



Reptile Survey Report

Babsham Farm

Babsham Lane

Bognor Regis

West Sussex

PO21 5EL

11th October 2017

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Notice to Interested Parties

To achieve the study objectives stated in this report, we were required to base our conclusions on the best information available during the period of the investigation and within the limits prescribed by our client in the agreement.

No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information. Thus, we cannot guarantee that the investigations completely defined the degree or extent of e.g. species abundances or habitat management efficacy described in the report.

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EXECUTIVE SUMMARY

- 0.1 Arbeco Ltd. were commissioned by Sloane and Brown Ltd on behalf of their client Recycle Southern Ltd to carry out reptile presence / suspected absence surveys at Babsham Farm, Babsham Lane, Bognor Regis, West Sussex, PO21 5EL to help inform the proposed change of use of land within the site for skip storage.
- 0.2 A preliminary ecological appraisal undertaken by Arbeco Ltd in August 2017 identified the need for further ecological surveys at the site. The assessment considered that the site had suitable terrestrial habitat for reptiles and, therefore, further presence / absence surveys were recommended.
- 0.3 The reptile surveys followed the recommended methodology outlined in the Herpetofauna Worker's Manual (JNCC, 2003) and Froglife's Advice Sheet 10 (1999).
- 0.4 The surveys were undertaken in September and October 2017 and recorded a low population of slow worms *Anguis fragilis* on site and individual smooth newts *Lissotriton vulgaris* using the suitable habitat on site.
- 0.5 A mitigation strategy is therefore outlined in Section 6 of this report to ensure that no reptiles or amphibians are harmed during works and that onsite population of slow worms is retained through maintenance and enhancement of retained habitat in the north-western part of the site (i.e. receptor site).
- 0.6 The habitat links to the wider landscape will be maintained through the retention of a 5m habitat corridor strip along the north-eastern site boundary to maintain habitat links suitable for slow worms in the wider landscape
- 0.7 The mitigation strategy will include measures such as the creation of a hibernacula in the receptor area, appropriate timings of site clearance to avoid the reptile hibernation period and the directional strimming of the site from south-east to north-west to encourage the dispersal of reptiles to the receptor area.

1 INTRODUCTION

- 1.1 Arbeco Ltd. were commissioned by Sloane and Brown Ltd on behalf of their client Recycle Southern Ltd to carry out reptile presence / suspected absence surveys at Babsham Farm, Babsham Lane, Bognor Regis, West Sussex, PO21 5EL to help inform the proposed re-development of the site.
- 1.2 The objectives of the reptile surveys were to assess whether reptiles were present on site and assess the population size of any species that were present. This will ensure that reptiles, if present, are not detrimentally impacted by the proposed works on the site, that there is no loss of ecological viability and that the favourable conservation status of the species in the local area is not affected by the proposed re-development.

Site Description

- 1.3 The site is located in the outskirts of the town of Bognor Regis in the county of West Sussex (Ordnance Survey Grid Reference for the centre of the site: SU 91755 01727). The site is approximately 0.5 ha in area and comprises a barn with associated courtyard.
- 1.4 The location of the site is shown in Figure 1.1 and the extent of the site boundary is shown in Figure 1.2.
- 1.5 The site is bordered to the north-east, north-west and south-east by agricultural arable land and to the south-east by Babsham Farm Business Park. A ditch system borders the south-eastern site boundary and extends to the north-east.
- 1.6 The habitats in the wider landscape comprise agricultural arable fields to the north, east and west and urban habitats within Bognor Regis to the south.

Legislation

- 1.7 Certain habitats and species including reptiles, are protection under the Conservation of Habitats and Species Regulations 2010 and / or the Wildlife & Countryside Act (1981), as amended.
- 1.8 In general, the above legislation makes it an offence to:
 - Deliberately/intentionally or recklessly kill, injure or take a protected species;
 - Intentionally or recklessly damage, destroy or obstruct access to any place that a protected species uses for shelter or protection whether the species is present or not;
 - Intentionally or recklessly disturb a protected species while it is occupying a structure or place that it uses for shelter or protection;
 - Deliberately take or destroy the eggs of species protected by this legislation (such as nesting birds).
- 1.9 Section 41 of the Natural Environment and Rural Communities Act (2006) lists the species and habitats of principal importance for the conservation of biodiversity in England and acts as a guide to local authorities in implementing their duties under Section 40, to have regard to the conservation of biodiversity in England.
- 1.10 Under The National Planning Policy Framework (NPPF) 2012 protected sites and species are a material consideration in determining planning applications.

