

PLOT AT LLANDARCY PARK, LLANDARCY, NEATH

REPTILE SURVEY 2023



Produced for: LP2 Ltd

QUALITY ASSURANCE

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SUMMARY

The current applicants wish to apply to Neath Port Talbot County Borough Council for permission to construct a drive through café and associated parking with electric vehicle charge points.

The habitats of the site are described and mapped in 'Plot at Llandarcy Park, Llandarcy, Neath, Preliminary Ecological Appraisal 2023.' By East Ecology issued on the 13th March 2023. The report found habitats suitable for reptiles to be present.

East Ecology was commissioned to undertake a reptile survey to determine the presence or likely absence of reptiles. Records of only common lizard had been recovered for the local area but over 1km away, but the habitat was thought to be suitable for them following a preliminary ecological appraisal in 2023.

Following an appropriate and recognised methodology, the survey found a juvenile grass snake on four occasions under the same refuge and was presumably the same individual. The site therefore supports a small population of grass snake but in association with other neighbouring sites.

Mitigation for grass snake will involve the preparation of the site outside of the development area to be prepared while the works area is fenced using an appropriate reptile barrier. Animals will be translocated outside of the works area and further habitat features added for grass snake outside of the parking area, including a hibernacula, pond, long grass, hedges and scrub mosaic. The mitigation habitat will be provided on land under the same management/ownership as the development.

Enhancements for other species are recommended within the East Ecology PEA report.

INTRODUCTION

Proposal

LP2 Ltd wish to build a drive through café building with associated car parking and electric vehicle charge points. The proposed layout is shown in figure 3.

Site Description

The study area consisted of an overgrown corner plot between two minor roads and a former tennis court. The site was made up of a mosaic of habitats including secondary broadleaved woodland, mainly bramble scrub with very small areas of tall ruderal weeds. All sides of the plot are surrounded by roads and the well-maintained sports pitches at Llandarcy park.

The habitats of the site are described and mapped in 'Plot at Llandarcy Park, Llandarcy, Neath, Preliminary Ecological Appraisal 2023.' By East Ecology issued on the 13th March 2023.

The relative position of the land at Llandarcy Park is shown in Figure 1 towards the end of the report.

Aims of study

The reptile survey aimed to establish the presence or likely absence of reptiles on the site.

Rebecca Sheahan-East of East Ecology was commissioned to undertake the 2023 surveys and prepare this report. Rebecca has over twenty years post graduate experience in ecology and nature conservation and holds CEnv MCIEEM qualifications and several Natural Resources Wales survey licences for protected species including bats, great crested newts and dormice.

PLANNING POLICY AND LEGISLATION

Reptiles

There are four common species of reptile present in Wales, common lizard, slow worm, adder and grass snake one further species has a very restricted range in north Wales. Slow worms by far are the more common species occupying a variety of habitats such as tall grasslands and scrub, railway embankments and derelict sites. Adders require a good supply of small mammal prey as do grass snake, but will also take amphibians and small birds. Grass snake are often associated with still water habitats and adders with heath and upland areas. All reptiles require habitat in which to bask and warm their bodies, nearby cover and foraging opportunities and shelter for winter where they go into a type of hibernation called brumation.

Environment Act (Wales) 2016

Section 7 of the Environment (Wales) Act has replaced the Section 42 of the NERC Act 2006 in Wales. Section 7 lists the living organisms and types of habitat in Wales which are considered to be of key significance to sustain and improve biodiversity in relation to Wales.

The Act states that Welsh Ministers must take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and encourage others to take such steps.

Planning Policy Wales 2021

Section 5.2.8 of Planning Policy Wales states that: 'The planning system has an important part to play in meeting biodiversity objectives by promoting approaches to development which create new opportunities to enhance biodiversity, prevent biodiversity losses, or compensate for losses where damage is unavoidable.'

