



Ecology Appraisal

1 Sea Drive

Ferring

Worthing

East Sussex

Date: June 2017

CONTENTS

EXECUTIVE SUMMARY	1
1 INTRODUCTION	2
Scope of Report	2
Site Context	2
Development Proposals	5
2 METHODOLOGY	6
Preliminary Ecological Appraisal	6
Badger Survey	8
Full Bat Roost Assessment	8
Great Crested Newt Habitat Suitability Index	9
Limitations	10
3 RESULTS	11
Desk Study	11
Phase 1 Habitat Survey	14
Great Crested Newt Habitat Suitability Index	21
Building Inspection for Bats	22
Bat Presence or Likely Absence Assessment	23
Protected Species Assessment	24
4 EVALUATION	26
Habitats	26
Protected and Notable Species	26
Potential Impacts of the Development	26
5 RECOMMENDATIONS	27
Pre-commencement Protected Species Surveys	27
Mitigation	27
REFERENCES	28
Appendix 1:	29
Relevant Legislation and Planning Policy	29
Legislation	30
Planning Policy	30
Appendix 2:	32
Target Note Photographs	32

EXECUTIVE SUMMARY

Client	Lucas Design
Survey Date	26 th May 2017
Site	1 Sea Drive, Ferring, Worthing, East Sussex, BN12 5HD
Survey Type	(1) Preliminary Ecological Appraisal (2) Full Bat Roost Assessment
Proposal	Site clearance and construction of a four unit residential development
Primary Findings	❖ No statutory or non-statutory designations apply to the Site. No statutory designated sites were located within 1km of the site boundary. ❖ The habitats within the Site were limited in extent and quality, and were populated by low numbers of common and self-seeded plants that are typical of well-managed, urban areas. Therefore, the habitats found within the Site have value within the Site only. ❖ The dense, privet hedges on the north and west site boundaries, the mature bay laurel in the centre of the Site and the topiary bay laurel in the northeast of the Site had Moderate potential to support breeding birds. ❖ All four buildings within the Site (B1, B2, B3 & B4) were assessed as having Negligible potential to support roosting bats. ❖ The Site was assessed as having Negligible potential to support any other protected or notable species. ❖ Any clearance of introduced shrubs within the development footprint should be undertaken outside of the main nesting season for breeding birds, which is typically considered to be March to August, inclusive. ❖ Full details of the recommended mitigation and enhancement measures are provided in Section 5 (Recommendations) of this report.

1 INTRODUCTION

Scope of Report

- 1.1 David Archer Associates were commissioned by Lucas Design in May 2017 to undertake a Preliminary Ecological Appraisal of the land and buildings at 1 Sea Drive, Ferring, Worthing, West Sussex, BN12 5HD, to inform a planning application for its proposed development.
- 1.2 This Preliminary Ecological Appraisal consists of a desk study, an extended Phase 1 Habitat Survey and a protected species assessment. The survey area included all land within the site boundary (Figure 1), hereafter referred to as 'the Site'.
- 1.3 The purpose of the Preliminary Ecological Appraisal is to satisfy the requirements of the National Planning Policy Framework (NPPF) by identifying potential impacts of the proposed development on protected species and features of ecological value within the Site. The findings are further required to guide the development to best contribute to local biodiversity priorities, in accordance with local planning policy (Worthing Borough Council's Core Strategy (2011)) and in-line with the *British Standard 42020 (2013) Biodiversity: Code of Practice for Planning and Development*.
- 1.4 This report details the methodology and findings of the appraisal, including a full assessment of the ecological value of the Site and details of any ecological constraints that apply to the proposed development. Where required, recommendations for ecological mitigation and enhancement measures are provided.

Site Context

- 1.5 The Site consisted of a single residential property set within its own private grounds measuring approximately 0.12 hectares (ha), and centred on Ordinance Survey (OS) National Grid Reference TQ 099 016.
- 1.6 The Site was bound by neighbouring residential properties to the north and west, by Sea Lane to the east and by Sea Drive to the South.
- 1.7 The wider landscape was peri-suburban, with the residential suburb of Ferring extending north and west from the Site, a contained area of agricultural land to the east and the Worthing seafront to the south. The residential suburb of Goring-by-Sea was located 780m east of the Site, beyond which lay Worthing Town proper.

Figure 1. Site Boundary (aerial image may not be representative of the conditions of the Site at the time of the survey)



Figure 2. Site Location and Context



Development Proposals

1.8 The development proposals described below are in accordance with the 16-046 series of site plans provided by Lucas Design in May 2017, and are understood to comprise:

- ✧ Demolition of all buildings on site, site clearance and preparation for construction; and,
- ✧ Construction of a four unit residential block with associated hard standing car parking provided at ground and lower-ground floor levels.