1.11 Further details of the legislation are outlined in Appendix A.

Background

1.12 A preliminary ecological appraisal undertaken by Arbeco Ltd in August 2017 identified the need for reptile presence / suspected absence surveys at the site as the site presented suitable habitats for reptiles in the form of grassland on disturbed ground and dense continuous scrub and several piles of debris and brash piles on site provided suitable refugia habitat for reptiles. A compost heap located in the western corner of the site was suitable for grass snake *Natrix natrix* egg-laying.

Development Proposals

1.13 The development proposals comprise the change of use of land within the site for skip storage. This will involve the removal of the majority of the vegetation on site to enable skips to easily be stored on the site and to enable vehicles to easily manoeuvre around the site.

2 METHODS

Reptile Survey

- 2.1 The reptile survey was carried out in accordance with the recommended methodology outlined in the Herpetofauna Worker's Manual (JNCC, 2003) and Froglife's Advice Sheet 10 (1999). The survey was undertaken by experienced ecologists throughout September and October 2017.
- 2.2 The survey was conducted using artificial refugia made from roofing felt measuring 50cm x 50cm. Refugia provide shelter and basking opportunities for reptiles, which can be recorded on or under the refugia during suitable weather conditions i.e. avoiding periods of strong wind, heavy rain or extreme temperatures, typically surveys are undertaken when air temperatures are between 9°C and 18°C.
- 2.3 On the 4th September 2017, 40 artificial refugia were placed in areas of suitable habitat for reptiles. The location of refugia is shown in Figure 2.1.
- 2.4 Whilst setting out the refugia, a visual search of all areas of suitable habitat for reptiles was also undertaken. The refugia were left to settle in for a period of six days in order to provide time for reptiles to locate them and for the vegetation beneath them to become flattened, making it easier to observe reptiles.
- 2.5 In order to conform to the best practice guidelines for determining the presence or absence of reptile species, seven survey visits were undertaken to inspect the refugia. Each survey visit was conducted during suitable weather conditions.
- 2.6 On each of the seven visits, refugia were inspected for reptiles above and beneath the refugia. The species and, where possible, the age and sex of each reptile observed was recorded. Any reptiles observed whilst walking between refugia were also recorded.
- 2.7 The artificial refugia were removed from site after the final survey on the 5th October 2017.
- 2.8 The survey results were used to estimate population class size for any reptile species recorded and to assess whether or not the site could be classified as a Key Reptile Site, as defined by Froglife (1999).

Survey Constraints

- 2.9 There were not considered to be any constraints to the reptile surveys.

3 RESULTS

Reptile Survey

- 3.1 Survey visits were undertaken on the 14th, 19th, 24th, 26th and 29th September and on the 3rd and 5th October 2017. Findings of the surveys are detailed in Table 3.1 below.

Table 3.1: Reptile survey results

Date	Result	Weather conditions
14/09/2017	No reptiles recorded	Temperature (°C): 15 Cloud cover (%): 50 Wind (Beaufort Scale): 1 Rain: 0
19/09/2017	No reptiles recorded	Temperature (°C): 16 Cloud cover (%): 10 Wind (Beaufort Scale): 0 Rain: 0
22/09/2017	No reptiles recorded	Temperature (°C): 15 Cloud cover (%): 20 Wind (Beaufort Scale): 1 Rain: 0
26/09/2017	No reptiles recorded. A juvenile smooth newt recorded.	Temperature (°C): 18 Cloud cover (%): 20 Wind (Beaufort Scale): 1 Rain: None
29/09/2017	One adult female slow worm recorded	Temperature (°C): 18 Cloud cover (%): 60 Wind (Beaufort Scale): 1 Rain: 0
03/10/2017	One adult female slow worm recorded	Temperature (°C): 13 Cloud cover (%): 0 Wind (Beaufort Scale): 0 Rain:
05/10/2017	No reptiles recorded	Temperature (°C): 18 Cloud cover (%): 30 Wind (Beaufort Scale): 2 Rain: 0

- 3.2 Slow worms were recorded during two of the seven survey visits, on 29th September and 3rd October 2017, with a peak count of one slow worm recorded during the separate survey visits. A juvenile smooth newt *Lissotriton vulgaris* was recorded on one of the visits. The distribution of reptiles and amphibian recorded is shown in Figure 3.1.

