

**Land North of Orchard Cottage
Honey Hill
Wokingham**

Reptile Survey

Report ref.: R2671_RS_b

Report Quality Control Information	
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CONTENTS PAGE

1	EXECUTIVE SUMMARY	3
2	INTRODUCTION	4
2.1	Project Background.....	4
2.2	Site Description	4
2.3	Report Objectives.....	4
3	LEGISLATION AND POLICY	5
3.1	Relevant Legislation	5
3.2	Planning Policy.....	5
4	SURVEY METHODS	6
4.1	Reptile Survey.....	6
4.2	Survey Limitations and Report Validity	6
5	SURVEY FINDINGS	7
5.1	Overview	7
5.2	Reptile Survey	7
6	DISCUSSION	8
6.1	Evaluation of Population Size and Site Importance.....	8
6.2	Impact Assessment.....	8
7	MITIGATION STRATEGY	10
7.1	Reptile Receptor Area	10
7.2	Mitigation Measures	11
7.3	Persons Responsible for Implementation.....	12
8	REFERENCES	13
	APPENDIX 1 – PROPOSED SITE LAYOUT	14
	APPENDIX 2 – RAW REPTILE SURVEY DATA.....	15
	APPENDIX 3 – REPTILE HIBERNACULUM SPECIFICATIONS.....	16
	APPENDIX 4 – REPTILE EXCLUSION FENCING SPECIFICATIONS	17

1 EXECUTIVE SUMMARY

- 1.1.1 John Wenman Ecological Consultancy LLP was instructed by Martin Kemball to undertake a Reptile Survey at land to the north of Orchard Cottage to accompany a planning application seeking consent for the erection of a new residential dwelling with associated access and landscaping proposals. The Reptile Survey follows a Preliminary Ecological Appraisal (PEA) prepared in April 2024. The PEA included a desk study that returned recent records within a 1-kilometre radius of the site and a walkover survey that identified suitable reptile habitat.
- 1.1.2 The site is approximately 1.03 hectares of land to the north of Orchard Cottage, Honey Hill in Wokingham and the application (i.e. red line boundary) covers approximately 0.43 hectares of the site. The site is a disused plot of land that sits between Hatch Ride and Honey Hill; it is currently accessible through Orchard Cottage and is predominantly neglected open habitat on sandy acidic soil sitting between woodland.
- 1.1.3 A total of 21 artificial refugia were set out on the 7th May 2024 and left to bed in for two weeks before surveying commenced. The artificial refugia were checked by Conor Watson ACIEEM on seven occasions between the 24th May and 21st June 2024.
- 1.1.4 A peak count of 30 sub-adult and adult slow-worms is consistent with the site supporting an 'exceptional' population and a peak count of four sub-adult grass snakes (*N. helvetica*) is consistent with the site supporting a 'low' population. The site meets two criteria to qualify for the Key Reptile Site Register by supporting an 'exceptional' population of one species and by supporting an assemblage of species that scores 4.
- 1.1.5 In the absence of mitigation, the site clearance and ground works required to facilitate the development proposals are likely to result in killing or injuring slow-worms (*A. fragilis*) and grass snakes (*N. helvetica*). In order to prevent the contravention of legislation protecting these reptile species, a programme of mitigation measures will be implemented as set out in **Section 7**.
- 1.1.6 The development proposals have scope to retain approximately 0.6 hectares of suitable reptile habitat on site (beyond the application boundary), i.e 58% of the total reptile habitat currently used by the populations. Therefore, an in-situ approach for the receptor site will be adopted for the welfare interest of the slow-worms and grass snakes and to help achieve the objective of no net loss to the local conservation statuses of these species – refer to the mitigation strategy set out in **Section 7**.
- 1.1.7 This report contains information regarding mobile species so it will likely be valid for 12 months only.