2 METHODOLOGY

Preliminary Ecological Appraisal

- 2.1 The methodology for this Preliminary Ecological Appraisal follows standard guidance set out in the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2013).
- 2.2 Surveyor Information - The survey and assessment were carried out by Daniel Simmons. Daniel has over seven years experience as an ecological consultant and is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

Desk Study

- 2.3 A desk study was undertaken in order to collate baseline ecological data for protected sites and protected and/or notable habitats and species that may be affected by the proposed development.
- 2.4 Data Search – The Sussex Biodiversity Records Centre (SxBRC) were commissioned to provide relevant ecological information from within a 1 kilometre (km) radius of the site. The data search included:
- ❖ Statutory designated sites¹;
 - ❖ Non-statutory designated sites²;
 - ❖ Ancient woodland³;
 - ❖ Protected species⁴;
 - ❖ Species and Habitats of Principal Importance for the conservation of biodiversity in England⁵; and,

¹ Special Protection Areas (SPAs), Wetlands of International Importance (Ramsar sites), Special Areas of Conservation (SACs), Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Local Nature Reserves (LNR).

² Sites of Nature Conservation Importance (SNCIs)

³ A woodland that has existed continuously since 1600 or before in England, Wales and Northern Ireland (or 1750 in Scotland). Listed on Natural England's Ancient Woodland Inventory.

⁴ Legally protected under UK or EU legislation.

⁵ Section 41 (S41) of the Natural Environment and Rural Communities (NERC Act 2006) requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. biodiversity in the exercise of their normal functions – as required under Section 40 of the NERC Act 2006.

- ❖ UK Biodiversity Action Plan (BAP) Priority Species and habitats⁶.

2.5 Online Resources – In order to fulfil the protected species assessment, Multi-Agency Geographic Information for the Countryside (MAGIC)⁷, Google Earth⁸ and Ordnance Survey Maps⁹ were used to evaluate the context of the Site and its connectivity to habitats in the wider landscape.

Extended Phase 1 Habitat Survey

2.6 An Extended Phase 1 Habitat Survey was carried out on 26th May 2017. All habitats within the Site, and on the site boundary, were defined according to the recorded abundance of individual plant species within them¹⁰. The methodology for the Phase 1 Habitat Survey followed Joint Nature Conservancy Committee's *Handbook for Phase 1 Habitat Survey* (JNCC, 2010).

2.7 Nomenclature follows *New Flora of the British Isles* (Stace, 2010) with Latin binomials used on the first mention of a species and common names used thereafter.

Protected Species Assessment

2.8 The potential for the Site to support protected and/or notable species was assessed by investigation for field signs and the presence of suitable habitats within or adjacent to it.

2.9 The protected species considered relevant to the assessment, based on geographical region and the presence of suitable habitats within the site, were as follows:

- ❖ Badgers – assessment of bare earth with ephemeral vegetation, and dense, continuous scrub, for their potential to support badger sett creation and foraging;
- ❖ Bats – assessment of mature trees for their potential to support roosting bats;
- ❖ Breeding birds – assessment of hedgerows and mature trees for their potential to support breeding birds; and,
- ❖ Great crested newts - assessment of terrestrial habitats within the Site for its potential to support great crested newts.

⁶ Species which appear on the revised list of UK BAP Priority species

⁷ <http://magic.defra.gov.uk/>

⁸ All aerial imagery within this report is used courtesy of Google Inc.

⁹ <https://osmaps.ordnancesurvey.co.uk>

¹⁰ Using the DAFOR scale, based on percentage (%) cover; Dominant (D) = >75%, Abundant (A) = 75 - 51%, Frequent (F) = 50 - 26%, Occasional (O) = 25 - 11%, Rare (R) 10 - 1 %.

2.10 Consideration was given to the potential for the site to support other notable species of conservation interest, including:

- ✧ Species of Principal Importance for the conservation of biodiversity under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006); and,
- ✧ Kent Biodiversity Action Plan (BAP) species.

Badger Survey

- 2.11 A badger survey was carried out in clear and dry conditions on 26th May 2017. All habitats within the Site, and all accessible land within a 30 m radius of the Site, were inspected for the presence of badger setts or other field signs of badger use such as latrines, runs and foraging holes.
- 2.12 Although the entire site and 30 m beyond was inspected, particular attention was paid to areas of agricultural land and hedgerows that could potentially conceal smaller sett entrances.
- 2.13 The survey was carried out in accordance with the methods described in Surveying Badgers (Harris, Cresswell & Jeffries, 1989).

