development, please submit this request for costs along with site drawings (scale 1:500) to the New Build Team also at the above address.

Yours faithfully

National Plant Enquiries Team, email: plant.enquiries.team@virginmedia.co.uk

Please note: National Plant Enquiries are now able to accept all major cards with the exception of American Express for credit/debit card payments. If you wish to use this facility please contact us at the above telephone number. Please note: National Plant Enquiries Team (Basildon) cover and respond to plant enquiries for all ex ntl:Telewest franchise areas.