2 INTRODUCTION

2.1 Project Background

2.1.1 John Wenman Ecological Consultancy LLP was instructed by Martin Kemball to undertake a Reptile Survey at land to the north of Orchard Cottage to accompany a planning application to be submitted to Wokingham Borough Council seeking consent for the erection of a new residential dwelling with associated access and landscaping proposals (refer to proposed site layout in **Appendix 1**).

2.1.2 The Reptile Survey follows a Preliminary Ecological Appraisal (PEA) prepared by John Wenman Ecological Consultancy LLP in April 2024 (Report ref.: R2671_PEA_a). The PEA included a desk study that returned recent records of adder, common lizard, grass snake and slow worm within a 1-kilometre radius of the site and a walkover survey that identified suitable reptile habitat.

2.2 Site Description

2.2.1 The site is approximately 1.03 hectares of land to the north of Orchard Cottage, Honey Hill in Wokingham and the application (i.e. red line boundary) covers approximately 0.43 hectares of the site (OS grid ref.: SU 830 656). The site is a disused plot of land that sits between Hatch Ride and Honey Hill; it is currently accessible through Orchard Cottage.

2.2.2 The site is predominantly neglected open habitat on sandy acidic soil characterised by a carpet of bluebells, a patch of broom and grassland that becomes dense bracken in the summer. The site sits between broadleaved woodland along Hatch Ride and mixed woodland along Honey Hill.

2.3 Report Objectives

2.3.1 The aim of the Reptile Survey is to determine the presence or likely absence of reptiles on site. The Reptile Survey findings will be used to inform an impact assessment and mitigation strategy for the planning proposals.

3 LEGISLATION AND POLICY

3.1 Relevant Legislation

3.1.1 In England and Wales, the four widespread reptile species – i.e. adder (*V. berus*), common lizard (*Z. vivipara*), grass snake (*N. helvetica*) and slow-worm (*A. fragilis*) are protected under the Wildlife & Countryside Act 1981 (as amended). Part of Section 9(1) and all of Section 9(5) apply and this means that these species are protected against intentional killing and injuring and against sale, possessing and transporting for sale etc.

3.1.2 The four widespread reptile species are all listed as species of principal importance for the conservation of biodiversity (a.k.a. priority species) in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

3.2 Planning Policy

3.2.1 The biodiversity duty imposed through the Environment Act 2021 states that Local Planning Authorities (LPAs) must consider what action they can take to conserve and enhance biodiversity in England. Government planning policy, such as the ODPM Circular 06/2005, requires LPAs to account for the conservation of protected species when considering and determining planning applications.

3.2.2 The ODPM Circular 06/2005 states that '*the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.*' This policy means that in instances where there is a reasonable likelihood of reptiles being present and affected by a development, surveys must be undertaken to inform a mitigation strategy to be agreed prior to granting planning permission.

4 SURVEY METHODS

4.1 Reptile Survey

- 4.1.1 A total of 21 artificial refugia, made of bituminous roofing felt and measuring approximately 0.5 x 0.5 metres, were set out by Conor Watson ACIEEM on the 7th May 2024 and left to bed in for two weeks before surveying commenced. The locations of the artificial refugia were recorded using a phone GPS signal (see **Figure 1** below).

