

RICHARD HAYWARD PROPERTIES

LAND AT ELBA CRESCENT, JERSEY MARINE

STAGE 2 ECOLOGY REPORT



AUGUST 2022

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Document Ref: E21105802/ Doc 01 – 30 August 2022

Issue	Revision	Stage	Date	Prepared by	Approved by	Signed
1	-	Draft	30 August 2022	Ben Satherley (Ecologist)	Dr M Watts (Director)	

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SUMMARY

Soltys Brewster Ecology were commissioned by Richard Hayward Properties to undertake stage 2 bat and reptile surveys at a parcel of land adjacent to Elba Crescent near Jersey Marine, Neath Port Talbot. Residential development has been proposed at the site and further survey work is required in order to inform a planning application. This report presents the findings of the stage 2 surveys and also includes recommendations on any ecological constraints/opportunities associated with the proposed works in relation to bats and reptiles.

Bat activity surveys revealed that the site is used by very few commuting/foraging bats with species limited to Common Pipistrelle, Soprano Pipistrelle and Noctule, all of which are known to be relatively tolerant to artificial light. The majority of bat activity at the site was associated with a treeline marking the southern boundary. This treeline is already subject to artificial light from existing lighting columns along Elba Crescent Road, and so any additional lighting required at the site is unlikely to result in a negative effect on locally foraging/commuting bat populations.

A dusk emergence survey found no evidence to suggest that the derelict guard house was currently or had been recently used by roosting bats and so no licence would be required prior to any works taking place to this building. There are therefore no timing or other implications associated with this building's removal although a precautionary approach to demolition is described in the current report.

Targeted reptile surveys confirmed the likely absence of reptiles within the habitats present at the site, with no reptiles found on any of the seven survey visits. As such no particular mitigation measures for reptiles would be required as part of any future development at the site.

1.0 INTRODUCTION

- 1.1. Soltys Brewster Ecology (SBE) were commissioned by Richard Hayward Properties to undertake a series of stage 2 ecological surveys for bats and reptiles at a parcel of land found adjacent to Elba Crescent Road near Jersey Marine, Neath Port Talbot (central grid reference: SS 69872 93079). The purpose of the surveys were to inform a planning application for proposed residential development at the site, although no layout plans were available at the time of writing.
- 1.2. The existing baseline ecological conditions at the site originally established via a combination of desk-based consultation and Extended Phase 1 Habitat Survey carried out in October 2021 (SBE, 2021). The survey revealed a range of habitats at the application site, most of which are typically associated with colonised brownfield land, including hardstanding, dense/continuous scrub, grassland, Bracken and early colonising vegetation (see Appendix I). The habitats and features present at the site were considered capable of supporting protected or otherwise notable fauna including bats and reptiles, for which records of both were known to exist in the local area. A derelict guard house found near the southern site boundary was also considered to hold Low Potential of supporting roosting bats.
- 1.3. The current report presents the findings of the targeted bat and reptile surveys undertaken at the site between April and August 2022 to identify the presence/absence of bats and reptiles. The report also includes recommendations on any ecological constraints/opportunities associated with the proposed development works in relation to bats and reptiles. The current report should be read in conjunction with the Extended Phase I Habitat Survey (SBE, 2021) to provide a comprehensive overview of ecological conditions at the site.

2.0 METHODOLOGY

Bat Activity Surveys

2.1. A series of bat activity surveys were undertaken between April and August 2022 within the proposed site boundary, to provide an indication of general levels of bat activity across the site and identify bat species present in the area. The surveys involved both walked transects and automated monitoring sessions and were based on best practice guidelines as described by the Bat Conservation Trust (BCT, 2016). A guard house located near the southern site boundary was also considered to hold Low Potential to support roosting bats and so an emergence survey of this building was undertaken in June 2022 with the aim of identifying any potential bat roosts.

