PV ECOLOGY

Land North of The Retreat, Croft Lane, Hayling Island, Hampshire, PO11 0LT.

Extended Phase 1 Ecological Assessment and Bat Inspection

Prepared on behalf of McAndrew Martin Chartered Surveyors

February 2012

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Land North of The Retreat, Hayling Island
Ecology 7056
Issue 02

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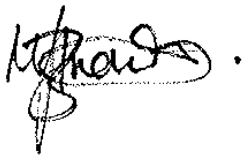

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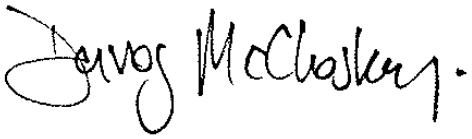

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1.0 Executive Summary

1.1 Surveyor: Michelle Brown
Survey date: 08.02.12
Grid Reference: SU 71987 02502
Client/contact: McAndrew Martin Chartered Surveyors / Nigel Kirkby.
Protected Species Found: None (Potential for reptiles and nesting birds).

1.2 The clients are proposing to construct two new chalet-style dwellings within land north of The Retreat, Croft Lane, Hayling Island. Proposals also include the construction of two associated garage blocks. Havant Borough Council highlighted the need for an initial bat inspection and Phase 1 Ecological Assessment of the site to assess the potential ecological impacts of the proposals. PV Ecology was commissioned to provide the ecological assessments for application APP/11/01793.

1.3 The ecological assessment consisted of 1) a desk study of designated sites of conservation interest and protected and notable species in relation to the site, 2) an Extended Phase 1 Habitat Survey of the land within the footprint of the proposed development and a buffer zone of 50m outside the site boundary, and 3) an initial internal and external bat inspection of all buildings affected by the proposals.

1.4 The site consisted of semi-improved grassland, scattered broad-leaved trees, non-native ornamentals, species-poor hedgerows, scrub and tall ruderal vegetation. The site contained a disused brick-built stable block with pitched corrugated metal roof and a small concrete-built storage hut with sloped corrugated metal roof.

1.5 An external inspection of the stable block and storage hut recorded several potential access points for bats. However, internal inspection revealed no evidence to suggest current or recent bat use. The buildings are considered to be of 'low' suitability for roosting bats.

1.6 No further survey work for bats is required for the purposes of the proposed development.

1.7 The site was bordered by scrub and species-poor hedgerows with scattered broad-leaved trees. These habitat areas have the potential to support nesting birds. The proposed works will involve the removal or disturbance to some areas of scrub adjacent to the stable block and storage hut. The removal of this vegetation will avoid bird nesting season (01st March to 01st August, inclusive) unless prior inspection by an ecologist concludes there are no nesting birds present.

1.8 The site contained areas of bordering scrub with the potential to support reptiles. The proposed development will involve disturbance to a small area of this habitat adjacent to the stable block and storage hut. These areas will be either strimmed to ground level during the period that reptiles are inactive (early November to end of February) or in a two-stage cut if carried out during the reptile active period (end of February to end of October). This will allow reptiles to move in to nearby areas of suitable habitat and minimise the risk of harm of injury to these protected species.

1.9 The northern section of the site, currently paddock, is identified within the Brent goose strategy as unknown wader roosting potential. Natural England have commented (**Appendix G**) on the current proposals (**Appendix B**) stating that, in their current form, they are unlilkely to have a significant impact on the SPA/SAC/Ramsar.

1.10 The report provides an assessment of the potential ecological impacts of the proposed development (**Section 5.0**) and details mitigation measures to be implemented prior to and during construction (**Section 6.0**). Mitigation measures include; a) further measures required to mitigate against the effects of the development, and b) further measures recommended to mitigate against the effects of the proposed development.

1.11 The results set out within this report are valid for one year from the issue date.

2.0 Introduction

Background

2.1 PV Ecology was commissioned on 7th February 2012 to carry out an Extended Phase 1 Ecological Assessment Survey and Phase 1 Bat Inspection of the land within the footprint of the proposed development on land north of 'The Retreat', Croft Lane, Hayling Island, PO11 0LT (grid reference SU 71987 02502). A planning application has been submitted to Havant Borough Council (APP/11/01793) for the construction of two chalet-style bungalows (**Appendix B**) and further ecological information has been requested by the Council. This report will contribute to this application. The results set out within this report are valid for one year from the issue date.

2.2 This report describes the current ecological baseline of the site, based on the findings of an Extended Phase 1 Habitat Survey and Phase 1 Bat Inspection and a review of existing data.

2.3 The methods employed to obtain ecological information on the site are described in **Section 3.0** of this report and the results are detailed in **Section 4.0**. **Section 5.0** identifies the potential impact on biodiversity receptors and **Section 6.0** describes the recommendations for further ecological survey work and the recommended environmental measures which should be incorporated into the scheme design to minimise potential effects on biodiversity receptors.

Site Description

2.4 The site is located on a 0.2ha plot of land to the north of the existing dwelling known as 'The Retreat' at grid reference SU 71987 02502 (**Appendix A**). The site currently contains an existing disused stable building and storage outbuilding. The site is located on the north-east edge of the village of Stoke in the north-west quarter of Hayling Island, approximately 0.4km west of Langstone Harbour. Residential properties border the south and west of the site, with arable land to the east and a horse paddock to the north.

2.5 The land within the site consists predominantly of semi-improved grassland, scrub and tall ruderal vegetation, with scattered broad-leaved trees, planted non-native ornamentals and species-poor hedgerows. It is managed as a garden and horse paddock.

Brief

2.6 To carry out an Extended Phase 1 Ecological Assessment of the land within the footprint of the proposed development works; to carry out an initial internal and external inspection to assess the building's potential to support roosting bats; and to inform the clients of any ecological implications of their proposals and of any further survey work and/or mitigation required.

3.0 Methodologies

Desk Study

3.1 The desk study methodology is based upon guidelines set out by the Institute of Environmental Assessment (IEA, 1995) and the Institute of Environmental and Ecological Management (IEEM, 2006). A data-gathering exercise was undertaken to obtain any available information relating to statutory and non-statutory nature conservation sites, priority habitats and species, and legally protected and controlled species using a range of sources (**Table 3.1**).

3.2 Given the proximity of the scheme to biodiversity resources located off site, data was requested for:

- statutory sites of nature conservation interest located on or within 1km of the site;
- Biodiversity Action Plan (BAP) Priority habitats within 1km of the site
- records of priority legally protected and controlled species to a distance of 1km from the site boundary.

Table 3.1: Summary of information sources used for the Desk Study

Organisation / Source	Information Sought
National Biodiversity Network (NBN)	Records of protected and/or notable species within 1km of the site.
Natural England	Locations of, and citations for, any SSSI, SAC, SPA or Ramsar sites within 2km of the site
MAGIC	Locations of all statutory wildlife sites and areas and BAP habitats within 1km of the site
Ordnance Survey Maps	Large scale habitat information and identification of off-site habitats which may require consideration (such as ponds)
Local Biodiversity Action Plan (LBAP)	Listings of LBAP species and habitats

Extended Phase 1 Habitat Survey

3.3 The site was visited on the 8th February 2012. The survey employed techniques based on standard Phase 1 Habitat Survey methods (JNCC, 2006). Habitat types on and immediately adjacent to the site were identified according to standard habitat definitions and mapped at an appropriate scale using standard colour codes and/or acronyms (**Appendix C**).