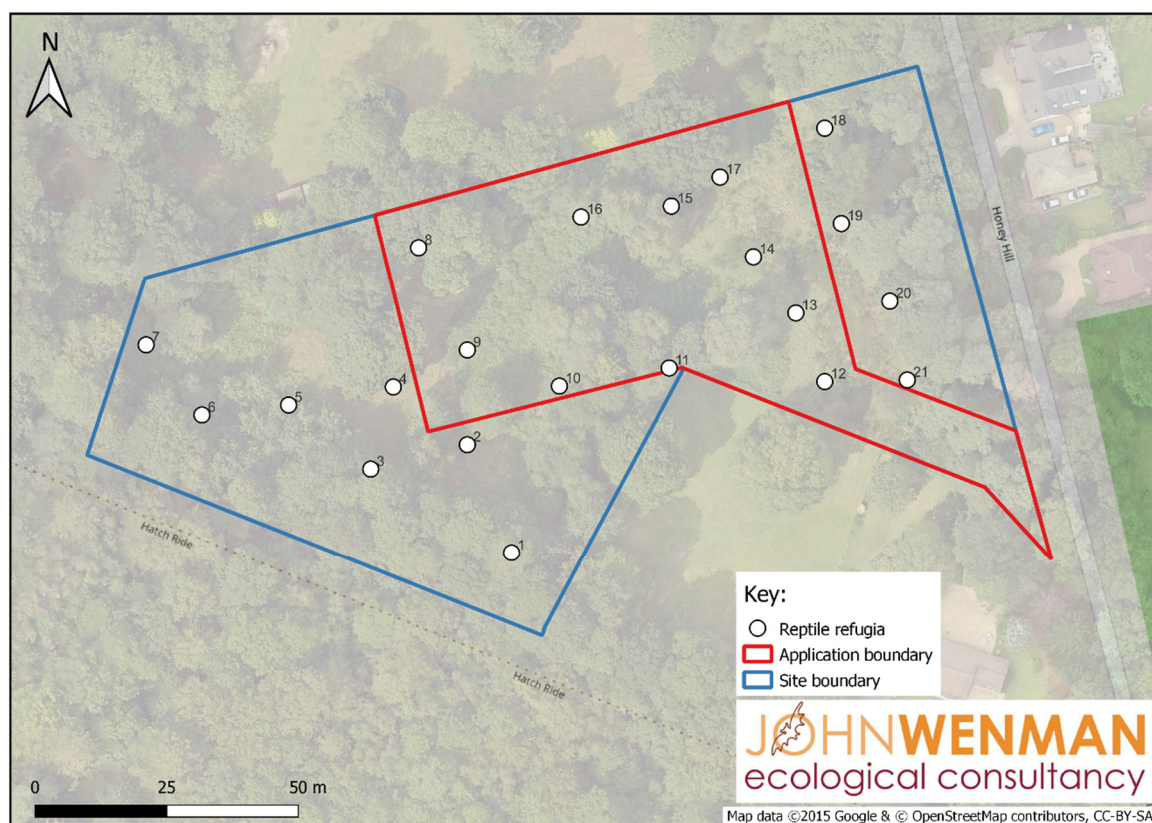


Figure 1. Reptile Refugia Location Plan.

- 4.1.2 The artificial refugia were checked by Conor Watson ACIEEM on seven occasions between the 24th May and 21st June 2024.

4.2 Survey Limitations and Report Validity

- 4.2.1 There were no significant survey limitations. The survey was undertaken at a time of year when reptiles are active, i.e. March to October, with two checks occurring in one of the three key survey months, i.e. April, May and September. The checks were predominantly carried out in weather conditions optimal for detecting reptiles, i.e. temperatures between 9°C and 18°C, intermittent or hazy sunshine, and little or no wind (Froglife 1999; Gent & Gibson 2003).
- 4.2.2 This report contains information regarding mobile species so it will likely be valid for 12 months only (CIEEM 2019b).

5 SURVEY FINDINGS

5.1 Overview

5.1.1 The reptile survey findings are described below and illustrated in a survey plan (see **Figure 2** below); the raw survey data is supplied in **Appendix 2**.

5.2 Reptile Survey

5.2.1 Slow-worms (*A. fragilis*) were recorded during all of the seven checks, averaging at 20 sub-adults and adults per check; the peak count was 30 sub-adult and adult slow-worms (*A. fragilis*) on the 24th May 2024. Adult male and female slow-worms (*A. fragilis*) were recorded on site as well as sub-adult and juvenile individuals. Slow-worms (*A. fragilis*) were found beneath all but one refugia distributed across the site.

5.2.2 Grass snakes (*N. helvetica*) were recorded during all but one of the seven checks; one adult individual was recorded on the 24th May 2024 and all subsequent checks recorded sub-adult individuals. The average number of grass snakes (*N. helvetica*) per check was just below two and the peak count was four sub-adult grass snakes (*N. helvetica*) on the 14th June 2024. Grass snakes (*N. helvetica*) were recorded under four different refugia that were widely distributed across the site.