Walked Transect Surveys

2.2. To identify areas of bat activity on site, walked transects were undertaken. These covered all areas of the site easily accessible on foot and generally followed linear features (e.g. treelines, scrub margins and boundaries) and paths/tracks across the site. The three walked dusk transects took place between April and July 2022 under suitable weather conditions (dry, temperature > 10°C, light wind, see Table 1). Each survey was carried out by two suitably experienced ecologists¹ equipped with broadband ultrasonic bat detectors (Bat Box Duet, Echo Meter Touch 2 or Peersonic) and MP3 recording devices to allow in field and office-based identification of bat calls. Calls were identified in the field or by using computer-based sonogram analysis software (Analog Insight). The dusk activity surveys commenced at sunset and continued for up to 120 minutes into the night, based on best practice guidelines (BCT, 2016). On each visit, two transect routes (see Appendix II) along with fixed 'spot count' observations were followed, each by a single surveyor.

Table 1 – Conditions for Walked Transect Surveys

Visit	Temperature (°C)	Weather Conditions	Sunset / Start Time	End Time
20/04/2022	15	Cloudy, dry, light winds.	20:20	22:20
13/06/2022	14	Clear skies, dry, no winds.	21:34	23:34
25/07/2022	16	Cloudy, dry, light winds.	21:15	23:15

¹ Full and Associate Members of the Chartered Institute of Ecology & Environmental Management (CIEEM) with experience of bat survey work

Automated Monitoring Surveys

- 2.3. To supplement the walked transect surveys, three monitoring sessions involving 2no. automated detectors (Anabat Express or Swift units) left in-situ for 5-7 consecutive nights were undertaken between May and August 2022. The Anabats were deployed at two different locations across the site during the monitoring period of May – August, to provide information regarding bat species diversity and distribution across the site. Locations of the fixed Anabats can be seen in Appendix II. All recorded calls were identified using computer-based sonogram analysis software (Analook Insight).

Building Emergence Survey

- 2.4. The 2021 Extended Phase 1 Habitat Survey identified a derelict guard house on the southern site boundary that was considered to hold Low Potential of supporting roosting bats. A single dusk emergence survey was subsequently undertaken at this building on 23rd June 2022 under suitable weather conditions (19°C, clear skies, dry, little winds), with the aim of establishing the likely presence/absence and species/type of bat roost(s). The emergence survey, which commenced 15 minutes before sunset and extended for a minimum of 90 minutes post sunset, was undertaken by a team of two suitably experienced surveyors², including 1no. bat licence holder. Surveyors were positioned strategically around the building to allow observation of any potential access/entry points for bats. As with the walked transect surveys, the emergence survey was conducted using broad-band bat detectors (Peersonic or Bat Box Duet) with suitable recording equipment. All calls were recorded and bat species either identified in the field or using computer-based sonogram analysis software (Anabat Insight).

Reptile Survey

- 2.5. The Extended Phase I Habitat survey identified that the mosaic of scrub, grassland, Bracken, early colonising vegetation and piles of refugia at the site could potentially support common reptiles such as Slow Worm *Anguis fragilis* and Common Lizard *Zootoca vivipara*, with records of Common Lizard known to exist than 500m from the site boundaries. Based on the availability of potentially suitable habitat across the site, a targeted reptile presence/absence survey was undertaken based on recommendations described by Froglife (1999). This involved the deployment and subsequent checking of artificial refugia. Refugia predominantly consisted of bitumen roofing felt (0.5 x 0.5 & 0.5 x 1.0m squares) in order to offer attractive shelter and basking opportunities for reptile species thought to be present at the site.
- 2.6. A total of 30no. refugia were deployed at the site on 8th April 2022. Reptile refugia were placed paying close attention to suitable habitat features e.g. scrub/grassland margins and anywhere vegetation offered suitable basking opportunities/lighting conditions. Following a settling in period of eighteen days, the refugia were

² Licence number: S088259/1
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checked on seven subsequent occasions for basking and sheltering reptiles. Reptile surveys were conducted between 27th April 2022 (check 1) and 8th June 2022 (check 7); under suitable environmental conditions as defined by Froglife (1999), i.e. little or no rain/wind and temperature between 9 and 18 °C.