Full Bat Roost Assessment

External and Internal Building Inspection

- 2.14 The site contained four buildings (B1, B2, B3 & B4), that were inspected for bats or evidence indicating the presence of a bat roost, such as: droppings, feeding remains or fur oil staining around access/egress points to a potential roosting feature.
- 2.15 Features that would be suitable to support roosting bats (e.g. cracks in brickwork, gaps into wall cavities, soffit boxes and slipped or broken roof tiles etc.) were searched for on the exterior of the buildings. All safely accessible internal areas that would be suitable to support bats were inspected, with particular attention being paid to the floors, walls, roofing timbers, ledges and stored items in areas of the buildings where evidence of a bat roost might have accumulated, such as roof voids and cellars.
- 2.16 Where required, a ladder, high-powered torch, and endoscope were used to inspect areas of the buildings that would otherwise have been inaccessible.
- 2.17 Consideration was given to the species of bat and type of roost (summer, transitory, maternity, feeding perch, hibernation) that might be associated with any features or habitats identified.

Bat Presence or Likely Absence Assessment

- 2.18 The Bat Presence or Likely Absence Assessment consisted of a dusk emergence survey carried out on 30th May 2017.

- 2.19 The survey involved nocturnal observation of B1 for bats emerging from potential roosting features that were identified on the building during the External and Internal Building Inspection. Where recorded, bat activity was categorised as commuting, foraging or social.
- 2.20 Two surveyors were stood so that each potential bat roosting feature could be observed during the dusk survey.
- 2.21 Both surveyors were equipped with an Echo Meter Touch bat detector supported by an Apple iPad Mini 2 interface, on which all bat activity was recorded. Recordings were later analysed using Wildlife Acoustics' Kaleidoscope Pro software to aid the identification of species according to current guidelines (Russ, 2012).
- 2.22 The survey was carried out in the optimum survey season for bats (May-August, inclusive), and in suitable temperature and weather conditions. The survey began 15 minutes before sunset and continued until at least 1.5 hours after sunset.
- 2.23 All survey methods were in accordance with The Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines - 3rd Edition* (Collins, J. (ed.) 2016), and *The Bat Worker's Manual* (Mitchell-Jones and McLeish, 2004).

Great Crested Newt Habitat Suitability Index

- 2.24 The Site did not contain any standing water. However, the three ponds located within 500m of the Site were surveyed to evaluate their suitability to support great crested newts (GCN) on 26th May 2017. The evaluation was carried out in accordance with the Habitat Suitability Index (HSI) assessment methodology (Oldham et al. 2000).
- 2.25 The HSI is a measure of habitat suitability for great crested newts. The pond was assessed against the following ten Factors based on the field survey and desk study:
- ❖ **Factor 1:** geographic location within the UK;
 - ❖ **Factor 2:** pond surface area;
 - ❖ **Factor 3:** permanence;
 - ❖ **Factor 4:** water quality;
 - ❖ **Factor 5:** percentage of water <1m from bankside in shade;
 - ❖ **Factor 6:** presence/absence/degree of waterfowl;
 - ❖ **Factor 7:** presence/absence/degree of fish;

- ❖ **Factor 8:** number of ponds within 1km of survey pond;
- ❖ **Factor 9:** quality of terrestrial habitat; and,
- ❖ **Factor 10:** percentage of macrophyte cover.

2.26 The ten field scores are then converted to HSI scores, on a scale from 0.01 to 1, multiplied together and divided to the 10th root. The calculated value then falls between 0 and 1. Values close to 0 indicate unsuitable habitat and values close to 1 represent optimal habitat (Oldham et al. 2000). In general, ponds with high HSI scores are more likely to support great crested newt than those with low scores.

Limitations

2.27 There were not considered to be any significant limitations to the methodology described above. Therefore, it is considered that the findings of this report provide an accurate representation of the ecological value of the site and its potential to support protected and notable habitats and species.

3 RESULTS

Desk Study

Data Search

- 3.1 The data search reports had not been received from SxBRC at the time of production of this report.
- 3.2 *Statutory and Non-Statutory Designated Sites* – PENDING
- 3.3 *Ancient Woodland* – PENDING
- 3.4 *Habitats of Principal Importance* – PENDING

Table 1. Designated and Non-designated Conservation Sites within 1 km of the Site.

Site Name	Designation	Reasons for Designation		Location in relation to Site
		Habitats	Species	
				11

11 Red = adjacent to the Site or connected to the Site via continuous/homogeneous habitats; Amber = separate from the Site but connected via fragmented habitats; Green = distant from the Site, isolated by lack of connecting habitats or barriers to the dispersal of species between the sites.

3.5 Protected and Notable Species –

Table 2. Records of relevant protected and notable species returned by the data search

Species	Most recent record	Reason for consideration	Protected Status

- 3.6 The likelihood of protected species, including those listed in Table 1 above, being present within the Site is evaluated in Table 4 – Protected Species Assessment.

Phase 1 Habitat Survey

Habitats

- 3.7 Descriptions of the broad habitat types present within the Site, and their species compositions, are provided in Table 3, overleaf. Ecological features of the Site are mapped in Figure 4: SE1617-DR5232-C – Phase 1 Habitat Survey Map.