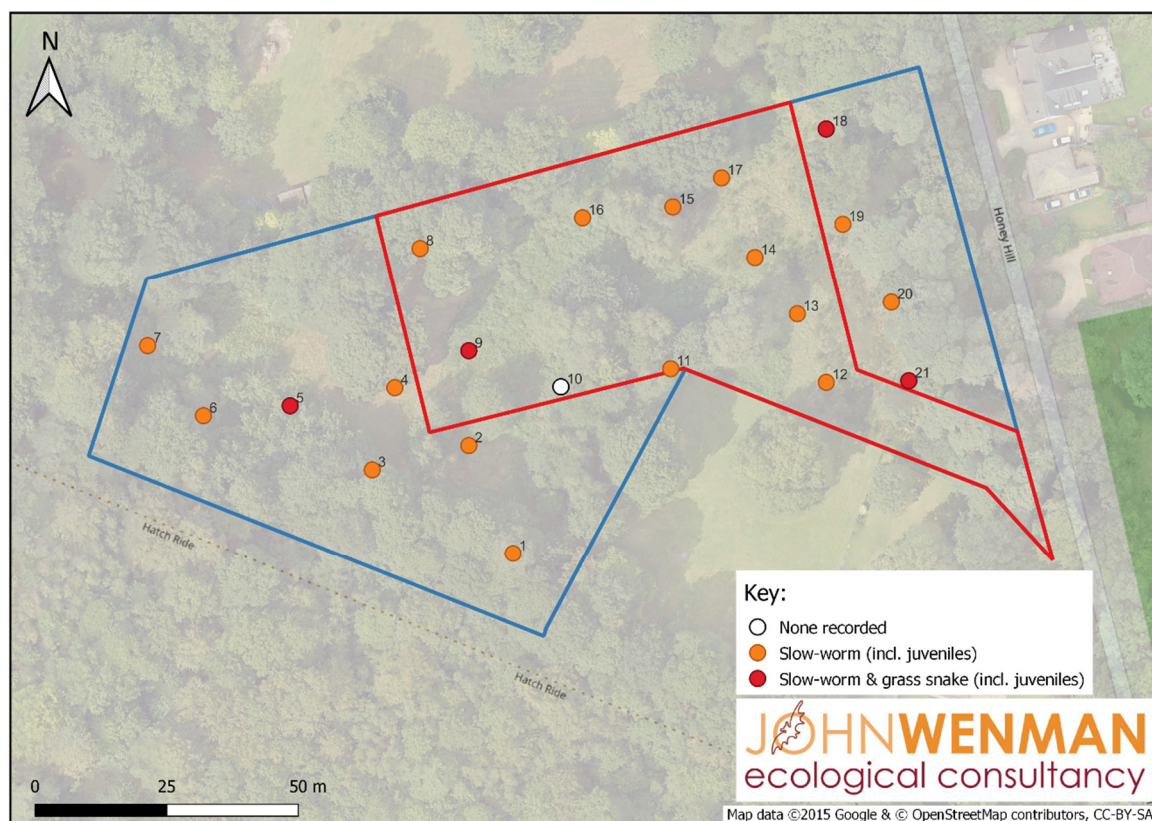


Figure 2. Reptile Survey Findings Plan.