Conservation of Species and Habitats Regulations (Amendment) 2017

All bats found in the UK are Protected Species (PS) being protected under the Conservation of Habitats and Species Regulations 2017, known as the 'Habitats Regulations'.

Under the Habitats Regulations, it is an offence to:

- Deliberately capture, injure or kill any wild animal of an PS,
- Deliberately disturb wild animals of any such species,
- Damage or destroy a breeding site or resting place of such an animal.

Disturbance is defined as that which is likely:

1. To impair the animal's ability:
 - to survive, to breed or reproduce, or to rear or nurture their young, or
 - in the case of animals of a hibernating or migratory species (e.g. bats), to hibernate or migrate; or
2. To affect significantly the local distribution or abundance of the species to which they belong.

Other offences also exist relating to possession, transport and sale.

Wildlife and Countryside Act 1981

Section 9 of the Wildlife and Countryside Act 1981 (as amended) offers varying degrees of protection to species including otter, bats, dormice, amphibians and reptiles. Animals listed on Schedule 5 of the Act are protected against one or more of the following:

- intentional killing, injuring or taking (not applicable to bats);
- intentional or reckless damage or destruction, or obstruction of access to any structure or place which any wild animal included in Schedule 5 uses for shelter or protection;
- disturbance of any such animal while it is occupying a structure or place which it uses for that purpose;
- sell, offer or exposes for sale, or has in his possession or transports for the purpose of sale, any live or dead wild animal included in schedule 5, or any part of, or anything derived from such an animal.

Wild birds are protected under the Wildlife and Countryside Act (1981) (as amended). It is an offence to intentionally kill, injure or take wild birds, intentionally take, damage or destroy a wild bird's nest while it's being used or built, intentionally take or destroy a wild bird's egg, possess, control or transport live or dead wild birds, or parts of them, or their eggs, sell wild birds or put them on display for sale, use prohibited methods to kill or take wild birds.

METHODOLOGY

Desk Study

A search was made for available information relating to protected and priority species in the local area. A data search was supplied by the South East Wales Biodiversity Records Centre (SEWBRc) for a 1km search area on the 3rd March 2023 LRC reference 0223-917, for the Preliminary ecological appraisal while other freely available information was obtained from the internet source the Multi-Agency Geographic Information for the Countryside (MAGIC) (DEFRA 2022) and Natural Resources Wales designated sites search over a 2km area.

Reptile Survey

The 2023 PEA survey identified small areas of habitat suitable for reptiles and a survey was commissioned within the next appropriate season.

The reptile survey was conducted to establish presence/absence over areas of suitable and accessible vegetation, since a good degree of the plot is impassible, 30 roofing felt artificial refugia of 0.5 x 0.5m were placed in the clearer areas which receive sun, or in areas where there was thought to be good shelter available. The density at which the artificial refugia were used was roughly equivalent to 46 per Hectare of the whole site, although 100 per hectare are normally recommended (Natural England 2011). A greater proportion of the site was not considered suitable habitat and the number of refugia per Hectare of suitable habitat is likely to be closer to 100. The dark colour of the roofing felt attracts the reptiles to the source of heat and provides cover from predators. Figure 2 illustrates the relative positions of the refugia in the available habitat.

The refugia were laid on the 16th June 2023 and allowed almost two weeks to bed-in before surveys commenced. A single surveyor visited the site during dry weather conditions, with temperatures between 10 and 20°C. Each artificial refuge was turned gently and reptiles basking on top or underneath recorded.

The refugia were observed on 10 occasions through July and August 2023, a table of survey visits and weather conditions can be found below. Visits were timed to avoid the hottest parts of the day and temperatures suitable for the methodology. The number of survey visits was calculated by use of the Reptile Mitigation Guidelines TIN 102 produced by Natural England.