Table 3. Baseline Ecological Conditions - Habitats

Phase 1 Habitat Type	Area of cover (m/m ²)
Amenity grassland Well-managed amenity grassland lawns were located to the front and rear of the property. Species within the grass sward comprised: cooch grass <i>Elymus repens</i> and Yorkshire fog <i>Hulcus lanatus</i>. Herbaceous species comprised: frequent creeping cinquefoil and lesser birds-foot trefoil, occasional mouse-ear, common sorrel and common daisy and, rare occurrences of chickweed and creeping buttercup. A small area of rough amenity grassland was present in the northeast of the rear garden. Herbaceous species in this area of the Site comprised the introduced horticultural species rhubarb and three cornered onion, in addition to the native perennials curled dock, wood avens, field bindweed, wavy bittercress, greater plantain and dandelion sp.	~3,720m² (60% of the Site)
Buildings The Site contained four buildings (B1-B4). A description of the type and structure of each building is provided below. Any habitats within any building that have potential to support a protected or notable species are discussed in more detail in the relevant sections of Table 4 – Protected Species Assessment. <i>B1 (Main House)</i> – 1 Sea Drive was a detached, two-storey residence with a multiple pitched and hipped roof. The roof was laid with plain clay field tiles, domed ridge tiles and bonnet hip tiles sealed with mortar. The building had one tile-hung dormer and three roof-lights on the south aspect, and one tile-hung dormer with its own pitched and hipped roof on the west aspect. The eaves of the roof were tightly sealed with PVC soffit boxes throughout. All elevations were rendered and whitewashed, with no gaps or cracks present. A single storey, flat-roofed annex was present on the south elevation, which housed the front door of the property. Windows and doors were PVC throughout and set directly in to the rendered elevations. <i>B2 (Greenhouse)</i> – A traditional steel-framed and glass sealed greenhouse. <i>B3 (Summerhouse 1)</i> – A prefabricated single skin timber summerhouse with a pitched roof lined with bitumen felt.	~186m² (3% of the Site)

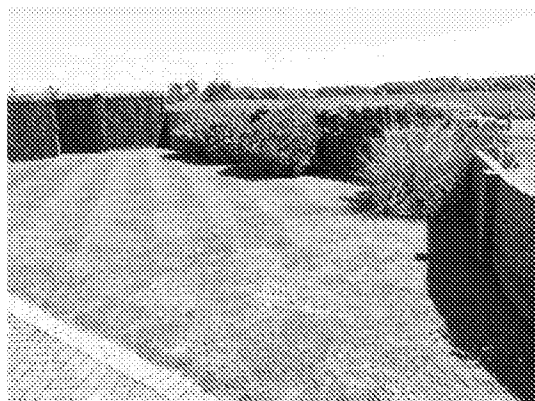
Table 3. Baseline Ecological Conditions - Habitats

Phase 1 Habitat Type	Area of cover (m/m ²)
<i>B4 (Summerhouse 2)</i> – An octagonal, prefabricated, steel-framed and glass sealed summerhouse with a flat, lead lined roof.	
Hard standing A hard standing driveway, comprised of brickwork paving, dominated the south of the site where vehicular access was provided from Sea Drive. Additional hard standing, comprising limestone paving, was present to the rear of the property where it provided a footpath along the north elevation of the residence and through the west and north of the rear garden.	~1,550m ² (25% of the Site)
Hedgerow (in-tact, species-poor) The Site contained a single privet <i>Ligustrum vulgare</i> hedgerow which lay on the shared west and north boundaries of the Site.	~186m ² (3% of the Site)
Planted introduced shrubs Limited areas of planted introduced shrubs were present throughout the site. Where they occurred, these were isolated and well maintained. Species comprised frequent bay laurel <i>Laurus nobilis</i> , <i>Euonymus</i> and <i>Hydrangea</i> , with occasional <i>Lonicera</i> cultivars, pampas grass <i>Cortaderia selloana</i> and a single fig <i>Ficus microcarpa</i> . Planted beds on the western boundary of the site, in the front garden, contained various horticultural flowers and <i>Cotoneaster</i> sp.	N/A

Figure 3. Photographs – Phase 1 Habitat Survey



Photograph 1. Amenity grassland in the north of the Site, facing east



Photograph 2. Amenity grassland with planted introduced shrubs in the southeast of the Site, facing northeast.



Photograph 3. B1, 1 Sea Drive, south elevation.



Photograph 4. B1, 1 Sea Drive, north elevation.



Photograph 5. B2, Greenhouse, facing west.