3.4 The collection of botanical information focused on the dominant and/ or key indicator species for each habitat, to allow allocation of habitats to the standard Phase 1 habitat types and where relevant to identify any LBAP habitats which are present on site. Any habitats identified as having potentially high botanical value will be subject to further botanical surveys, if deemed necessary.

3.5 The Phase 1 Habitat survey methodology was 'extended' in accordance with EIA guidelines (EIA, 1995) to include an assessment of the potential for habitats on or immediately adjacent to the site to support legally protected or conservation-notable species. The location and nature of any signs of the presence of protected species (such as droppings, footprints, burrows, etc.) were documented and mapped accordingly. Corresponding target notes are included in **Appendix D**. Indicative methods for protected species are outlined below.

Bats

3.6 Extant buildings and trees were inspected for potential roosting areas that could support bats. The on-site buildings were searched internally and externally for evidence of bats and evaluated for their potential to support bat roosts. Particular attention was paid to the following:

Trees

- Mature trees with ivy covering and/or crevices and peeling bark

Outside of building

- Stone crevices or cracks in brickwork, areas of hanging tiles or weatherboarding, gaps between roofing materials and the main building structure, ground outside any potential access points.

Inside of building

- Floors, on and between any ridge beams or other parts of roof timbers that are deemed accessible to bats, within crevices of stonework and under tiles (where accessible).

Evidence searched for to indicate usage of bats included:

- Droppings
- Urine staining
- Worn entrances or claw marks around potential access points
- Insect feeding remains
- Oil staining left from bat fur
- Live/dead bats

Birds

3.7 Any habitat features, for example, scrub, trees and buildings which could potentially be used by nesting birds, including barn owl, were surveyed and any signs of nesting activity, droppings or pellets were noted. The habitat was also assessed regarding its potential for bird activity (e.g. foraging).

Reptiles

3.8 Habitat features that could be suitable as hibernacula, foraging or basking areas were noted. Extant refugia were lifted and examined for evidence of reptiles, including sloughs (shed skins).

Badgers

3.9 Any area that could be used for foraging or could potentially contain a badger sett was surveyed and any signs noted including:

- Evidence of active or disused setts
- Evidence of potential badger diggings
- Latrines / dung pits
- Evidence of badger foraging ('snuffle holes')
- Footprints
- Badger hairs

Great Crested Newts

3.10 Any ponds present on-site or immediately adjacent to the site were assessed for their potential to support great crested newts and other amphibians. Ponds within the vicinity of the site were noted and the potential of the land to act as a commuting route, shelter or foraging resource for great crested newts was assessed.

Otters and Water Voles

3.11 Any riparian habitat present on-site or immediately adjacent to the site was searched for signs of otters and water voles. Signs included:

- Otter spraints or sign heaps
- Water vole latrines and feeding stations
- Evidence of potential holts or burrows
- Footprints

Dormice

3.12 The suitability of the habitat was assessed for dormice. Any small mammal feeding signs were checked and assessed, including:

- Examination of hazel nuts
- Evidence of nest building

4.0 Results

Desk Study

Nature Conservation Sites

4.1 The boundary of the Chichester and Langston Harbours Ramsar site and Special Protection Area (SPA), the Solent Maritime Special Area of Conservation (SAC) and the Langston Harbour Site of Special Scientific Interest (SSSI) lay approximately 400m from the boundary of the site. The boundary of the West Hayling Local Nature Reserve (LNR) lies approximately 500m to the north-west. The boundary of the Chichester Harbour Area of Outstanding Natural Beauty (AONB) lies approximately 900m to the south-east. No other statutory protected sites were recorded within 1km of the proposed development. The statutory site search via DEFRA website, MAGIC, is displayed in **Appendix E**.

Biodiversity Action Plan (BAP) Priority Habitats

4.2 The data search revealed five BAP Priority Habitats are present within 2km of the site:

- Lowland meadow (approx. 300m north-west)
- Mudflats (approx. 450m west)
- Saline lagoons (approx. 450m west)
- Traditional orchard (approx. 560m south-east)
- Reed beds (approx. 1000m south-east)

Full BAP Priority habitat data provided by MAGIC are included in **Appendix F**.

Ponds within 500m

4.3 The data search revealed the presence of five ponds within 500m of the site boundaries. The closest of which is situated approximately 230m to the south of the proposed development site.

Protected and Notable Species

4.4 The NBN Gateway datasets were searched for records of protected and notable species which have been recorded within 1km of the site. Key species records are summarised below.

Badgers

4.5 The desk study revealed no records of badger (*Meles meles*) within 2km of the proposed development site.

Bats

4.6 At least three species of bat have been recorded on Hayling Island, including common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*pipistrellus pygmaeus*) and noctule (*Nyctalus noctula*). Records ranged from to 1998 to 2010. None of the records were from within 1km of the site.

Birds

4.7 No records were returned for barn owl (*Tyto alba*) from within 1km of the site. Records of barn swallow (*Hirundo rustica*) were returned from within 1km of the site, dated between 1988 and 2011. Dark-bellied brent geese (*Branta bernicla*) have been recorded within 1km of the site. The paddock to the north of the site has been identified as having unknown wader potential within the Brent Goose and Wader Strategy.

Dormice

4.8 No records were returned for hazel dormouse (*Muscardinus avellanarius*) within 1km of the site.

Great Crested Newts

4.9 The data search returned no records of great crested newt (*Triturus cristatus*) within 1km of the site.

Otters and Water Voles

4.10 No records for otter (*Lutra lutra*) or water vole (*Arvicola amphibius*) were returned from within 1km of the site.

Plants

4.11 No records for Schedule 8 or 9 plant species were returned from within 1km of the site.

Reptiles

4.12 Records were returned for two reptile species within 1km of the site. One record was returned for common lizard (*Zootoca vivipara*) dated from 1990, and two records of slow-worm (*Anguis fragilis*) dated from 1990 to 1995.

Other Species (including amphibians, invertebrates, mammals)

4.13 The data search returned no records of other protected species from within 1km of the site.

4.14 None of the records returned from the data search are believed to have occurred within the site itself or on land immediately adjacent to the site.

Extended Phase 1 Habitat Survey

Introduction

4.15 The survey was carried out on 08th February 2012 by a Consultant Ecologist under overcast and cool weather conditions.

4.16 The results of the Extended Phase 1 Habitat Survey are presented in the sections below. An illustrated and annotated Extended Phase 1 Habitat Survey Map is presented in **Appendix C**. The map illustrates the location and extent of all habitat types recorded on site, along with additional notable features or details depicted with target notes. A corresponding list of target notes to accompany the Extended Phase 1 Habitat Survey Map is provided in **Appendix D**.

Site Constraints

4.17 It was not possible to gain full access under every beam during the internal inspection of the stable block. However, this report concludes that the building is of 'low' suitability for roosting bats and their presence in this structure is highly unlikely.

4.18 It was not possible to gain access to the five ponds present within 500m of the site to assess their suitability to support great crested newts. However, the site did not contain any water bodies suitable for newt breeding and there are no records of this species within 1km of the site. It is therefore considered unlikely that the proposed works will present the risk of harm, injury or disturbance to this species.