4 EVALUATION

- 4.1 Common species of reptile including common lizard *Lacerta vivipara*, grass snake, slow worm and adder *Vipera berus* are protected under Schedule 5, Section 9 of the Wildlife and Countryside Act 1981(as amended) against intentional injury or killing.
- 4.2 Smooth newts, palmate newts *Triturus helveticus*, common frogs *Rana temporaria* and common toads *Bufo bufo* are protected by under Schedule 5, Section 9 of the Wildlife and Countryside Act 1981 (as amended) against sale, barter, exchange, transporting for sale and advertising to sell or to buy.
- 4.3 Great crested newts are fully protected by both the Wildlife and Countryside Act 1981 and the Habitats Regulations, the species is a European Protected Species and a priority species under the UK Biodiversity Action Plan, and has been adopted as a species of Principal Importance in England under Section 41 of the NERC Act (2006).
- 4.4 The habitats within the site boundary were identified as having potential to support reptiles during the preliminary ecological appraisal undertaken by Arbeco Ltd in September 2017. The grassland on disturbed ground and dense continuous scrub had the potential to support reptile species. Several piles of debris and brash piles on site provided suitable refugia habitat for reptiles. A compost heap located in the western corner of the site was suitable for grass snake egg-laying.
- 4.5 The reptile surveys undertaken in September and October 2017 recorded a peak count of one adult slow worm with a density of 80 refugia per ha. Therefore, it is considered that there is a **low population of slow worm** present on site, as defined by Froglife (1999). Given that there is only one species of reptile on site and this species is not present in exceptional numbers, the site does not qualify as a Key Reptile Site (Froglife, 1999).
- 4.6 A juvenile smooth newt was recorded on one of the visits, therefore it is considered that the terrestrial habitats on site is used by individual amphibians.
- 4.7 The development proposals comprise the change of use of land within the site for skip storage. This will involve the removal of the majority of the vegetation on site to enable skips to easily be stored on the site and to enable vehicles to easily manoeuvre around the site.
- 4.8 Therefore, without a suitable mitigation strategy, development of the site could have a negative impact on the local reptile population and harm the individual amphibians using the terrestrial habitats on site.

5 CONCLUSION

- 5.1 The seven visits undertaken in September and October 2017 identified a low population of slow worms on site. However, as this is the only species of reptile on site and it is not present in exceptional numbers, the site does not qualify as a Key Reptile Site.
- 5.2 A juvenile smooth newt was recorded on one of the visits, therefore it is considered that the terrestrial habitats on site is used by individual amphibians.
- 5.3 The development at Babsham Farm will comprise site clearance of habitats currently supporting a low population of slow worms and individual amphibians. In the absence of appropriate mitigation, development of the site could have a negative impact on the local reptile population.
- 5.4 Recommendations are set out in section 6 of this report which will ensure that no reptiles or amphibians are harmed during works and that the slow worm population is retained on site.

6 RECOMMENDATIONS

- 6.1 A low population of slow worms and individual amphibians have been found to be using the suitable habitats on site. The proposed development of the site will impact upon these suitable habitats and, in the absence of a suitable mitigation strategy, development of the site could have negative impacts on the population of slow worms present on site.
- 6.2 This mitigation strategy comprises the onsite retention of slow worms through maintenance and enhancement of retained habitat in the north-western part of the site and will ensure that no reptiles or amphibians are harmed during works.
- 6.3 The habitat links to the ditch system bordering the south-eastern site boundary and extending to the north-east will be maintained through the retention of a 5 m habitat corridor strip along the north-eastern site boundary as shown in Figure 6.1. This will allow reptiles using the site to disperse in the wider landscape and will comprise a 2 m strip of retained vegetation along the site boundary protected by a 3 m buffer of short vegetation.

Mitigation Strategy

- 6.4 Prior to any habitat manipulation works taking place, the retained habitat on site will be enhanced by creating a reptile hibernacula in the north-western part of the site. This will provide hibernation and refuge opportunities for reptiles on site and will also provide habitat for soft-bodied invertebrates, which represent the principal food source for slow worms. Figure 6.1 shows the location of the proposed hibernacula and of the receptor site.
- 6.5 Site clearance and vegetation removal works should not commence until the beginning of the reptile active period (March to October but weather dependent). All debris and vegetation clearance should be carried out under the supervision of a suitably qualified ecologist. Construction and project staff should be made aware of reptile constraints on site.
- 6.6 Immediately prior to the debris and vegetation clearance the ecologist should walk the area to be cleared to check for reptiles and amphibians, and dismantle by hand any features that could be used as refuges. Any reptiles and amphibians found should be recovered and moved to a safe area in the north-western part of the site.
- 6.7 Grass snakes can use compost heaps between June and July to lay eggs that usually hatch after two months. Therefore, it is recommended that the compost heap on site is not dismantled during the period May to October (inclusive) to prevent any damage to grass snake eggs or juveniles that may be present.
- 6.8 No equipment, machinery or materials should be brought into the area of retained habitat in the north-eastern part of the site or in the corridor along the north. The receptor site will be securely marked and fenced-off with appropriate temporary fencing (e.g. 'Heras' fences) prior to works commencing and left in situ for the duration of the works to prevent access and incidental damage by site vehicles, equipment, materials and personnel.