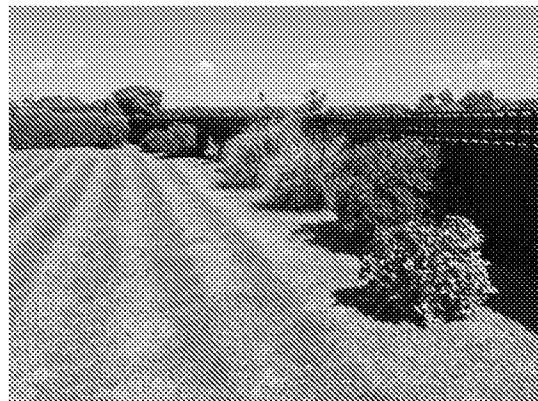


Photograph 6. Hard standing paving in the southwest of the Site, facing southwest.

Figure 3. Photographs – Phase 1 Habitat Survey

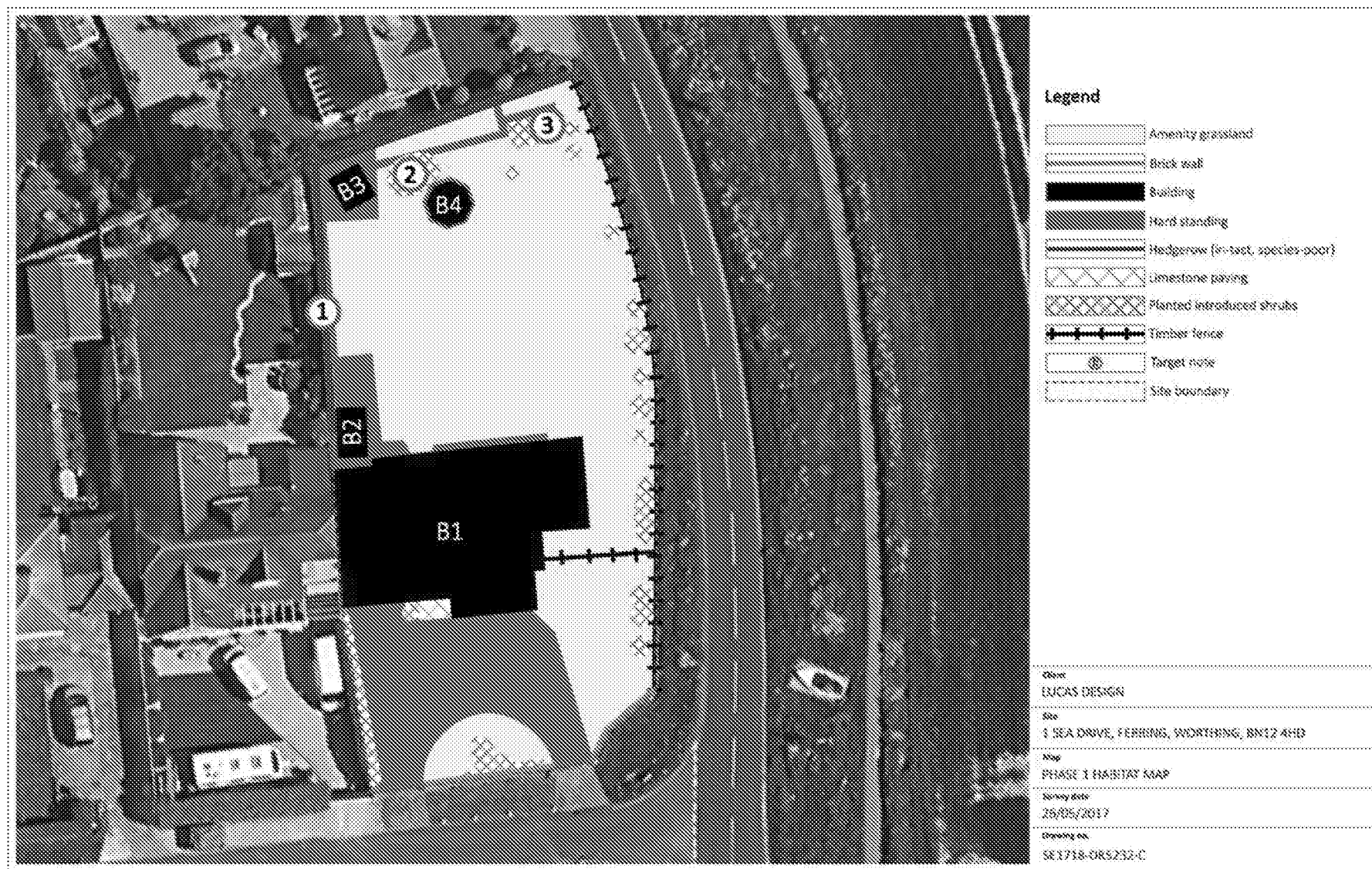


Photograph 7. Intact, species-poor hedgerow on the west site boundary, facing northwest.



Photograph 8. Planted introduced shrubs on the east site boundary, facing north-northeast.