Date of visit	Time	Temperature	Weather conditions
29/06/2023	09:10	16°C	Partly cloudy, moderate wind
05/07/2023	12:00	18°C	Overcast after full sun, moderate wind
07/07/2023	09:45	20°C	Sunny, light wind
13/07/2023	10:45	18°C	Overcast, light wind sunny day with showers
20/07/2023	11:20	16°C	Overcast after short shower and sun
25/07/23	15:30	20°C	Sunny all day
10/08/2023	10:00	20°C	Overcast after sun, no wind
24/08/2023	09:20	17°C	Partly sunny, no wind
24/08/2023	15:30	20°C	Sunny, light wind
30/08/2023	18:00	17°C	Sunny, no wind

RESULTS

Reptiles

A single juvenile grass snake was observed on 13th and 25th July , 24th and 30th August. The snake was found under the same refuge on each occasion and is likely to be the same individual.

No other reptiles were found during the survey visits, but small mammals and amphibians were noted on several occasions. The voles and common toad noted are well suited to the bramble scrub and woodland habitat and are likely to provide a food source for the grass snake population.

EVALUTATION AND ASSESSMENT

Reptiles

A single reptile species has been observed at the site, grass snake. It is thought that a single individual was observed but must be part of a viable population which may be spread across several adjacent sites. The plot of land at Llandarcy Park is unlikely to support a viable grass snake population in isolation. The population found is thought to be small and of lower conservation significance. A population class size may be derived from the peak counts data or a habitat suitability assessment. Since the peak count was >5 individuals and the habitat suitability classed as 'poor' the class size can be assessed as being small according to the Reptile Mitigation Guidelines TIN 102.

Habitat connectivity to adjacent sites is poor, but animals may be able to access the scrub habitat to the south of the buildings at Llandarcy Park by the roadside vegetation beside the pitches on the B4290. There is also suitable habitat for them across the B4290 between the M4 and the adjacent sports pitches.

The approximate area of poor suitability habitat present is 4963m² with a loss of approximately 1639m² to the development. The remaining 3324m² will be enhanced for reptiles with the exception of the woodland area. The majority of this area will be available to reptiles during the construction work and will be prepared in advance by bramble removal.

Vegetation clearance activities must be undertaken in a way that avoid harm to the reptiles present and must be done so following translocation of animals within the site but outside of the area of work.

Non-native invasive species

The site currently contains a moderate sized stands of Japanese knotweed near to the south east side and the removal of it and development of the site would be viewed as a positive impact.

The plant must be controlled from allowing its spread into neighboring property. To allow its spread would be considered an offence.

Removal of the plant including all root and rhizome material would need to be carried out by a specialist contractor and carrier and disposed of at a specialist facility. Alternatively, the plant may be treated on site using glyphosate based herbicides using the correct dosing and timing for application, by a suitably qualified contractor. The Japanese knotweed present on site may take several years of applications to take effect and kill the plant. If removal is not considered a viable option the plant may be buried to a depth of 5m or 2m if wrapped in membrane and kept within the site boundary.

All work regarding the removal of Japanese knotweed must be conducted to Natural Resources Wales guidelines under a method statement prepared for the site.

CONCLUSIONS

Following the reptile survey, grass snake are found to present with possible prey species.

Impacts of the development of the site on reptiles are likely to be low to moderate and mitigation will be required to protect animals through the construction process and provide good quality habitat surrounding the developed area but within the same ownership as the development.