3.0 RESULTS

Bat Activity Surveys

- 3.1 The species recorded during the bat activity transects and their locations are displayed in Appendix II. In general, bat activity levels across the site were very low, with the greatest amount of activity (highest number of bat passes/observations) associated with a treeline marking the site's southern boundary. Small amounts of activity were also associated with the areas of dense and scattered scrub found in the central regions of the site, while the fewest number of bats were observed/recorded in the northern extent of the site – this area was exposed to greater illumination in comparison to the rest of the site due to existing artificial lighting columns, with roads and hard standing the predominant land use. Weather conditions were deemed of no constraint throughout the series of walked transect surveys (see Table 1).

Transects Survey – 20th April 2022

- 3.2 A total of three bat species including Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus* and Noctule *Nyctalus noctule* were identified during the walked transect survey on 20th April 2022. A maximum number of twelve observations and notable passes was recorded during the survey, with the majority of the activity associated foraging pipistrelles in the central and southern regions of the site. It should be noted that the number of bat passes does not necessarily correlate with bat numbers. The first bat recorded was at 20:35, fifteen minutes after sunset (20:20 hours) and was seen foraging along the treeline marking the site's southern boundary.

Transect Survey – 14th June 2022

- 3.3 Common Pipistrelle represented the only species seen/heard at the site during the transect survey on 14th June 2022, with five bats recorded in total. This included an individual bat seen commuting along the southern treeline at 22:42, approximately fifty-two minutes after sunset (21:34 hours). All other bats recorded that survey were not seen by the surveyors but were instead picked up by detectors.

Transect Survey – 25th July 2022

- 3.4 A total of six bat observations were seen during the third walked transect survey, all of which belonged to either Common Pipistrelle or Noctule. Once again, most of the activity was attributed to bats foraging along the southern boundary treeline and throughout the parcel of scrub found in the central regions of the site. The first bat recorded was at 21:33, approximately eighteen minutes after sunset (21:15 hours).

Automated Detector Surveys

- 3.5 In addition to the walked transect surveys, three monitoring sessions were conducted using two automated bat detectors (Anabat Express or Swift units) deployed at two different locations at the site (see Appendix II for detector locations). They were deployed for 5-7 consecutive nights on each occasion as follows; 4th May – 9th May, 13th June – 19th June and 18th August – 23rd August 2022. Recordings were later identified to species level where possible via desktop bat analysis software (Anabat Insight) and a description of the results are provided in Table 2 below.
- 3.6 The automated detectors recorded a minimum of three species over the course of the three survey sessions. As noted during the walked transects, bat activity levels were very low across the site with very few bat calls detected in either of the automated detector positions. It should be noted that the number of bat passes included in the summary table do not necessarily relate to the number of bats present – for example a high number of passes can be associated with a single (or small number) of bats regularly foraging at a given location.

Table 2 – Automated Bat Detector Survey Results

Species (passes recorded)	May		June		August		Total
	Western Boundary	Southern Boundary	Western Boundary	Southern Boundary	Western Boundary	Southern Boundary	
Common Pipistrelle	0	5	2	0	0	0	7
Soprano Pipistrelle	0	1	0	0	0	1	2
Noctule	1	4	0	1	1	6	13

Dusk Emergence Survey

- 3.7 The dusk emergence survey undertaken on 23rd June 2022 confirmed the likely absence of any bat roosts within the derelict guard house with no bats seen leaving any of the building's features/elevations. Similarity to the transect surveys, several Common Pipistrelles were observed commuting along the southern boundary treeline and foraging above the central areas of scrub vegetation.

Reptile Survey

3.8 The targeted reptile surveys carried out at the site between April and June 2022 established the likely absence of reptiles within the habitats at the site with no reptiles found on any of the seven survey visits (see Table 3).

Table 3 – Reptile Presence/Absence Survey Results 2022

Visit	Date	Time (from)	Temperature (°C)	Weather	Slow Worm			Common Lizard			Total
					Female	Male	Juv	Female	Male	Juv	
1	27/04/2022	09:00	12	Sunny, breezy	0	0	0	0	0	0	0
2	04/05/2022	11:00	16	Sunny, still	0	0	0	0	0	0	0
3	10/05/2022	11:00	15	Sunny, breezy	0	0	0	0	0	0	0
4	17/05/2022	09:00	15	Overcast, breezy	0	0	0	0	0	0	0
5	26/05/2022	11:00	15	Sunny, breezy	0	0	0	0	0	0	0
6	07/06/2022	10:00	15	Overcast, still	0	0	0	0	0	0	0
7	08/06/2022	10:00	16	Sunny, still	0	0	0	0	0	0	0