- 6.9 Vegetation clearance should be undertaken in a phased way to allow reptiles to move out of the area to be cleared:
- The vegetation should be cut directionally, starting on the north-eastern end of the site and moving north-west to encourage reptiles to move away from the development footprint to suitable retained habitat in the north-eastern part of the site as shown in Figure 6.1.
 - The vegetation should be first cut to a height of approximately 15-20 cm.
 - After a period of at least 24 hours from the first cut, the vegetation should be cut to ground level.
- 6.10 Vegetation works should be undertaken using hand tools only, including brush cutters and strimmers, and piles of cleared vegetation should be removed from the work area and disposed of off-site or in the retained habitat in the north-western part of the site.
- 6.11 Following sensitive clearance of the construction area, a 3 m buffer of short vegetation between the habitat corridor and the development area should be kept in place the duration of the works and maintained post development.
- 6.12 To avoid reptiles re-colonising the development area after vegetation and debris clearance, the grassland on disturbed ground should be kept short during the development and post-development. Any debris should be disposed of in skips to avoid creating potential reptile refugia in the areas used for vehicle manoeuvring and skip storage.
- 6.13 The retained habitat in the north-eastern part of the site should be maintained post-development and appropriately marked immediately after the removal of temporary fencing to prevent access and incidental damage by site vehicles while the skip site is operational.