6 DISCUSSION

6.1 Evaluation of Population Size and Site Importance

- 6.1.1** A peak count of 30 sub-adult and adult slow-worms (*A. fragilis*) is consistent with the site supporting an 'exceptional' population of this species, which scores 3 in the survey assessment (Froglife 1999).
- 6.1.2** A peak count of four sub-adult grass snakes (*N. helvetica*) is consistent with the site supporting a 'low' population of this species, which scores 1 in the survey assessment (Froglife 1999).
- 6.1.3** The site meets two criteria to qualify for the Key Reptile Site Register by supporting an 'exceptional' population of one species and by supporting an assemblage of species that scores 4 (Froglife 1999). The TVERC Local Wildlife Site (LWSs) Selection Criteria document (Version 7) states that '*sites may [...] be proposed for LWS status on the basis of supporting a good assemblage of [...] reptile species*' and defines a good reptile assemblage as '*an assemblage of species scoring at least 4.*'

6.2 Impact Assessment

Overview

- 6.2.1** The development proposals consist of the erection of a new residential dwelling with associated access and landscaping (refer to proposed site layout in **Appendix 1**). The impacts of the proposals, during construction and post development, have been assessed in accordance with the mitigation hierarchy as follows:

Construction Phase

- 6.2.2** In the absence of mitigation, the site clearance and ground works required to facilitate the development proposals are likely to result in killing or injuring slow-worms (*A. fragilis*) and grass snakes (*N. helvetica*). In order to prevent the contravention of legislation protecting these reptile species, a programme of mitigation measures will be implemented as set out in **Section 7** below.

Post Development

- 6.2.3** The development proposals have scope to retain approximately 0.6 hectares of suitable reptile habitat on site (beyond the application boundary), i.e 58% of the total reptile habitat currently used by the populations. Therefore, an in-situ approach for the receptor site will be adopted for the welfare interest of the slow-worms (*A. fragilis*) and grass snakes (*N. helvetica*) and to help achieve the objective of no net loss to the local

conservation statuses of these species – refer to the mitigation strategy set out in **Section 7** below.

7 MITIGATION STRATEGY

7.1 Reptile Receptor Area

7.1.1 The receptor area will be formed of two separate parts of the site and total approximately 0.6 hectares of suitable reptile habitat. The receptor area will provide protection for slow-worms (*A. fragilis*) and grass snakes (*N. helvetica*) during the construction phase.

7.1.2 The receptor area will be demarcated by root protection fencing (e.g. Heras fencing) and reptile exclusion fencing as shown in **Figure 3** below. The fencing will be maintained throughout the duration of the construction phase to ensure that no heavy plant or materials enter the receptor area.