4.0 CONCLUSIONS AND RECOMMENDATIONS

Bat Activity Surveys

- 4.1 The bat activity surveys demonstrated that the site is used by a very small number of foraging and commuting bats, with species limited to Common Pipistrelle, Soprano Pipistrelle and Noctule – all of these species are considered to be relatively tolerant to artificial lighting. The majority of bat activity was observed along a treeline marking the southern site boundary, with individual or small numbers of bats also seen foraging above the scrub vegetation found in the central regions of the site. These findings matched the findings of the automated monitoring surveys which also identified a higher volume of bat calls along southern boundary. Any future development at the site should seek to limit its potential impact on local bats by retaining this treeline as part of any final layout plan. However, as this treeline is already subject to artificial lighting from existing lighting columns along Elba Crescent Road, any additional lighting required along this boundary is considered unlikely of causing any significant negative effects on locally foraging/commuting bat populations.
- 4.2 The dusk emergence survey found no evidence to suggest that the derelict guard house was currently or had been recently used by roosting bats and so no licence would be required prior to any construction works taking place to this building (e.g. its destruction/removal). There are therefore no timing or other implications associated with this building's removal. Absence of bats is very difficult to prove, and many bat species are itinerant in nature and will often make use of multiple roosts during the course of the active months (typically April to October). On a precautionary basis, the roof covering and fascia should be removed using hand held tools (e.g. crow bar) in the first instance to expose the top of the wall and any associated cavity. In the unlikely event that a bat were discovered once works have begun, all work in the area will cease immediately and the project ecologist or Natural Resources Wales (NRW) contacted for advice on how to proceed.

Reptiles

- 4.3 The surveys established the likely absence of any common reptile species at the proposed site, with no reptiles recorded during any of the seven survey visits. Based on the survey findings it is unlikely that reptiles are present within the habitats at the proposed site and as such no particular mitigation measures for reptiles would be required as part of any future development.

Other Considerations

- 4.4 As per the 2021 Extended Phase 1 Habitat survey recommendations, any future development layout should seek to retain some of the relatively diverse grassland found in the western extent of the site. This area could be retained and managed as an informal open space for use by local residents.

REFERENCES

Bat Conservation Trust (2016). *Bat Surveys for Professional Ecologists – Good Practice Guidelines*. Bat Conservation Trust, London.

Froglife. (1999). *Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife Advice Sheet 10. Froglife. Halesworth.

Gwent Wildlife Trust (2004) *Guidelines for the Selection of Wildlife Sites in South Wales*. ISBN 0 9548517 0 6

Soltys Brewster Ecology (2021). *Land at Elba Crescent, Jersey Marine. Preliminary Ecological Appraisal*. Document Reference: E21105801/DOC 01 – 02 November 2021.

Neath Port Talbot County Borough Council (2016) Neath Port Talbot CBC Local Development Plan (LDP). 2011 – 2026.

APPENDIX I EXTENDED PHASE 1 HABITAT PLAN



Key

- Target Notes
- Site Boundary
- A2.1 Dense/Continuous Scrub
- A2.2 Scattered Scrub
- A3.1 Scattered Broad-leaved Trees
- A3.3 Line of Mixed Trees
- B6 Poor Semi-improved Grassland
- C1.1 Continuous Bracken
- J1.3 Ephemeral Short Perennial
- J2.4 Fence
- J3.6 Buildings
- J5 Other Habitat (Grassland)
- Hardstanding
- Wet Ditch



Richard Hayward Properties

Land at Elba Crescent, Jersey Marine

Extended Phase 1 Habitat Plan

E21105801 / DR01

BS

MW

21 October 2021

PRELIMINARY

PLANNING

DESIGN

TENDER

CONSTRUCTION

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APPENDIX II BAT ACTIVITY RESULTS



- Site Boundary
- - - Bat Transect 1
- - - Bat Transect 2
- ★ Static Position

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Bat Activity Results

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30 August 2022

PRELIMINARY	PLANNING	DESIGN	TENDER	CONSTRUCTION
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