REPTILE MITIGATION PLAN

- A reptile exclusion area to allow space for the development and storage of machinery and materials throughout will need to be agreed on site.
- Outside of this area the retained habitat will be prepared for reptiles by clearance of bramble scrub. Some patches will be left to provide a mosaic of habitats including adequate cover for reptiles.
- Bramble clearance will take place during the months of March to October only. Bramble clearance will be undertaken in two stages to first cut to a height of 300mm. The second stage cut may proceed after a minimum of one week and then cut to a height of 50mm. All cutting/trimming activities will be supervised by an experienced ecologist to guide specific areas for cutting and rescue animals where necessary.
- Bramble clearance of the working area to become the exclusion area will also be required and carried out at the same time.
- A reptile barrier will be installed around the exclusion area. The barrier fence will be made of 250 thick uv stable with 600mm above ground and 150mm below ground with a 100mm turnback. It will be held by 50 x 50 x 1200mm stakes spaced at 1.5m intervals. The upper edge will also have a turn back stapled to the stakes.
- The barrier fence will enclose the working area of the site completely at the translocation stage.
- Artificial refugia will be placed at a high density through the interior of the enclosed area and a suitably experienced ecologist will check the refugia daily at temperatures between 10 and 20°C and suitable weather during the months of March through to October.
- Reptiles captured will be placed over the fence into the retained and prepared habitat area.
- Once five consecutive checks have been completed without any reptiles captured, the site may be considered clear.
- The mitigation for reptiles will include the planting of native hedge species, hibernacula construction, pond creation according to figure 3.
- Aftercare of the reptile mitigation features will include bramble control of the retained habitat area, annual trimming of native hedges after year 3. Annual cut and

collect mowing of the grassland around the parking area. Details to be provided in a habitat management plan.

REFERENCES

CIEEM (2016) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal. 2nd Edition*. Chartered Institute for Ecology and Environmental Management.

DEFRA (accessed 2021) Multi Agency Geographic Information for the Countryside, interactive map

JNCC UK Biodiversity Action Plan species <http://jncc.defra.gov.uk/page-5170>

Natural England (2011) Technical Information Note 102 Reptile Mitigation Guidelines

South East Wales Biodiversity Records Centre (2021) Data search for priority and protected species at Land at Darran Road.

Wales Biodiversity Partnership (2006) Section 42 list Species of Principle Importance for Conservation of Biological Diversity in Wales.

FIGURES

Figure 1. Location of the land Llandarcy Park. Contains Ordnance Survey data © Crown copyright and database right 2013