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FIGURES

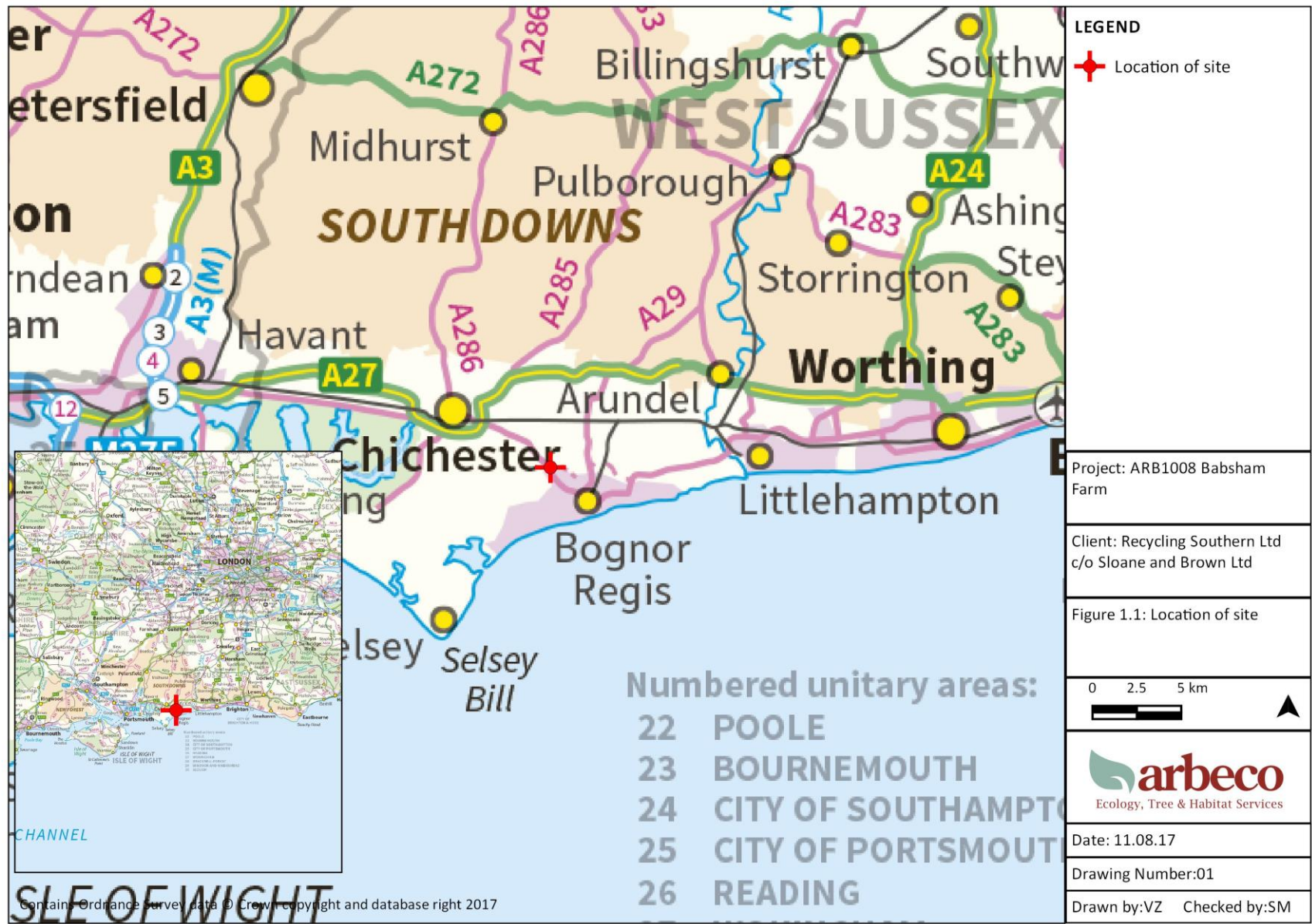
Figure 1.1: Location of site