Figure 4. Phase 1 Habitat Plan



Target Notes

3.8 Points of ecological interest are target noted on the above Extended Phase 1 Habitat Maps. The target note numbers correspond to the following points of ecological interest within the Site:

- ❖ **TN1:** Dense privet hedge with moderate potential to support breeding birds;
- ❖ **TN2:** Mature bay laurel with moderate potential to support breeding birds; and,
- ❖ **TN3:** Topiary privet hedge with moderate potential to support breeding birds.

Great Crested Newt Habitat Suitability Index

- 3.9 Three ponds were located within a 500m radius of the Site. One pond was not found and is therefore considered dry/absent. The remaining two ponds were surveyed to determine their suitability to support great crested newts. Details of these ponds, together with their HSI values, are shown in Figure 6, below.

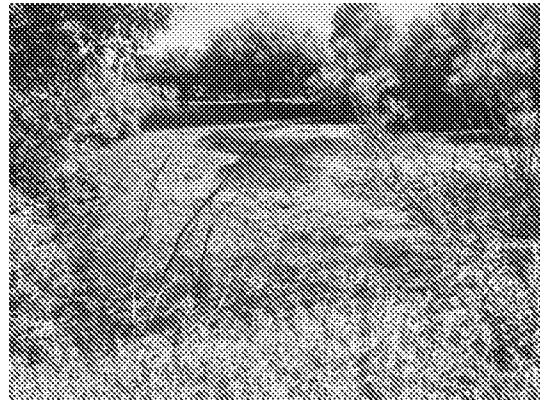
Figure 6. Great crested newt HSI target pond



Pond 1. 241m northeast

HSI Value: 0.57

Pond suitability: Below Average



Pond 2. 374m northwest

HSI Value: 0.31

Pond suitability: Poor

POND NOT FOUND

Pond 3. 427m northwest

HSI Value: N/A

Pond suitability: N/A

Building Inspection for Bats

B1 – 1 Sea Drive

3.10 No evidence of roosting bats was recorded during the inspection of B1. Features with potential to support roosting bats were recorded on the exterior/interior of the building as follows:

- ✧ A low number of gaps beneath hanging tiles on the single-storey, flat-roofed extension on the south elevation;
- ✧ A low number of gaps beneath lifted field tiles on the north and south aspects of the pitched roof;
- ✧ Three drainage gaps in the parapet pitched roof above the side extension on the east elevation;
- ✧ Three crevices beneath lifted lead flashing at the base of the chimney stack on the west elevation; and,
- ✧ A single gap where mortar is missing between terminal field tiles on the east gable end of the building.

3.11 B1 was found to contain a low number of features with low potential to support roosting bats. The building is situated close to suitable commuting and foraging habitat for bats, and... **DATA SEARCH RECORDS PENDING. B1 was therefore assessed as having Low potential to support roosting bats.**

3.12 One dusk bat emergence survey was carried out to determine the presence of likely absence of bats within the building and the results of this survey are provided in the Bat Presence or Likely Absence section, below.

B2, B3 and B4

3.13 No bats, evidence of roosting bats, or features with potential to support roosting bats were recorded during the inspection of B2, B3 or B4. **B2, B3 and B4 were therefore assessed as having Negligible potential to support roosting bats.**

3.14 No further surveys of these buildings were carried out.

Bat Presence or Likely Absence Assessment

Dusk Emergence Survey 30th May 2017

- 3.15 Sunset on 30th May was at 21:04. The survey began at 20:49 and finished at 22:34. Weather conditions were suitable: dry, with a minimum ambient air temperature of 14°C, wind at Beaufort 2¹², and 30% cloud cover.
- 3.16 No bats were recorded emerging from B1 during the survey.
- 3.17 One bat species, common pipistrelle, was recorded in flight within the grounds of the Site during the survey. A summary of recorded behaviour for this species is provided below:
- 3.18 **Common pipistrelle** was recorded infrequently during the survey. The first record of this species was at 21:44 (40 minutes after sunset), in the north of the Site. This record falls outside the anticipated emergence time for this species, indicating that the bat was not roosting close to, the Site or had not recently emerged from its roost. This species foraged briefly over the front and rear garden between 21:51 and 21:52.
- 3.19 No further bat activity was recorded during the survey.

¹² The Beaufort scale of wind velocity: 0 = Calm, 1 = Light Air, 2 = Light Breeze, 3 = Gentle Breeze, 4 = Moderate Breeze, 5 = Fresh Breeze, 6 = Strong Breeze, 7 = Near Gale, 8 = Gale, 9 = Strong Gale, 10 = Storm, 11 = Violent Storm, = 12 Hurricane (<http://www.metoffice.gov.uk>).

Protected Species Assessment

- 3.20 A preliminary assessment of the potential for protected species to be present within the Site, based on the findings of the desk study and site survey, is provided in Table 4, below. The likelihood of Species of Principal Importance to Biodiversity in the UK, and other species of local conservation interest, occurring within the Site is also provided.