Habitats

4.19 The site is situated on the north-east edge of the village of Stoke, with residential properties and associated curtilage present on the south and west sides, and horse-grazed paddocks to the north and east. Croft Lane borders the south-east quarter of the site, with agricultural land beyond.

4.20 The site contains an existing un-occupied residential dwelling known at 'The Retreat', with associated curtilage consisting predominantly of semi-improved grassland, gravel hard standing, scrub and ruderal vegetation. The site contains a disused stable block and storage hut to the north of the property, with an area of grassland previously used for horse-grazing beyond. The site is bordered by species-poor hedgerows and scrub, and contains scattered native and non-native trees and shrubs. Recent cessation of grassland and scrub management within the site boundaries has led to ruderal encroachment and the early stages of grass tussocks.

4.21 Two buildings present within the site boundary will be affected by the proposed development works; the stable block and storage hut. The stable block consisted of a single-storey brick-built structure, open to the rafters, with a corrugated metal pitched roof. The storage hut consisted of a single-storey concrete structure, open to the rafters, with a sloped corrugated metal roof. The proposals involve the demolition of both structures to facilitate the construction of two new dwellings. The un-occupied dwelling known as 'The Retreat' is not included within the proposals and is therefore not considered further for the purposes of this report.

4.22 Habitats recorded within the site boundary and immediate vicinity comprised:

- Semi-improved grassland
- Scrub and tall ruderal vegetation
- Species-poor hedgerows
- Scattered native and non-native trees and shrubs
- Brick-built single-storey stable block (B1)
- Concrete-built single-storey storage outbuilding (B2)
- Gravel / hard-standing

Each of the habitat types with potential to support ecological features is described in detail below. The distribution of each habitat type is represented in the Extended Phase 1 Habitat Map in **Appendix C** with corresponding target notes in **Appendix D**.

Semi-improved grassland

4.23 The site contained three main areas of grassland which, until recently, were regularly maintained at a sward height of approximately 10-20mm. The areas immediately surrounding 'The Retreat' and the stable block were dominated by perennial rye-grass (*Lolium perenne*) and red fescue (*Festuca rubra*), with abundant cock's-foot (*Dactylis glomerata*), frequent annual meadow grass (*Poa annua*), yarrow (*Achillea millefolium*), white clover (*Trifolium repens*), occasional creeping bent (*Agrostis stolonifera*), common mouse ear (*Cerastium fontanum*), ribwort plantain (*Plantago lanceolata*) and common cat's-ear (*Hypochaeris radicata*), dandelion (*Taraxacum officinale*), bristly ox-tongue (*Picris Hieracioides*), daisy (*Bellis perennis*), creeping buttercup (*Ranunculus repens*) and scarlet pimpernel (*Anagallis arvensis*) were also present, with patches of rough-stalked feather moss (*Brachythecium rutabulum*), lords and ladies (*Arum maculatum*) and columbine (*Aquilegia formosa*).

4.24 The horse paddock area to the north of the stable block was dominated by perennial rye-grass (*Lolium perenne*) and red fescue (*Festuca rubra*), with abundant cock's-foot (*Dactylis glomerata*), frequent ragwort (*Senecio jacobaea*), broad-leaved dock (*Rumex obtusifolius*), annual meadow grass (*Poa annua*), yarrow (*Achillea millefolium*), nettle (*Urtica doica*), cleavers (*Galium aperine*), white clover (*Trifolium repens*), occasional creeping bent (*Agrostis stolonifera*), common mouse ear (*Cerastium fontanum*), ribwort plantain (*Plantago lanceolata*) and common cat's-ear (*Hypochaeris radicata*), bristly ox-tongue (*Picris Hieracioides*), creeping buttercup (*Ranunculus repens*) and teasel (*Dipsacus fullonum*) were also present, with patches of rough-stalked feather moss (*Brachythecium rutabulum*), common vetch (*Vicia sativa*) and common field speedwell (*Veronica Persica*).

Scrub and tall ruderal vegetation

4.25 Areas of scrub surrounded the northern horse paddock and patches of scrub and tall ruderal vegetation were present within the grassland. The north and west sides of the stable block and the storage outbuilding were surrounded by scrub and tall ruderals, with scrub at the hedgerow bases on the east side of the access track. Scrub areas were dominated by bramble (*Rubus fruticosus*) and nettle (*Urtica doica*), interspersed with broad-leaved dock (*Rumex obtusifolius*), spear thistle (*Cirsium vulgare*) and occasional ivy (*Hedera helix*) and ground ivy (*Glechoma hederacea*).

Species-poor hedgerows

4.26 Hedges bordering the east of the site consisted of hawthorn and bramble (*Crataegus monogyna*) with occasional field maple (*Acer campestre*). Hedges at the north-west corner of the northern horse paddock and the south and south-east borders of 'The Retreat' were dominated by leyland cypress (*x Cupressocyparis leylandii*) and privet (*Ligustrum sp*.). Hedgerows had low diversity of ground flora and poor structural diversity.

Scattered native and non-native trees and shrubs

4.27 The site contained several trees and shrubs, both native and non-native. Native species included walnut (*Juglans regia*), field maple (*Acer campestre*), ash (*Fraxinus excelsior*), oak (*Quercus robur*), beech (*Fagus sylvatica*) and elm (*Ulmus minor var. vulgaris*). Non-native species included cherry laurel (*Prunus laurocerasus*), Leyland cypress (*x Cupressocyparis leylandii*), and butterfly bush (*Buddleja davidii*).

Brick-built single-storey stable block (B1)

4.28 A brick-built single-storey stable block was present within the north-west corner of the site (**Figure 1**). The structure had a pitched corrugated metal roof with metal ridge and was open to the rafters. The building was comprised of six compartments, including a lean-to at each end. The building is depicted as B1 on the Extended Phase 1 Habitat Map in **Appendix C**.



Figure 1: Brick-built single-storey stable block (B1)

Concrete-built single-storey storage outbuilding (B2)

4.29 A concrete-built storage outbuilding area was present to the east of the stable block (**Figure 2**). The outbuilding consisted of a single-storey structure with a sloped corrugated metal roof with no ridge. The structure was open to the rafters and un-lined. The building is depicted as B2 on the Extended Phase 1 Habitat Map in **Appendix C**.



Figure 2: concrete-built single-storey storage outbuilding (B2)

Hard-standing

4.30 A gravel driveway / access track ran from the Croft Lane at the south-eastern corner of the site, through to the horse paddock at the north of the site. The areas were starting to become encroached by grasses and ruderal species.

Protected or notable species

Badgers

4.31 No evidence found at time of survey.

Bats

4.32 *Stable block (B1)*:

No bat droppings or feeding remains were found during the internal inspection of the stable block compartments. A number of potential access points were evident, including broken windows, gaps between wooden stable doors and door frames, gaps in the soffit

areas. The roof was un-lined and open to the rafters (**Figure 3**), and constructed of corrugated metal (**Figure 4**) set on wooden batons. No areas of hanging tiles or weatherboarding were present.