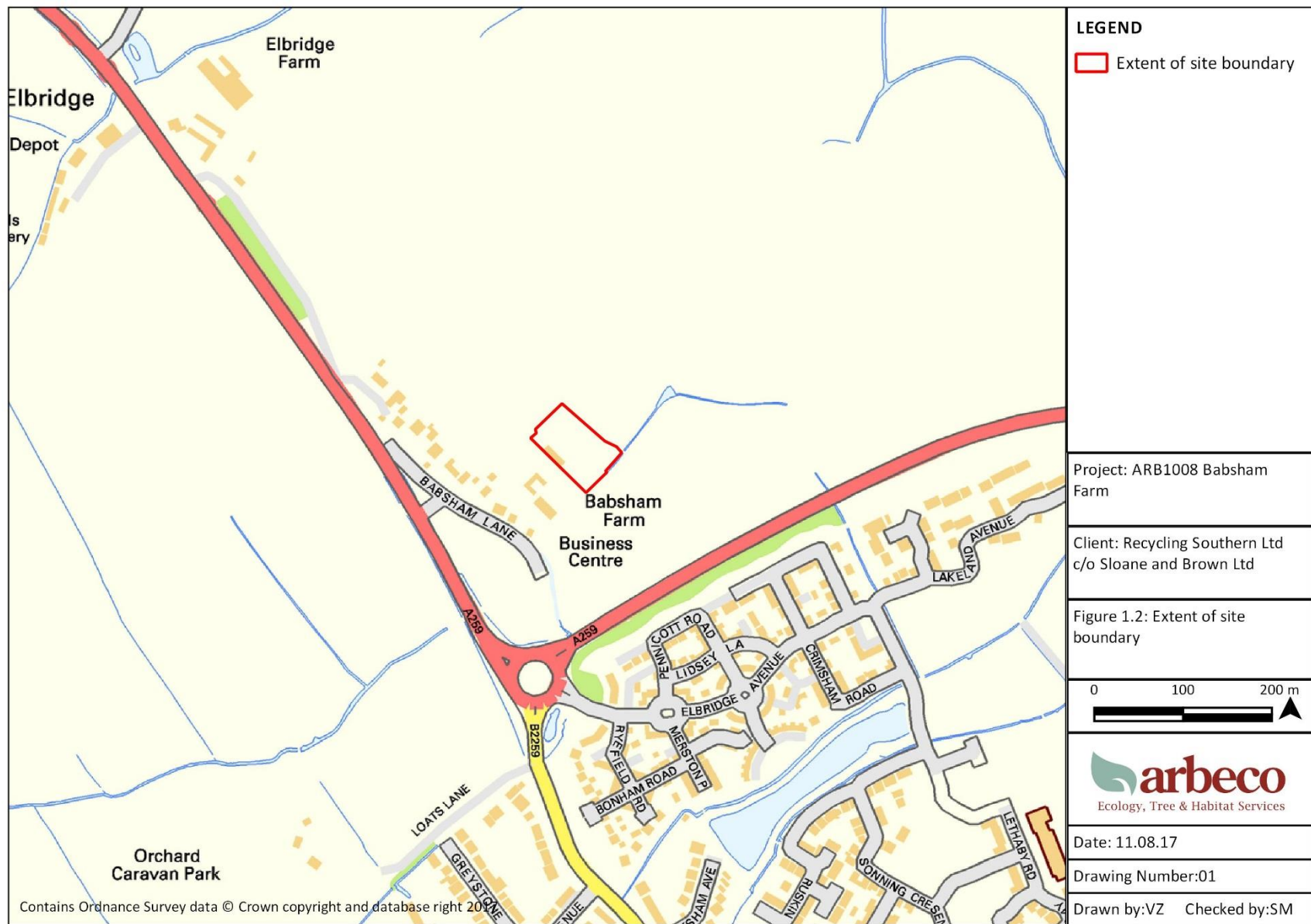
Figure 1.2: Extent of site boundary

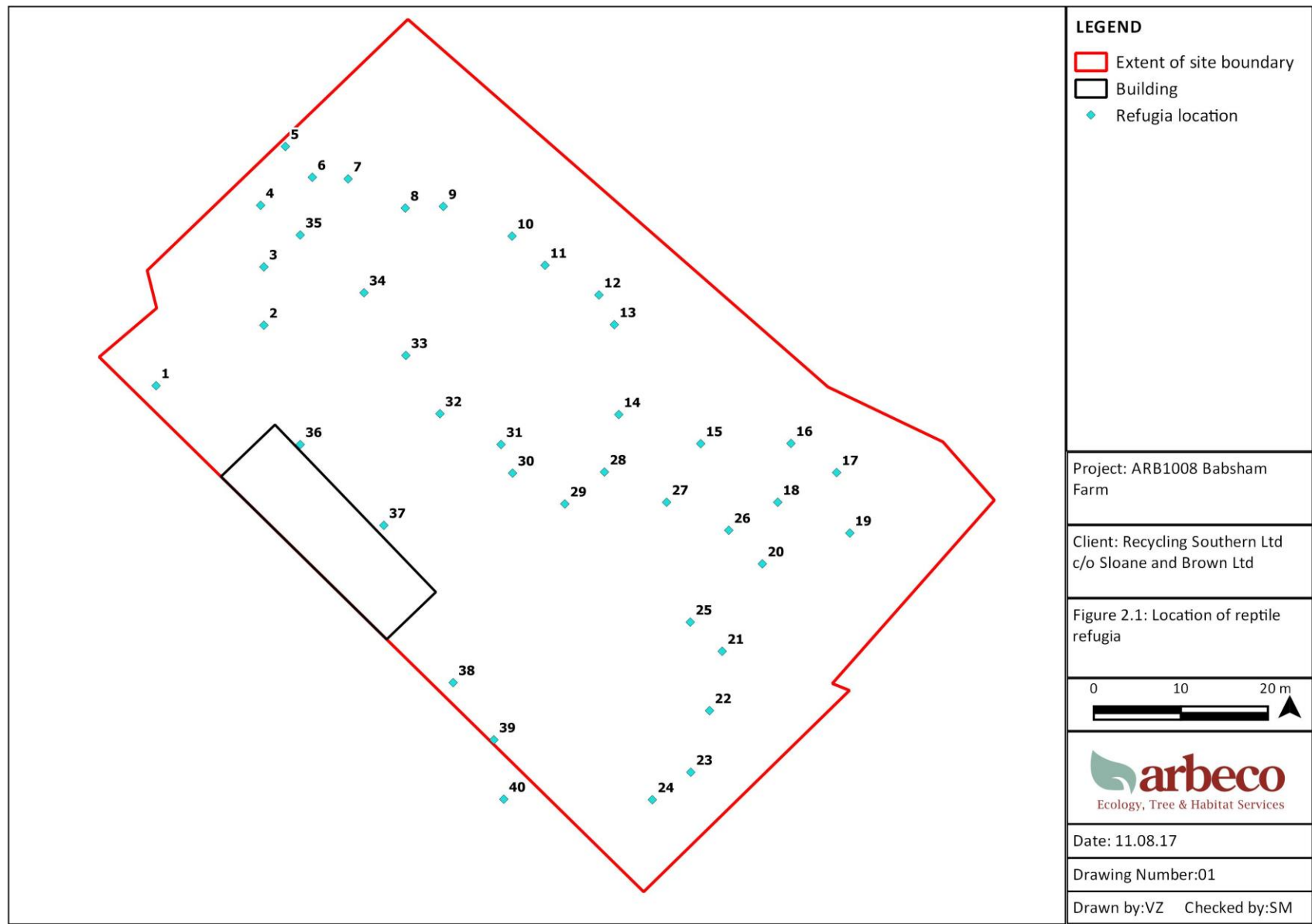