Table 4. Protected Species Assessment

Species	Reason for Consideration	Likelihood of Occurrence
Badgers	Presence of suitable habitat for foraging and sett creation	Negligible (foraging and sett creation) – No badger field signs, such as footprints, foraging holes or dung pits, were recorded during the survey. No evidence of badger sett creation or foraging was recorded within the Site or within suitable habitats within a 30 m radius of the Site during the survey. DATA SEARCH RECORDS PENDING
Bats	Presence of potential roosting and foraging habitats AND relevant records returned by the data search.	Negligible <i>All buildings</i> - Features with potential to support roosting bats were recorded on B1 during the building inspection. All buildings were located close to moderate quality bat foraging and commuting habitats (agricultural land, residential gardens, nearby woodland) and records of XXXX bat species were returned by the data search. B1 was subject to one dusk emergence survey in order to determine the presence or likely absence of bat roosts within it. As no bats were recorded emerging from the building during the survey, and below-average bat activity was recorded in the vicinity of the Site during the surveys, the building was assessed as having Negligible potential to support roosting bats. DATA SEARCH RECORDS PENDING

Table 4. Protected Species Assessment

Species	Reason for Consideration	Likelihood of Occurrence
Breeding birds	Presence of potential nesting habitat.	Moderate – The dense, privet hedges on the north and west site boundaries, the mature bay laurel in the centre of the Site and the topiary bay laurel in the northeast of the Site had moderate potential to support nests of one bird Species of Principal Importance, House Sparrow <i>Passer domesticus</i>, which was recorded in abundance during the survey, in addition to nests of common and widespread passerine bird species such as robin <i>Erithacus rubecula</i> and wren <i>Troglodytes troglodytes</i>. The buildings within the Site had negligible potential to support the House Sparrow. The hedgerow and introduced shrubs provide suitable habitats to support single or low numbers of these species during the breeding season. No habitats with potential to support Schedule 1 bird species were recorded within the Site. DATA SEARCH RECORDS PENDING.
Great crested newt	Presence of potential nesting and commuting habitat (woodland and hedgerows).	Negligible – The Site contained no suitable terrestrial or aquatic habitats to support great crested newts. One of the three freshwater water bodies within 500m of the Site had permanently dried up/been removed, the remaining two freshwater water bodies were evaluated as having Poor and Below Average suitability to support great crested newt under the Habitat Suitability Index. Main roads in the vicinity of the Site are considered to comprise a significant barrier to the dispersal of this species in to the Site. DATA SEARCH RECORDS PENDING.

4 EVALUATION

Habitats

- 4.1 No statutory or non-statutory designations apply to the Site. The habitats found within the Site are limited in extent, and quality, and are populated by low numbers of common and self-seeded plants that are typical of well-managed, urban areas.
- 4.2 **Therefore, the habitats found within the Site have value within the Site only.**

Protected and Notable Species

Breeding birds

- 4.3 The dense, privet hedges on the north and west site boundaries, the mature bay laurel in the centre of the Site and the topiary bay laurel in the northeast of the Site had moderate potential to support nests of one bird Species of Principal Importance, House Sparrow, in addition to nests of common and widespread passerine bird species. Owing to the limited extent of the habitats present within the Site, the Site had capacity to support low numbers of common and widespread breeding birds only. No habitats with potential to support Schedule 1 bird species were recorded within the Site.
- 4.4 **The value of the Site to breeding birds would therefore be limited to within the Site only.**

Other Protected and Notable Species

- 4.5 The habitats on site had negligible potential to support any other protected or notable species.

Potential Impacts of the Development

Protected and notable Habitats and Species

- 4.6 Table 5, below, provides a summary of the potential impacts of the proposed development on the ecological receptors that are present/potentially present within the Site, *without further mitigation or compensation measures*.

Table 5. Potential impacts of the development

Proposed Activity	Ecological Receptor	Potential Impacts
Removal of mature bay laurel in the centre of the Site and the topiary bay laurel in the northeast of the Site	Breeding birds	Moderate potential to result in the unlawful destruction of any active bird nests present within these habitats, if site clearance is carried out during the nesting season (March-August).

5 RECOMMENDATIONS

Pre-commencement Protected Species Surveys

Breeding bird survey (*only required if site clearance scheduled for March – August*)

- 5.1 If clearance of vegetation with potential to support nesting birds (i.e. the mature bay laurel in the centre of the Site and the topiary bay laurel in the northeast of the Site) is scheduled to take place during the bird nesting season (March to August, inclusive), then a breeding bird survey must be carried out in order to determine the presence or likely absence of active bird nests within these habitats prior to their removal.
- 5.2 The surveys would comprise a single pre-dawn bird survey carried out within 48 hours of the proposed site clearance. The survey would involve monitoring habitats within the Site from a suitable vantage point for two hours before sunrise to watch for activity that would indicate the presence of active bird nests (such as territorial calling, delivery of food, transport of nesting materials, early records of birds leaving nests in introduced shrubs).
- 5.3 Following the survey, a nesting bird check would be carried out, comprising an inspection of any suitable nesting features within the Site for the presence of nesting birds.
- 5.4 If an active birds nest were found, an exclusion zone would need to be established to prohibit works in the vicinity until a suitably experienced ecologist verifies that the chicks have fledged the nest.
- 5.5 Please see Section 5 'Mitigation', below, for an alternative contingency to avoid unlawful impacts to nesting birds.