Figure 3: Stable block structure open to the rafters and unlined (B1)



Figure 4: Pitched corrugated metal roof and metal ridge on stable block (B1)

4.33 *Storage outbuilding (B2)*:

No bat droppings or feeding remains were found during the internal inspection of the outbuilding. The interior was heavily cobwebbed (**Figure 5**) and the roof was un-lined and constructed of corrugated metal set on wooden batons.

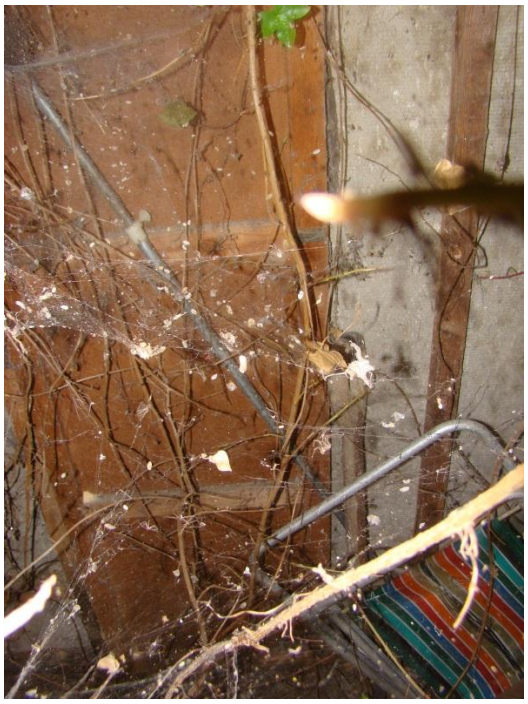

Figure 5: Heavily cobwebbed interior within outbuilding B2.

4.34 Three mature trees were present within the site boundaries, an ash (*Fraxinus excelsior*), a walnut (*Juglans regia*) to the east of the stable block and a Leyland cypress (*x Cupressocyparis leylandii*) at the north-east corner of the horse paddock. Two of the trees had ivy covered trunks. However, no crevices, fractured limbs or peeling bark was evident with the potential to support roosting bats.

4.35 The native trees, species-poor hedgerows and scrub bordering the site offer foraging potential for bats. The site is linked to more optimal bat foraging habitat within the wider landscape through a network of hedgerows and areas of woodland.

Birds

4.36 A disused wood pigeon nest (*Columba palumbus*) (**Figure 6**) was found in the second compartment of the stable block (compartment 2, building B1, **Appendix C**). No evidence of barn own (*Tyto alba*) or swallow (*Hirundo rustica*) was found in any of the compartments of the stable block (B1) or in the storage outbuilding (B2).



Figure 6: Wood pigeon nest in compartment 2 of stable block B1.

4.37 The following bird species were noted during the field survey; blackbird (*Turdus merula*) magpie (*Pica pica*), crow (*Corvus corone*), wood pigeon (*Columba palumbus*) and blue tit (*Cyanistes caeruleus*).

Dormice

4.38 No evidence found at time of survey.

Great crested newts

4.39 No evidence found at time of survey.

Otters and water voles

4.40 No evidence found at time of survey.

Plants

4.41 No protected or notable plant species found to be present at time of survey.

Reptiles

4.42 No evidence found at time of survey.

Other species (including amphibians, invertebrates and mammals)

4.43 No evidence found at time of survey.

5.0 Analysis and Impact Assessment

Nature Conservation Sites

UK Statutory Sites of Conservation Interest

5.1 A search of the DEFRA run Magic website revealed five statutory sites of conservation interest within 50m of the boundaries of the site, the closest of which are the Chichester and Langston Harbours Ramsar site and SPA, the Solent Maritime SAC and the Langston Harbour SSI, approximately 400m from the boundary of the site. The site is separated from nearby sites of conservation interest by the existing Havant Road, the village of Stoke and a network or agricultural fields beyond. The proposed development works are contained entirely within the curtilage of the existing dwelling, 'The Retreat', and will involve no loss of, damage to or removal of surrounding habitats. The proposed works may involve a short-term temporary increase in vehicular activity on the Havant Road and Croft Lane during the demolition and construction phase of the development. However, providing Pollution Prevention Guidelines (PPG6) (Environment Agency, 2010) are followed during the demolition and construction phases of the proposed works, the impact upon the nearby statutory sites of conservation interest will be 'negligible'.

Habitats

5.2 The data search revealed the presence of five BAP Priority habitats present within 2km of the site. However, no BAP habitats were found to be present on-site or within 50m of the site boundaries. The site is separated from sensitive BAP habitats by the existing Havant Road and by a network of agricultural fields and residential areas. The proposed works will involve a temporary increase in vehicular activity on the Havant Road during the construction phase of the development. However, providing Pollution Prevention Guidelines (PPG6) (Environment Agency, 2010) are followed during the demolition and construction phases of the proposed works, the impact upon the nearby BAP Priority habitats will be 'negligible'.

5.3 The ecological importance of each of the habitats identified on-site and immediately off-site during the Extended Phase 1 Survey has been assessed according to its relevance to the UK BAP, Local BAPs, Section 41 of the NERC Act, its ability to support protected or notable species and the likelihood of negative impact upon it as a result of the current proposal. The assessment is summarised further below.

Semi-improved grassland

5.4 The areas of semi-improved grassland are considered to be of limited ecological value due to the lack of species diversity. However, the cessation of a regular mowing and grazing regime has resulted in these areas starting to develop a tussocky structure more conducive to supporting invertebrates and widespread reptiles. The proposals do not involve the loss of the more structurally diverse habitat of the horse paddock to the north of the stable block. However, the proposals will involve the loss of approximately 500m^2 of semi-improved grassland previously managed as amenity grassland within the garden of 'The Retreat'. These areas have only recently been left unmanaged and are not likely to have been colonised by reptiles. These areas are currently sub-optimal for reptiles but will become more suitable over time if left unmanaged. The predicted negative

ecological impact resulting from the proposed works considered to be 'low' at the site and landscape scales.

Scrub and tall ruderal vegetation

5.5 The areas of scrub immediately bordering the north and west sides of the stable block will be disturbed and/or removed during the demolition of the stable block. These areas have the potential to support nesting birds and link in to habitat within the horse paddock to the north which may contain widespread reptiles. The scrub areas that will be affected by the works should be strimmed down to ground level during the winter period of November to end of February to avoid reptile active season and bird nesting season. If the removal of these areas of scrub during the period of 01st March to 01st November is unavoidable, an inspection by an ecologist for nesting birds will be required prior to the removal of any scrub and the strimming must be undertaken in a two-stage cut (the first reducing the scrub to a height of 100mm and cuttings removed, and the second cut, 24 hours apart from the first, reducing the scrub to a height of <20mm and cuttings removed) to allow any reptiles, if present, to move in to areas of adjacent suitabile habitat. The scrub removal should be overseen by a suitably trained ecologist. The areas of scrub and tall ruderals in the horse paddock to the north of the stable block are not included within the footprint of the construction works. Providing these measures are followed, the ecological impact of the proposed works is considered to be 'low' at the site and landscape scales.