Figure 2.1: Location of reptile refugia

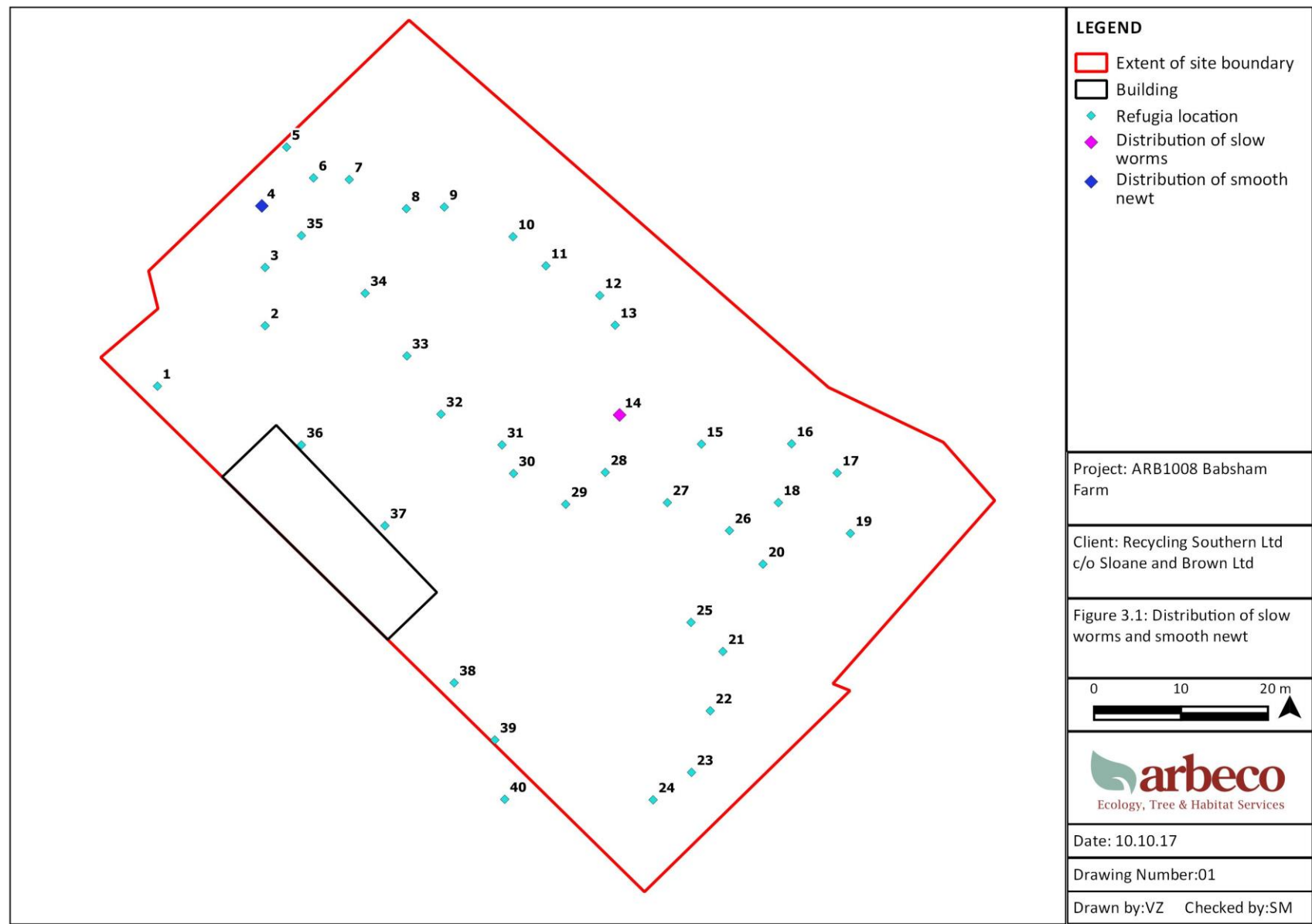
Figure 3.1: Distribution of slow worms and smooth newt