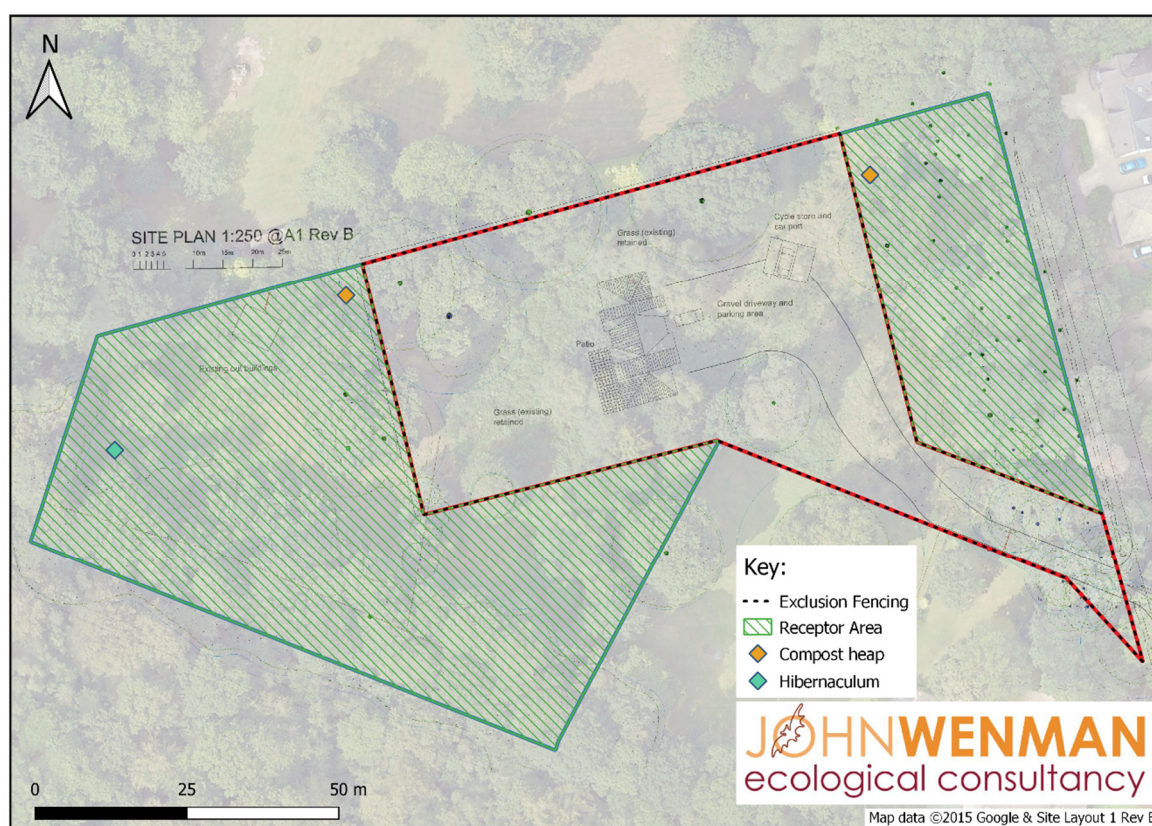


Figure 3. Reptile Mitigation Plan.

7.1.3 Post development, the receptor area will be separated from the residential curtilage by a post-and-rail fence and be available to the reptile populations in the long-term. The current low intensity management (i.e. mowing paths for access) will continue post-development to ensure that suitable reptile habitat remains on site. Furthermore, additional reptile habitat features will be incorporated into the receptor area and maintained post-development to offset the habitat loss and ensure that the proposed in-situ approach works effectively.

7.1.4 A reptile hibernaculum will be created (see **Figure 3** above) to provide shelter for reptiles during periods of cold and adverse weather conditions – see **Appendix 4** for reptile

hibernaculum specifications. Any vegetation cut as part of the mitigation strategy will be piled within the receptor area to create compost heaps (see **Figure 3** above) suitable for slow-worm (*A. fragilis*) foraging and potentially grass snake (*N. helvetica*) egg-laying.

7.2 Mitigation Measures

Reptile Exclusion Fencing Installation

7.2.1 To prevent slow-worms (*A. fragilis*) and grass snakes (*N. helvetica*) from being killed or injured during the construction phase, they will be excluded from the application site (i.e. development area) in advance of any ground works or site clearance. The reptile exclusion fencing will be erected around the perimeter of the application site, thus preventing the free movement of slow-worms (*A. fragilis*) and grass snakes (*N. helvetica*) into the development area.

7.2.2 The installation of the exclusion fencing will be supervised by a suitably qualified ecologist – see **Appendix 4** for reptile exclusion fencing specifications. Due to the presence of scattered scrub and trees on site, it may be necessary to cut vegetation along parts of the route of the exclusion fencing prior to excavation and installation works in order to prevent killing or injuring of reptiles. Any reptiles encountered during the vegetation clearance and fence installation process will be moved to the receptor area.

Reptile Translocation Programme

7.2.3 To prevent slow-worms (*A. fragilis*) and grass snakes (*N. helvetica*) from being killed or injured during the construction phase, a suitably qualified ecologist will translocate the reptiles from the development area to the receptor area in advance of any ground works or site clearance. Artificial refugia will be laid out in the development area at a density of 100 per hectare and left to bed in for a minimum of two weeks. The refugia will be checked every day in suitable weather conditions for a minimum of 30 days; any slow-worms (*A. fragilis*) and grass snakes (*N. helvetica*) encountered will be captured and transferred to the receptor area beyond the reptile exclusion fencing. This translocation approach will be undertaken between March and early November (inclusive) and capture will continue until trapping rates have declined to zero for at least five consecutive days of suitable weather conditions. Based on the 'exceptional' slow-worm (*A. fragilis*) population size, it is anticipated that the translocation period could continue for up to 90 trapping days (HGBI 1998).