Species-poor hedgerows

5.6 The hedgerows bordering the site consisted predominantly of bramble (*Rubus fruticosus agg*), holly (*Hedera helix*) and hawthorn (*Crataegus monogyna*) and had poor structural diversity and species composition. However, the hedgerows do provide opportunity for nesting birds and some foraging potential for bats. Hedgerows bordering the east of the horse paddock to the north had the potential to support widespread reptiles. The proposed works to not involve the removal of or damage to the hedgerows bordering the site. The impact of the proposed works upon this habitat type is considered to be 'low' at the site and landscape scales.

Scattered native and non-native trees and shrubs

5.7 The mature trees on site were assessed in accordance with Bat Conservation Trust (2007) guidance as having 'low' potential to support roosting bats. All native trees on site have the potential to support nesting birds and contribute to bat foraging potential. The proposed works may involve the removal of a maximum of four trees within the site boundaries. Tree removal will avoid bird nesting season of 01st March to 01st August inclusive unless prior inspection by an ecologist concludes no nesting birds are present. Providing these measures are followed, the ecological impact of the proposed works upon this habitat type is considered to be 'low' at the site and landscape scales.

Brick-built single-storey stable block (B1)

5.8 The external inspection of the stable block revealed many potential access points for bats, including broken windows and gaps above stable doors. However, internal

inspection of all the compartments within the stable block revealed no evidence to suggest bat presence or bat use. The roof was constructed of materials known to be sub-optimal for bat roosting (BCT, 2007) and un-lined and open to the rafters with no separate attic area or roof void. The building was constructed of single-skin layer of bricks with no wall cavities. It is therefore considered that the demolition of this building will be of 'low' ecological impact both at the site and landscape scale perspectives. The building has a bird nest inside and is suitable for nesting birds. It should be removed outside of the nesting bird season unless an ecologist shows that there are no nesting birds present when demolition is proposed.

Concrete-built single-storey storage outbuilding (B2)

5.9 The external inspection of the outbuilding revealed several potential access points for bats, including gaps above the wooden door and holes in the soffit area. However, internal inspection revealed no evidence to suggest bat presence or bat use. The roof was constructed of materials known to be sub-optimal for bat roosting (BCT, 2007), was un-lined and open to the rafters with no separate attic area or roof void. The building was constructed of concrete bricks with no wall cavities. It is therefore considered that the demolition of this building will be of 'low' ecological impact both at the site and landscape scale perspectives. The building is suitable for nesting birds. It should be removed outside of the nesting bird season unless an ecologist shows that there are no nesting birds present when demolition is proposed.

Gravel / hard standing

5.10 The impacts of the proposed works are largely confined to the existing gravel areas with grass and ruderal encroachment. These areas are of 'low' ecological value. The impact of the proposed works on these areas is considered to be 'low' at the site and landscape scales.

Protected and Notable Species

Badgers

5.11 No records for badger were returned from within 1km of the development site. No evidence of badger foraging, latrines or badger setts were found in the vicinity of the site. The potential impact of the proposed works upon badgers is considered to be 'negligible' at both the site and landscape scales.

Bats

5.12 The desk study revealed records of at least three bat species within 1km of the proposed development site. External inspection of the stable block (B1) and the storage outbuilding (B2) revealed several potential access points for bats. However, the internal inspection revealed no evidence of bat droppings or feeding remains and a sub-optimal environment for bat roosting. The impact of the proposed demolition of these buildings upon bat species is therefore considered to be 'low' at the site and landscape scales.

5.13 The proposed development works involve a net loss of approximately 500m^2 of semi-improved grassland, approximately 50m^2 of scrub and tall ruderal vegetation and the removal of a maximum of four trees. These habitats contribute to bat foraging potential at the site scale. However, the site is directly linked to areas of more optimal bat foraging habitat within the wider landscape through existing hedgerows and areas of broad-leaved woodland. It is therefore considered that the loss of these habitats will have a 'low' impact at the site scale and 'low' impact at the landscape scale.

Birds

5.14 Records were returned for a large number of protected and/or notable bird species within 1km of the site. However, no evidence of protected bird species was found at the time of survey. No evidence of barn owl (*Tyto alba*), swallow (*Hirundo rustica*) or dark-bellied brent geese (*Branta bernicla*) was observed on-site at the time of the survey. A single wood pigeon (*Columba palumbus*) nest was found within the roof of compartment 2 in stable block B1 (**Appendix C**). The proposals will involve the demolition of the stable block. In order to minimise the risk of disturbance to nesting birds, demolition will avoid the bird nesting season of 01st March to 01st August inclusive unless an inspection by an ecologist concludes there are no active nests present prior to the demolition. Providing these measures are followed, the proposed works are considered to have a 'low' ecological impact upon birds at both the site and landscape scales.

5.15 Trees, scrub and hedgerows present on-site offer potential nesting habitat for birds. Any area of vegetation is required to be disturbed as a result of the proposed works will be scheduled outside of the bird nesting season which runs from 01st March to 01st August unless prior inspection by an ecologist can show that there are no nesting birds present. Providing these measures are followed, the impact upon birds as a result of the proposed works is considered to be 'negligible' at both the site and landscape scales.

Dormice

5.16 No records for dormouse were returned within 1km of the development site. The hedgerows which form the site boundaries do not contain sufficient species or structural diversity to support dormouse populations. Furthermore, the proposed works do not encroach upon hedgerows or boundary vegetation. The potential impact of the proposed works upon dormice is considered to be 'negligible' at both the site and landscape scales.

Great crested newts

5.17 The data search returned no records of great crested newt within 1km of the proposed development site. There are no water bodies present within or immediately adjacent to the site boundaries. Although the areas of scrub and hedgerow on site could be considered as potential areas of terrestrial habitat for this species, it is considered highly unlikely that this species is present within the site boundaries. The potential impact of the proposed works upon great crested newts is therefore considered to be 'negligible' at both the site and landscape scales.

Otters and water voles

5.18 There are no records of otter or water vole within 1km of the site. The proposed development site does not contain any water courses and is therefore unsuitable for otter and water vole. The site is not directly linked to aquatic habitats suitable for these species within the wider landscape. The potential impact of the proposed works upon otters and water voles is considered to be 'negligible' at both the site and landscape scales.

Plants

5.19 No records of Schedule 8 or 9 plant species were returned from within 1km of the site. No protected or notable flora specimens were found during the survey. The semi-improved grassland areas contain a relatively low diversity of flora and have little potential to support protected fauna. The proposals involve the loss of approximately 500m^2 of semi-improved grassland and approximately 50m^2 of scrub and tall ruderal vegetation. Given the low species diversity of these habitats, the impact of the proposed works upon floral diversity is considered to be 'low' at the site and landscape scales.

Reptiles

5.20 Records of two reptile species were returned from within 1km of the site, common lizard (*Zootoca vivipara*) and slow-worm (*Anguis fragilis*). Hedgerow bases and scrub at the borders of the site have the potential to provide some foraging and shelter for widespread reptile species. The rest of the site was previously managed as amenity grassland and, as a result of the recent cessation in management, has become overgrown and has started to develop a tussocky structure in places. It is considered that these areas are unlikely to have been colonised by reptiles within the short period of time that the grassland has been left unmanaged. However, these areas are likely to become more suitable for reptile colonisation the longer they are left undisturbed. It is therefore advisable that the grass areas are maintained at a sward height of <10mm to reduce the likelihood of reptile colonisation prior to the construction works, therefore reducing the risk of harming reptile species which are protected under the Wildlife and Countryside Act 1981 (as amended). Providing these measures are followed, the impact of the proposed works upon reptile species is considered to be 'low' at the site and landscape scales.