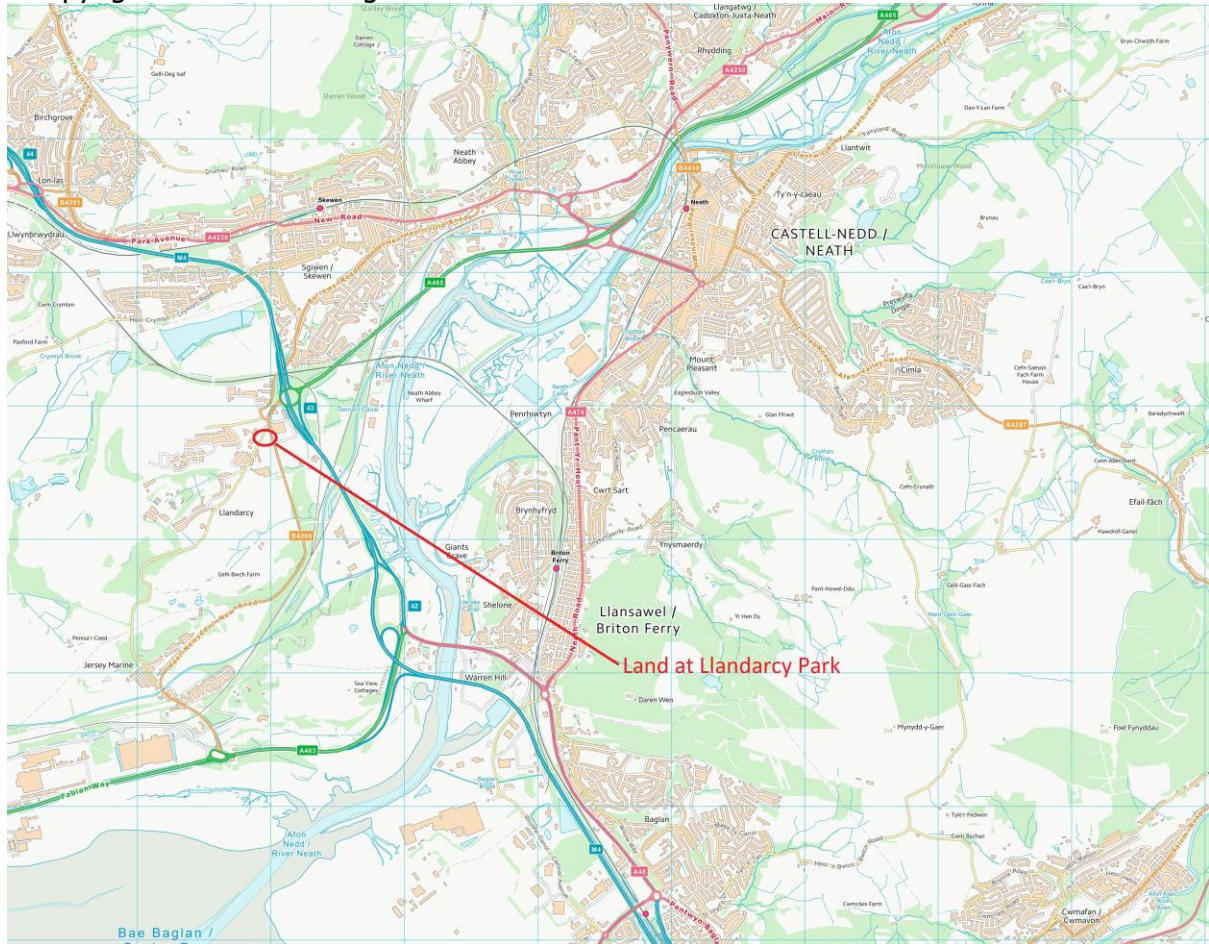


Figure 2. Artificial refugia locations for reptile survey Adapted from Holder Mathias
Architects Drawing number 4733 A-90-003