Mitigation

Timing to avoid the bird nesting season

- 5.6 The clearance of any habitats with potential to support nesting birds (i.e. the mature bay laurel in the centre of the Site and the topiary bay laurel in the northeast of the Site), should be undertaken outside of the main nesting season for birds, which typically runs from **March to August**, inclusive. This will ensure that no active bird nests are present within the Site at the time of the works and, therefore, that the development will not result in unlawful impacts to breeding birds.

REFERENCES

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Appendix 1:

Relevant Legislation and Planning Policy

Legislation

Breeding birds

- a) All birds, and their active nests, are protected under Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended). Under this legislative instrument it is an offence to:
- ✧ Intentionally kill, injure or take any wild bird;
 - ✧ Intentionally take, damage or destroy the nest of any wild bird while it is being used or built; and/or,
 - ✧ Intentionally take or destroy a wild birds' egg.

Species of Principal Importance for the Conservation of Biodiversity

- b) Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 requires the Secretary of State to publish a list of Habitats and Species that are of Principal Importance for the conservation of Biodiversity in England. The Countryside Rights of Way Act (2000) makes it legally incumbent upon the Local Planning Authority to have regard to the conservation of these habitats and species.

The site has high potential to support bat species that may include pipistrelle and brown long-eared bat, high potential to support grass snake, slow-worm and stag beetle, and moderate potential to support hazel dormouse.

Therefore, the recommendations for further surveys and mitigation measures provided in Section 5 (Recommendations) of this report must be implemented in order to avoid adverse impacts to these species.

Planning Policy

National

- c) The National Planning Policy Framework (NPPF, 2012) sets out the Government's planning policies for England and how these are expected to be applied. The key principals within the NPPF that relate to the preservation of biodiversity include:
- ✧ Minimising impacts on biodiversity and providing net gains in biodiversity where possible; and,
 - ✧ Promoting the protection and recovery of priority species populations, linked to national and local targets.

Local (District Level)

The Worthing Borough Council Core Strategy, adopted in April 2011 (Worthing Borough Council, 2011) - details the following policy relevant to ecology and the proposed development site.

Chapter 4: The Vision and Strategic Objectives

Strategic Objective 1 - Protect our natural environment and address climate change

New development will be expected to avoid or, where not practical, mitigate any adverse impact on flora and fauna and environmentally sensitive areas. The protection and enhancement of environmental assets will be integral to ensuring a high quality of life. Opportunities will be sought to increase the biodiversity of the town, expand the green network and protect and enhance the coastal strip.

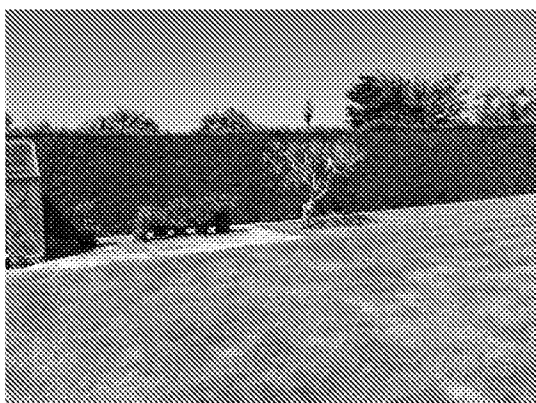
Policy 13 - The Natural Environment and Landscape Character

- 8.2 The strategic objectives of the Core Strategy set out the need to ensure that the quality of the natural environment is protected, maintained and enhanced for current and future generations. Conserving and enhancing the natural and built environment are important aspects of the planning process and this has been endorsed through the consultation process which has highlighted the value and importance of the town's natural assets.
- 8.3 Although Worthing is primarily an urban area it does contain important greenfield areas to the east, west and north of the town. Enabling continued sustainable growth and development are important factors in securing Worthing's economic growth and vitality. However, as pressure for development grows it remains important to protect and where possible, enhance areas that are important and valued for their nature, flora, fauna, geological and biodiversity conservation.

Appendix 2:

Target Note Photographs

Figure 1. Photographs – Target Notes



TN1: Dense privet hedge with moderate potential to support breeding birds between March and August, inclusive.



TN2: Mature bay laurel with moderate potential to support breeding birds between March and August, inclusive.



TN3: Topiary privet hedge with moderate potential to support breeding birds between March and August, inclusive.