5.21 The demolition of the stable block will involve the removal of approximately 50m^2 of scrub and tall ruderal vegetation with the potential to support reptiles. The scrub must be removed prior to the demolition of the stable block and will be scheduled within the reptile hibernation period of November to February. If it is not possible to schedule the scrub removal within this period, the scrub must be strimmed in a two-stage cut (the first reducing the scrub to a height of 100mm and cuttings removed, and the second cut, 24 hours apart from the first, reducing the scrub to a height of <20mm and cuttings removed). The areas of scrub and tall ruderals in the horse paddock to the north of the stable block are not included within the footprint of the construction works. Providing these measures are followed, the ecological impact of the proposed works upon reptiles is considered to be 'low' at the site and landscape scales.

Other species (including amphibians, invertebrates and mammals)

5.22 No protected or notable species of invertebrate, amphibian or mammal were observed to be present during the survey. It is considered unlikely that the site contains protected or notable invertebrates, amphibians or mammals due to low diversity of plant species present on-site. The proposed works will involve the loss of approximately 500m^2 or semi-improved grassland and approximately 50m^2 of scrub and tall ruderal vegetation of relatively 'low' ecological importance. The impact of the proposed works on amphibians, invertebrates and mammals is therefore considered to be 'low' at the site and landscape scales.

Summary Relevant of Potential Impacts

5.23 Assuming the worst case scenarios in the absence of appropriate mitigation, the potential negative ecological impacts of the proposed development have been assessed in relation to the proximity of nature conservation sites, proximity of BAP Priority Habitats and the likelihood to affect protected or notable species. Measures that can be taken to reduce or eliminate the potential negative ecological impacts are detailed in **Section 6.0**.

6.0 Requirements and Recommendations

Essential Pre-Application Further Survey Work

Bats

6.1 No further survey work will be required to determine the potential impacts of the proposed works upon bats.

Further Measures Required to Mitigate Against the Effects of the Proposed Development

Birds

6.2 It is an offence under the Wildlife and Countryside Act 1981 (as amended) to disturb nesting birds (further details relating to current legislation are described in **Appendix J**). If the timing of the demolition works or vegetation removal coincides with bird nesting season (01st march to 01st August), an inspection by an ecologist will be required to determine the presence / likely absence of nesting birds prior to commencement of the works. If the presence of nesting birds is confirmed, any works which may disturb them will be delayed until the young birds have fledged the nest. Scheduling the demolition and vegetation removal works outside of this period will reduce the need for further surveys.

6.3 Natural England has been consulted by the client and considers the risk potential ecological impact of the proposed development upon protected bird species (e.g. dark bellied-brent geese *Branta bernicla*) to be minimal. The client must adhere to the recommendations made by Natural England as detailed within the correspondence included in **Appendix G.**

Reptiles

6.4 Reptiles are protected from killing and injusy under the Wildlife and Countrydide Act 1981 (as amended) (further details relating to current legislation are described in **Appendix J**). The timing of scrub removal will avoid the reptile active season on March to October inclusive to avoid harm to reptile species, if present. If the removal of scrub is during the reptile active period is unavoidable, vehetation removal will be conducted in a two-stage cut (the first reducing the scrub to a height of 100mm and cuttings removed, and the second cut, 24 hours apart from the first, reducing the scrub to a height of <20mm and cuttings removed) to allow reptiles, if present, to move to areas of adjacent suitable habitat. This work should be overseen by a suitably trained ecologist.

Follow-Up Surveys

6.5 The results set out within this report are valid for one year from the issue date of this report. If development does not commence within 12 months of the issue date, the need

for a follow-up survey, to establish whether site conditions have changed, will be assessed accordingly.

Further Measures Recommended to Mitigate against the Effects of the Proposed Development

Reptiles

6.6 Management of grassland in the horse paddock to the north of the existing stable block should seek to retain a vegetative buffer of at least 1m between grazed grassland and the hedgerow bases. This will ensure that habitat for reptiles is retained on site and connectivity with the wider landscape for fauna is maintained. This will be detailed in a landscape plan for the site that will incorporate native planting to mitigate for the loss of scrub habitat on site.

Biodiversity Enhancement

6.7 In accordance with the Natural Environment and Rural Communities Act (2006) and Planning Policy Statement 9 (PPS9) (ODPM, 2005) the master planning process should seek to incorporate measures to further the conservation of protected species and biodiversity in general.

6.8 New features for nesting birds could be incorporated into the new properties or garage blocks. Suggested bird nesting features are included in **Appendix H**.

6.9 Bird boxes suitable for attachment to trees could be erected on mature / semi-mature trees within the site boundaries to provide additional nesting habitat for garden birds, particularly sparrows. These can be located on any aspect of the trees, except south-facing. Suggested bird nesting features are included in **Appendix H**.

6.10 Planting of native forbs could be incorporated in to the site landscaping plan to benefit native invertebrates. A list of suggested species is included in **Appendix I**.

6.11 Enhancement of areas of retained grassland could be achieved through over-sowing of a native wildflower mix for lawns (such as Emorsgate EL1F or similar) or by plug / bulb planting native flowering species in selected areas. A list of suggested bulb/plug planning species is included in **Appendix I**.

6.12 Any planting for the purposes of boundary marking or screening should consist of native species to benefit biodiversity in general. Suggested species are included in **Appendix I**.