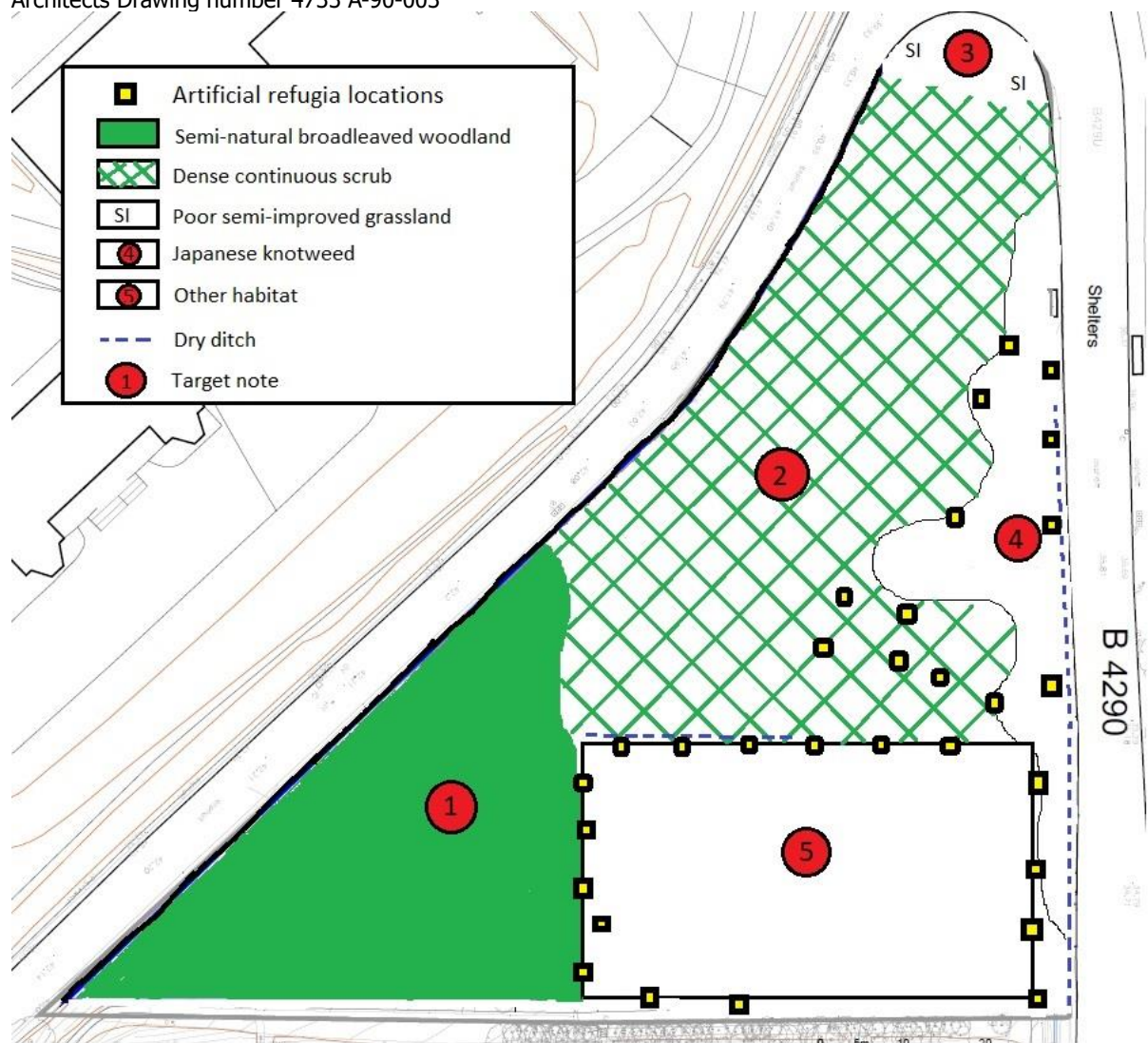


Figure 3. preliminary outline layout of the prosed development and mitigation
Adapted from Holder Mathias Architects Drawing number 4733 A-90-003