7.2.4 As the translocation progresses, it will be aided by habitat manipulation with the aim of creating 'islands' of suitable reptile habitat amongst less favourable short vegetation.

The vegetation will be cut in two stages using strimmers and/or brush-cutters: stage one will cut the vegetation down to 15cm; and stage two will cut the remaining vegetation down to ground level. These cuts will be undertaken under the supervision of a suitably qualified ecologist; the ecologist will also monitor the condition of the reptile exclusion fencing to ensure that it is continuing to function as a barrier to slow-worm (*A. fragilis*) and grass snake (*N. helvetica*) dispersal.

Destructive Search

- 7.2.5** After a minimum of 30 trapping days, if there has been five consecutive days of no reptile capture, a decision will be made as to whether a reasonable trapping effort has been undertaken. Once the programme of translocation has finished, a suitably qualified ecologist will supervise a destructive search of the development area to remove any remaining slow-worms (*A. fragilis*) and grass snakes (*N. helvetica*) without compromising their welfare. The destructive search will involve a final cut of the remaining vegetation in the development area followed by the removal of the turf down to a maximum depth of 15cm using an excavator with a toothed bucket. In the event that reptiles are encountered during the search, they will be captured by the ecologist and transferred to the receptor area. **N.B. the reptile exclusion fencing will only be removed once the construction phase is complete.**

7.3 Persons Responsible for Implementation

- 7.3.1** Martin Kemball is the applicant so has the ultimate responsibility for ensuring the implementation of this reptile mitigation strategy.
- 7.3.2** John Wenman Ecological Consultancy will be available to provide advice in relation to this reptile mitigation strategy throughout the duration of the project.

BSI (2013). *Biodiversity - Code of Practice for Planning and Development BS42020:2013*. BSI Standards Limited: London.

CIEEM (2017). *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester

Froglife (1999). *Froglife Advice Sheet 10 - Reptile Survey*. Froglife, Peterborough.

Gent, A.H. & Gibson, S.D. (1998). *Herpetofauna workers' manual*. Peterborough, Joint Nature Conservation Committee.

Herpetofauna Groups of Britain and Ireland (1998). *Evaluating Local Mitigation/Translocation Programmes: Maintaining Best Practice and Lawful Standards*. HGBI Advisory Notes for Amphibians and Reptile Groups. HGBI, co/ Froglife, Halesworth.