7.0 References and Bibliography

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Appendices

Appendix A: Site Location Plan

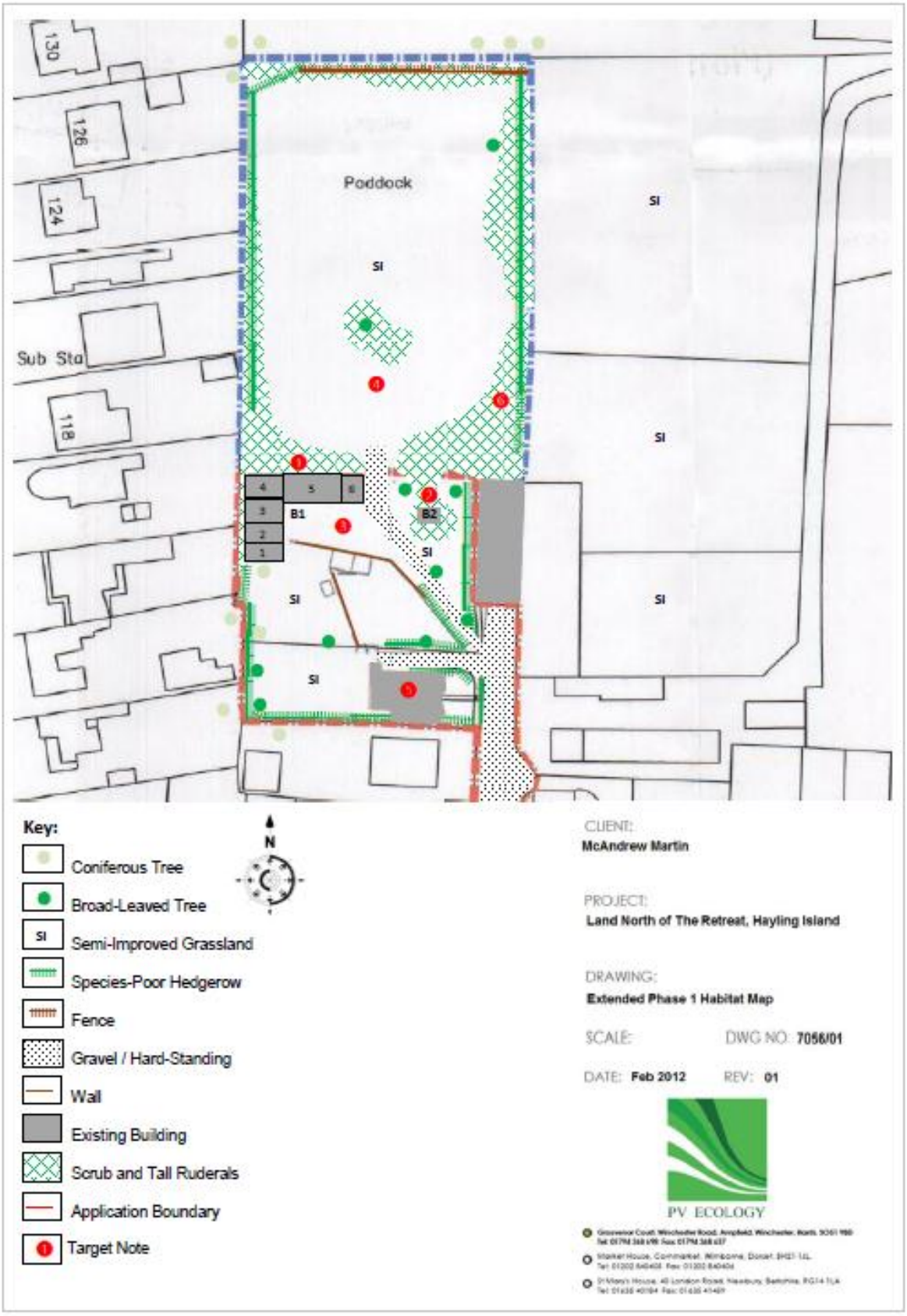
Key: X = site location. Scale 1:25000



Appendix B: Current Site Proposals



Appendix C: Extended Phase 1 Habitat Survey Map



Appendix D: Target Notes to Accompany Appendix C

Target Note 1: Area of scrub may provide habitat for reptiles. Scrub must be cleared during the winter months or in a two-stage cut if scrub clearance in the reptile active season is unavoidable.

Target Note 2: Area of scrub may provide habitat for reptiles. Scrub must be cleared during the winter months or in a two-stage cut if scrub clearance in the reptile active season is unavoidable.

Target Note 3: Grassland previously managed as amenity grassland. Starting to develop longer sward and tussocks in places. Will become more suitable for reptile colonisation over time.

Target Note 4: Grassland previously grazed by horses. Starting to develop longer sward and tussocks in places. Will become more suitable for reptile colonisation over time. Area not included within footprint of construction works.

Target Note 5: Existing dwelling, 'The Retreat', unoccupied at time of survey. 'Medium' bat potential. Property not included in development proposals.

Target Note 6: Scrub along eastern boundary of the horse paddock should be retained for reptile habitat. Management should leave a vegetative buffer of at least 1m between grazed grassland and hedgerow bases.

Appendix E: MAGIC Statutory Nature Conservation Sites Data



Appendix F: MAGIC BAP Priority Habitats Data



Appendix G: Natural England Correspondence

Date: 24 January 2012
Our ref: 42509
Your ref: APP/11/01793

2nd Floor, Cromwell House
15 Andover Road
Winchester
SO23 7BT

Mrs H Lealan
Development Control
Havant Borough Council
Civic Offices
Havant
PO9 2AX

By email only, no hard copy to follow

Dear Mrs Lealan

LANGSTONE HARBOUR SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
CHICHESTER & LANGSTONE HARBOURS SPECIAL PROTECTION AREA/Ramsar (SPA/Ramsar)
SOLENT MARITIME SPECIAL AREA OF CONSERVATION (SAC)

Proposal: Outline application for the erection of 2 chalet bungalow style dwellings and new garage for existing dwelling, utilising access onto Croft Lane.
Location: Land adj. The Retreat, Croft Lane, Hayling Island, PO11 0LT

Thank you for your email dated 6 January 2012 requesting Natural England's comments on the above proposal.

Assessment under the Conservation of Habitats and Species Regulations 2010
In Natural England's opinion this proposal in its current form is unlikely to have a significant effect on the interest features of the above SPA/Ramsar/SAC sites and therefore does not require appropriate assessment in accordance with Regulation 61 of the Conservation of Habitats and Species Regulations 2010 provided conditions to the effect of the following are attached to any planning permission granted:

- Given the bird sensitivities in the area, the proposed construction will need to be timed and undertaken in a suitable way to minimise disturbance to over wintering and nesting birds, therefore it will be necessary to:
  - Ensure best practice is in place for operating machinery to reduce unnecessary noise;
  - No percussive piling or works with heavy machinery occur within the waterfowl over-wintering period, 1 October to 31 March inclusive. Heavy machinery constitutes, for example, use of pneumatic drills, diggers, dumper trucks and lorries.

Advice under S28I of the Wildlife & Countryside Act 1981 (as amended by the Countryside & Rights of Way Act 2000)
It is Natural England's advice that the above SSSI is unlikely to be adversely affected by the above proposal provided conditions to the effect of the above are attached to any planning permission granted.

I draw your attention to your duty, under S28G of the Wildlife and Countryside Act 1981, as incorporated by the Countryside and Rights of Way Act 2000, to take reasonable steps, consistent with the proper exercise of your functions, to further the conservation and enhancement of the SSSI.

I also draw your attention to the provisions of S28I of the 1981 Act, in particular to the requirement that, should permission be given contrary to Natural England's advice, then you must ensure that:

- notification is given to Natural England of the date and terms of the permission and how, if at all, you have taken account of Natural England's advice.

- the permission does not permit operations to begin before 21 days after details of the permission and a statement of how you have taken account of Natural England's advice, has been given to Natural England.

Please forward a copy of the decision notice to our office at the above address.

Protected species
Natural England advises the proposals as presented have the potential to affect species protected under European or UK legislation. Natural England refers you to our Standing Advice on protected species http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/spatialplanning/standingadvice/default.aspx

If you have any queries relating to this response please do not hesitate to contact the case officer, Simon Thompson at the above address, by telephone on 0300 060 4625 or by email to simon.thompson@naturalengland.org.uk

Yours sincerely



On behalf of Vanessa Burley
Lead Advisor
Land Use Operations Team

Appendix H: Suggested Bird Boxes



Schwegler 1SP Sparrow Terrace.

Can be incorporated into the west facing aspect of the new extension.



Schwegler 1B Bird Box.

Can be affixed at a height of 4m to a semi-mature or mature tree.

Suitable for any aspect except south-facing.