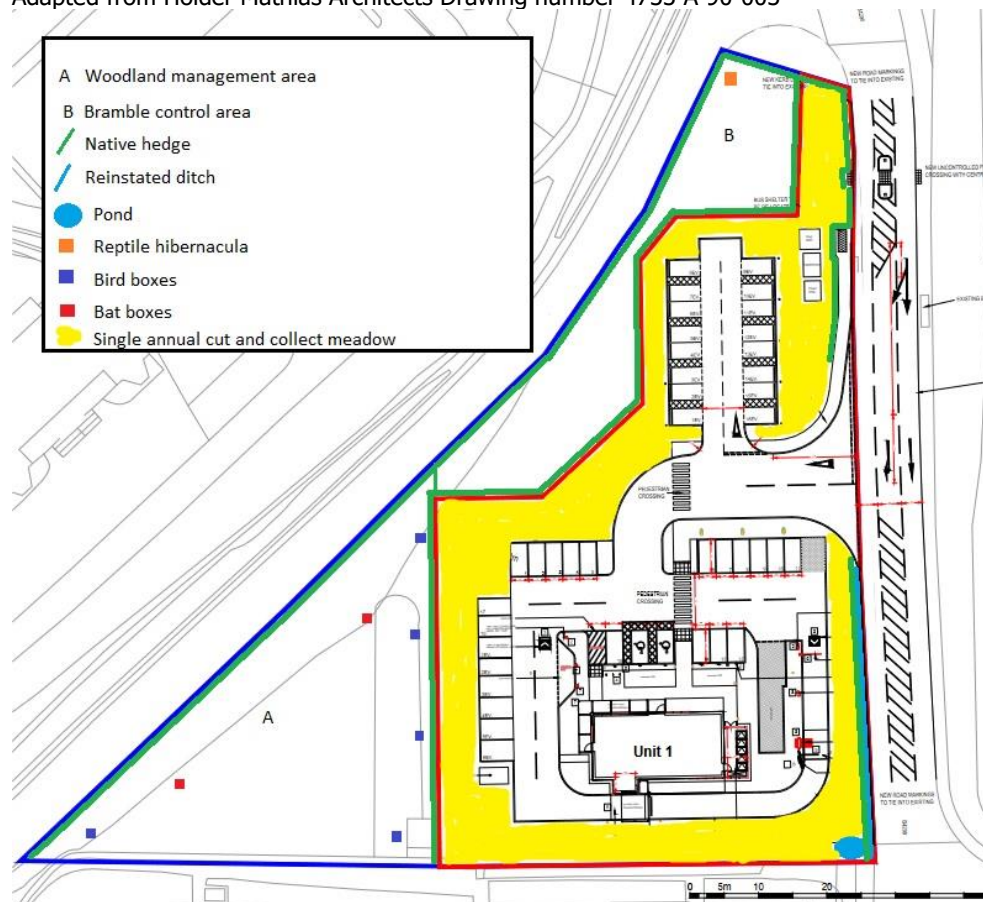
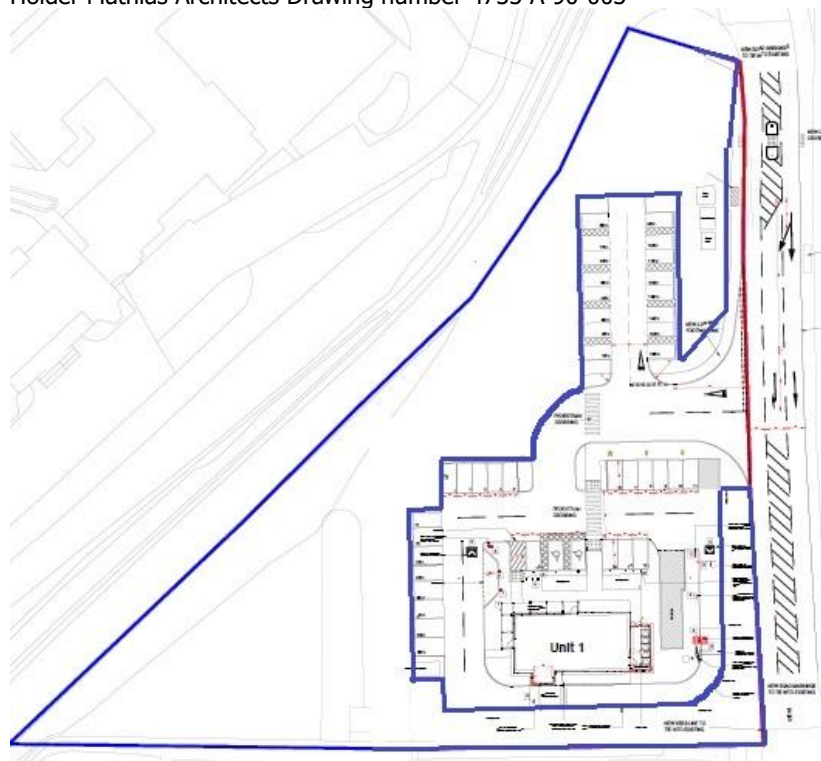


Figure 4. Retained and enhanced area for reptiles and other species Adapted from Holder Mathias Architects Drawing number 4733 A-90-003



APPENDIX A Site photographs



Photo 1.
Former pitch area
with scrub border
Feb 2023



Photo 2. Bramble
scrub habitat Feb
2023



Photo 3. Juvenile
grass snake
13/07/23



Photo 4. Juvenile
grass snake
25/07/23



Photo 5. Juvenile
grass snake
24/08/23



Photo 6. Juvenile
grass snake
30/08/23