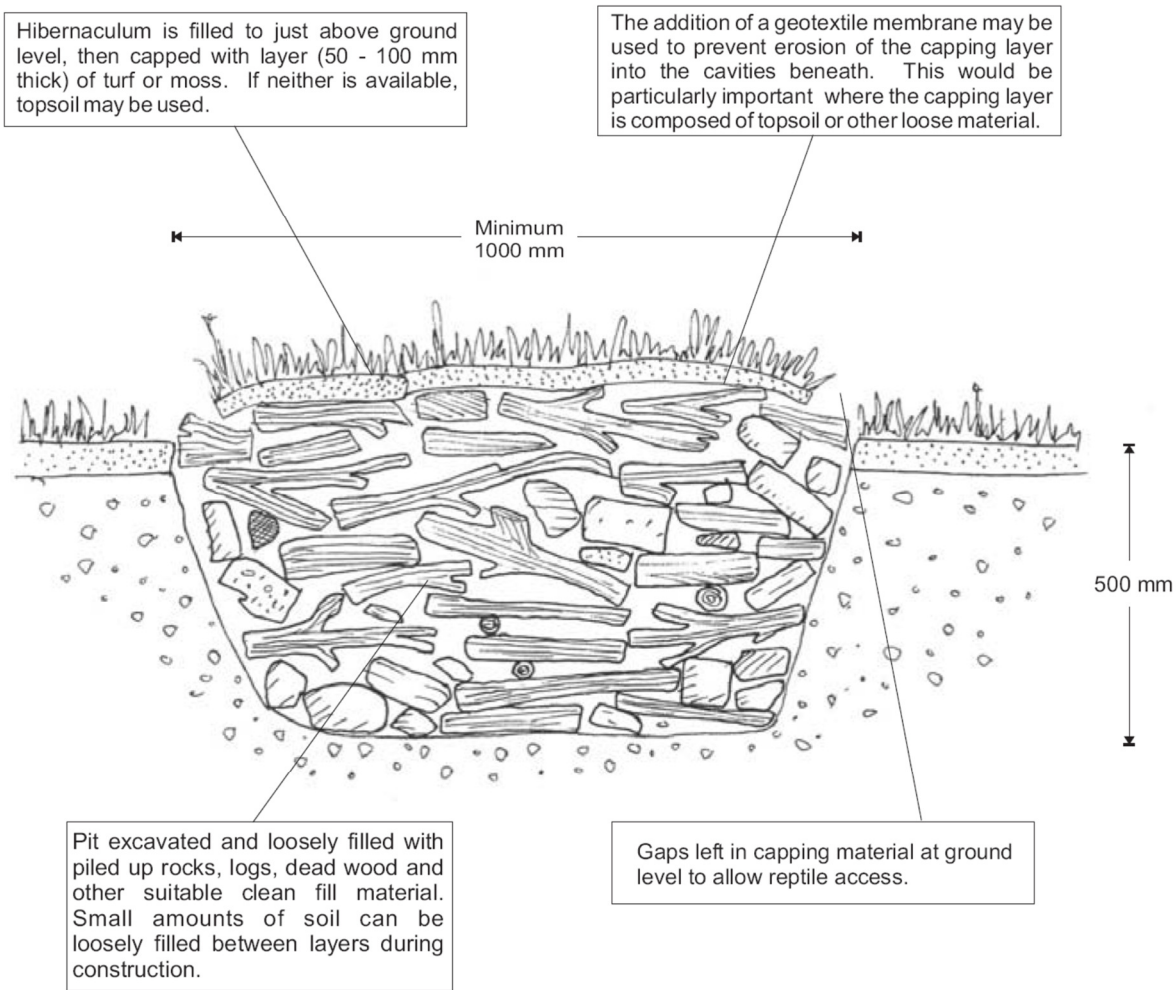
APPENDIX 1 – PROPOSED SITE LAYOUT



APPENDIX 2 – RAW REPTILE SURVEY DATA

Date	Start time	Survey findings	Weather conditions
24/05/24	11:30	1x adult grass snake 30x sub-adult & adult slow-worms	16°C; 7/8 cloud cover; still (0)
31/05/24	11:00	20x sub-adult & adult slow-worms 4x juvenile slow worms	14°C; 8/8 cloud cover; still (0)
07/06/24	14:30	3x sub-adult grass snakes 12x sub-adult & adult slow-worms 9x juvenile slow-worms	19°C; 7/8 cloud cover; light air (1)
10/06/24	17:00	3x sub-adult grass snakes 9x sub-adult & adult slow-worms 6x juvenile slow-worms	16°C; 7/8 cloud cover; still (0)
14/06/24	16:00	4x sub-adult grass snakes 21x sub-adult & adult slow-worms 5x juvenile slow-worms	19°C; 4/8 cloud cover; light breeze (2)
18/06/24	10:30	1x sub-adult grass snake 26x sub-adult & adult slow-worms 4x juvenile slow-worms	19°C; 1/8 cloud cover; still (0)
21/06/24	9:30	1x sub-adult grass snake 24x sub-adult & adult slow-worms 3x juvenile slow-worms	19°C; 0/8 cloud cover; light breeze (2)

APPENDIX 3 – REPTILE HIBERNACULUM SPECIFICATIONS



APPENDIX 4 – REPTILE EXCLUSION FENCING SPECIFICATIONS