Details of these can be found at http://www.alanaecology.com/wildlife/Schwegler_Boxes.html

Appendix I: Suggested Species Planting List

Emorsgate seed mix **EL1F** is available from**:** **http://wildseed.co.uk/mixtures/view/59**

Table 1: Suggested wildflower planting list

Common Name	Latin Name
Wildflowers	
Autumn Hawkbit	*Leontodon autumnalis*
Betony	*Stachys officinalis*
Birdsfoot Trefoil	*Lotus corniculatus*
Bladder Campion	*Silene vulgaris*
Cat's Ear	*Hypochoeris radicata*
Common Knapweed	*Centaurea nigra*
Common Sorrel	*Rumex acetosa*
Common Toadflax	*Linaria vulgaris*
Common Vetch	*Vicia sativa*
Cowslip	*Primula veris*
Field Scabious	*Knautia arvensis*
Lady's Bedstraw	*Galium verum*
Meadow Buttercup	*Ranunculus acris*
Meadow Cranes-bill	*Geranium pratense*
Meadowsweet	*Filipendula vulgaris*
Musk Mallow	*Malva moschata*
Ox-eye Daisy	*Leucanthemum vulgare*
Ragged Robin	*Lychnis flos-cululi*
Red Campion	*Silene dioica*
Ribwort Plantain	*Plantago lanceolata*
Rough Hawkbit	*Leotodon hispidus*
Salad Burnet	*Sanguisorba minor*
Self-heal	*Prunella vulgaris*
Perforate St Johns Wort	*Hypericum perforatum*
Tufted Vetch	*Vicia cracca*
White Campion	*Silene latifolia*
Wild Carrot	*Daucus carota*
Wild Marjoram	*Origanum vulgare*
Wild Red Clover	*Trifolium pratense*
Yarrow Milfoil	*Achillea millefolium*
Yellow Rattle	*Rhinanthus minor*

Table 2: Suggested bulb planting list

Common Name	Latin Name
Angular Solomons Seal	*Polygonatum odoratum*
Camasia	*Camasia quamash*
Crocus	*Crocus tommasihinanus & C. flavus flavus*
English Bluebell	*Hyacinthoides non-scripta*
Lent Lilly / Wild Daffodil	*Narcissus pseudonarcissus*
Lily of the Valley	*Convallaria majalis*
May Flowering Tulip	*Tulipa sprengeri*
Ramsons	*Allium ursinum*
Round Headed Leek	*Allium sphaerocephalon*
Snakes Head Fritillary	*Fritillaria melegris*
Snowdrop	*Galanthus nivalis*
Winter Aconite	*Eranthis hyemalis*

Table 3: Suggested plug planting list

Common Name	Latin Name
Common Mallow	*Malva sylvestris*
Cowslip	*Primula veris*
English Bluebell	*Hyacinthoides non-scripta*
Field Scabious	*Knautia arvensis*
Harebell	*Campanula rotundifolia*
Kidney vetch	*Anthyllis vulneraria*
Meadow Cranesbill	*Geranium pratense*
Meadowsweet	*Filipendula ulmaria*
Ox-eye Daisy	*Leucanthemum vulgare*
Red Campion	*Silene dioica*
Round Headed Leek	*Allium sphaerocephalon*
Selfheal	*Prunella vulgaris*
Sneezewort	*Achillea ptarmica*
Teasel	*Dipsacus fullonum*
White Campion	*Silene alba*
Yarrow	*Achillea millefolium*
Yellow Flag Iris	*Iris pseudacorus*

Table 4: Suggested planting list for boundaries and screening

Common Name	Latin Name
Hawthorn	*Crataegus monogyna*
Guelder rose	*Viburnum lantana*
Holly	*Ilex aquifolium*
Rowan	*Sorbus aucuparia*
Spindle	*Euonymus europaeus*
Field maple	*Acer campestre*
Dogwood	*Cornus sanguinea*
Wild privet	*Ligustrum vulgare*
Blackthorn	*Prunus spinosa*
Hazel	*Corylus avellana*
Elder	*Sambucus nigra*
Willow	*Salix sp.*
Crab apple	*Malus sylvestris*

Appendix J: Protected Species Legislation

Bats

All UK bat species are listed in Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) and Schedule 2 of the *Conservation of Habitats and Species Regulations 2010*. They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. These make it an offence, *inter alia*, to:

- deliberately capture, injure or kill any such animal;
- deliberately disturb any such animal, including in particular any disturbance which is likely:
    - to impair its ability to survive, breed, or rear or nurture their young;
    - to impair its ability to hibernate or migrate;
    - to affect significantly the local distribution or abundance of that species; or
- damage or destroy a breeding site or resting place of any such animal; or
- intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat (*Rhinolophus ferrumequinum*);
- Lesser horseshoe bat (*Rhinolophus hipposideros*);
- Bechstein's bat (*Myotis bechsteinii*);
- Barbastelle (*Barbastella barbastellus*);
- Greater mouse-eared bat (*Myotis myotis*).

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favorable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

Dormouse (*Muscardinus avellanarius*), European otter (*Lutra lutra*) and Great Crested Newt (*Triturus cristatus*)

These species are listed in Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) and Schedule 2 of the *Conservation of Habitats and Species Regulations 2010*. They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. These make it an offence, *inter alia*, to:

- deliberately capture, injure or kill any such animal;
- deliberately disturb any such animal, including in particular any disturbance which is likely:
    - to impair its ability to survive, breed, or rear or nurture their young;
    - to impair its ability to hibernate or migrate.

    - to affect significantly the local distribution or abundance of that species; or
- damage or destroy a breeding site or resting place of any such animal; or
- intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

Nationally Protected Species

Badger (*Meles meles*)

The *Protection of Badgers Act 1992* consolidates previous legislation (including the *Badgers Acts 1973 and 1991 Badgers (Further Protection) Act 1991*). It makes it a serious offence to:

- kill, injure or take a badger;
- attempt to kill, injure or take a badger; or
- to damage or interfere with a sett.

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

Breeding Birds

With certain exceptions[1], all wild birds, their nests and eggs are protected by section 1 of the *Wildlife and Countryside Act 1981* (as amended). Therefore, it is an offence, *inter alia*, to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls.

Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- intentionally or recklessly disturb the dependent young of any such bird.

Reptiles

The four widespread[2] species of reptile that are native to Britain, namely common or viviparous lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake

[1] Some species, such as game birds, are exempt in certain circumstances

[2] The other native species of British reptile (sand lizard and smooth snake) receive a higher level of protection under the *Habitats Regulations* 1994 and (in England and Wales only) the *Wildlife and*

(*Natrix natrix helvetica*), are listed in Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) and are afforded limited protection under Section 9 of this Act. This makes it an offence, *inter alia*, to:

- intentionally kill or injure any of these species.

Water vole *(Arvicola amphibius)*

The water vole is listed in Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) and is afforded limited protection under Section 9 of this Act. This makes it an offence, *inter alia*, to:

- intentionally kill, injure, or take (handle) any a water vole (in England only);
- intentionally or recklessly damage or destroy or obstruct access to any structure or place which water voles use for shelter or protection; or
- intentionally or recklessly disturb water voles while they are using such a place.

Countryside Act 1981 (as amended). However, the distribution of these species are restricted to only a very few sites. All marine turtles (Cheloniidae and Dermochelyidae) are also protected.