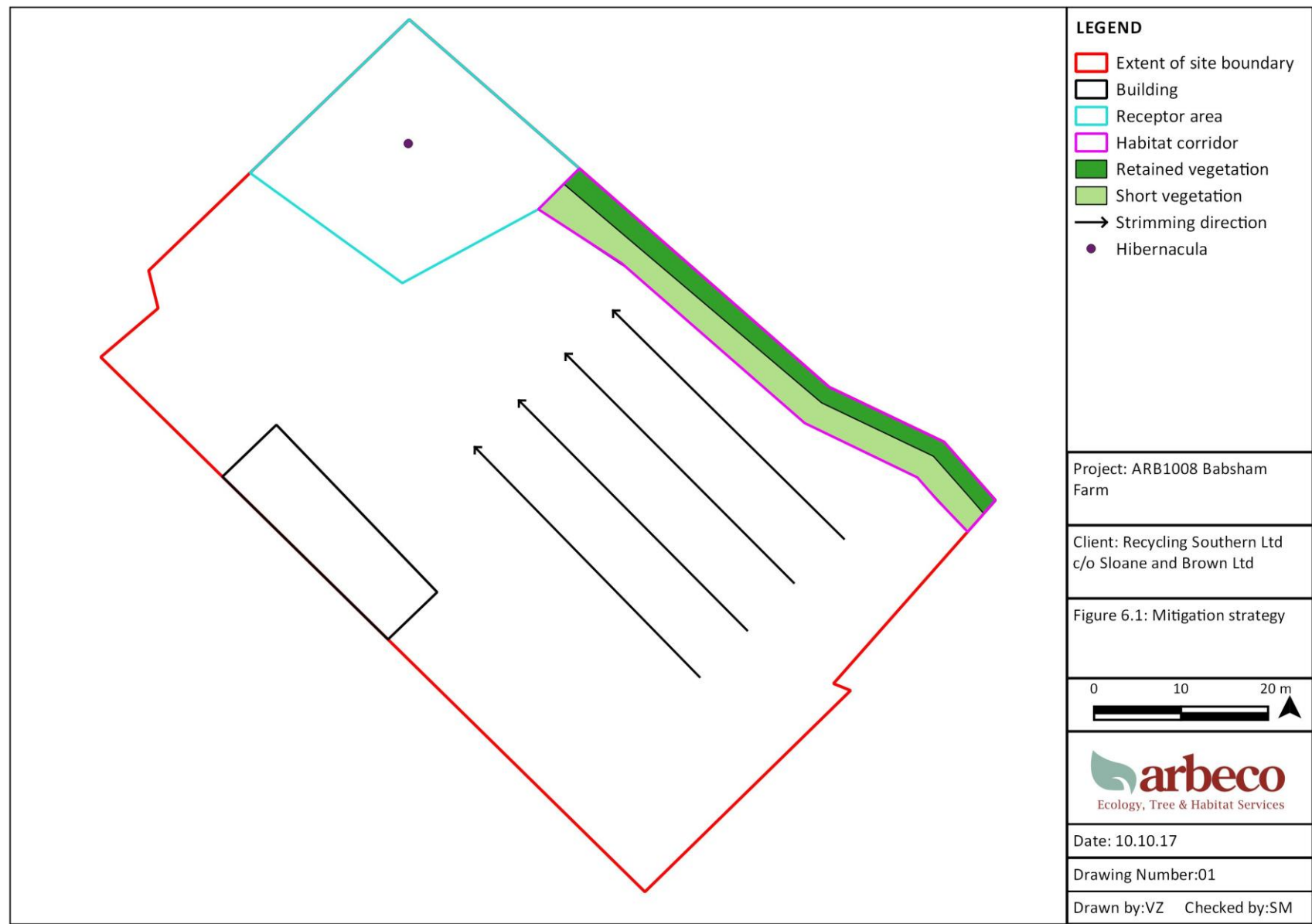
Figure 6.1: Mitigation strategy











APPENDIX A Wildlife Legislation

The Wildlife and Countryside Act 1981 (as amended)

Schedule 1

Applies to all wild birds where it is an offence:

- to take, damage or destroy a nest whilst it is being built or in use;
- to kill, injure or take any wild bird (subject to certain exceptions); and
- to take or destroy the egg of any wild bird.

It is also an offence to disturb any wild bird listed on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended):

- while it is nest building;
- at a nest containing eggs or young; and
- to disturb the dependant young of any such bird.

Schedule 5

For animals fully protected under Schedule 5 which includes the smooth snake, sand lizard and natterjack toad. It is an offence:

- to intentionally kill or injure or take these species;
- to intentionally or recklessly damage or destroy or obstruct access to any structure or place which a species uses for shelter or protection, at any time even if the animal is not present; and
- to intentionally or recklessly disturb whilst it is occupying a place which it uses for shelter or protection.

Adder, grass snake, common lizard and slow worm are protected from being killed or injured and the white-clawed crayfish is protected from being taken.

Schedule 8

Specific species of plants listed in Schedule 8 are protected. It is an offence: to intentionally pick, uproot or destroy a wild plant listed in Schedule 8.

Schedule 9

Invasive non-native species are listed under Schedule 9. It is an offence:

- to plant or otherwise cause to grow in the wild.

If soils are contaminated by invasive non native plant species it becomes classified as 'controlled waste' under the Environmental Protection Act 1990 (England, Wales & Scotland), and must be disposed of accordingly.

The Conservation of Habitat and Species Regulations 2010

Schedule 2 applies to all European Protected Species (EPS) which included all bat species, great crested newts, dormice, otters, sand lizards, smooth snake and natterjack toad. The protection afforded is overlapping but separate from the Wildlife and Countryside Act (1981), as amended.