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*Land off New Brighton Road, New Brighton*

# Interim Protected Species Survey (Reptiles)

Compiled by Ecology Services Ltd.

*on behalf of*

Stewart Milne Homes North West England

**June 2021**



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Environmental Consultants

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## 1.0 Introduction

1.1 Ecology Services Ltd. was commissioned by Stewart Milne Homes NW England Ltd. in April 2021 to carry out an updated reptile survey on land off New Brighton Road, New Brighton, Mold, CH7 6RQ; National Grid Reference; (NGR) 325193, 365564. The site plan and reptile refugia locations are shown on Drawing 1.

### **Proposals**

1.2 The site is proposed for residential development with associated infrastructure and landscaping. See Drawing 2 - New Brighton, Mold, Proposed Layout V23 07.04.21. There have been changes to the design from a previous application including a reduction in the number of units from 92 to 84, a new footpath along the northern boundary of the site, an increase in the size of the Local Equipped Area for Play (LEAP) to the south west of the site and of the Public Open Space (POS) to the north west of the site.

### **Background and Survey Objectives**

1.3 The updated reptile survey is required following the original reptile survey undertaken in 2018, which is now out of date. Please refer to ESL - Protected Species Survey (Reptile) Report, New Brighton (Aug 2020) V4, in Appendix 2. The original data is also discussed in the report where it adds context.

1.4 The aims of the updated reptile survey were to:

- Review the desktop study undertaken for the updated preliminary ecological appraisal of reptile records in the local area to check for new records.
- Undertake an updated reptile presence/likely absence survey of habitats considered suitable to support such species. See Drawing 1 showing the location of reptile refugia.
- Record/map any locations of reptiles.
- If evidence is found within the proposed development site, provide advice to protect reptiles and their habitat.

1.5 All survey works were undertaken by experienced Ecologists during suitable weather conditions and at an appropriate time of year.

## 2.0 Planning Policy and Legislation

### **Legislation**

2.1 All British terrestrial native reptiles are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are protected under Section 9 of the Act.

2.2 Common reptile species comprise of adder (*Vipera berus*), slow worm (*Anguis fragilis*), grass snake (*Natrix natrix*) and common lizard (*Lacerta vivipara*) which are protected under Section 9 (parts 1 and 5) of the Act, against intentionally killing, injury and taking. The Act also prohibits selling, offering for sale, possessing or transporting for the purpose of sale or publishing advertisement to buy or sell.

2.3 Where any works affect the common reptile species, appropriate mitigation measures would be required to prevent intentional killing or injury.

- 2.4 Rarer reptiles are afforded additional protection; the species include smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*). These are afforded additional protection under the Conservation of Habitat and Species Regulation 2017<sup>1</sup> (as amended). Collectively the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended) make it an offence to:
- Intentionally or deliberately kill, injure or capture.
  - Deliberately disturb.
  - Damage or destroy breeding or resting places or places used for shelter or protection.
  - Possess, or any part of a smooth snake or sand lizard, unless acquired legally.
  - Sell, barter, exchange or transport for sale, etc., smooth snake and sand lizards or any part of them.
- 2.5 Disturbance is defined as that which is likely:
- to impair their 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, to hibernate or migrate; or
  - To affect significantly the local distribution or abundance of the species to which they belong.
- 2.6 The legislation covers all life stages. Eggs, juvenile and adults are covered equally by the legislation.
- 2.7 Where any works affect smooth snake or sand lizard, licences can be issued to allow otherwise prohibited acts (e.g. capturing or handling sand lizards). Licences for scientific study and conservation, education and photography are issued by the statutory nature conservation organisations. Smooth snake and sand lizard are not present at this site.
- Planning Policy**
- 2.8 Planning Policy Wales Edition 11 (February 2021) places a clear responsibility on Local Planning Authorities (LPA) to contribute to conserving and enhancing the natural and local environment. LPAs should support the conservation of biodiversity, safeguard protected and priority species (e.g. Species of Principal importance, Local Biodiversity Action Plan species) and existing biodiversity assets from impacts and secure enhancement of and improvements to ecosystem resilience. Technical Advice Note (TAN) 5 Nature Conservation and Planning (2010) provides detailed planning advice which supplements Planning Policy Wales.
- 2.9 Protected species within the UK, such as bats, are a 'material consideration' in the determination of a planning application. Therefore, an LPA is unlikely to determine an application until all relevant information relating to protected species or habitats is submitted to fully inform the application. Relevant information includes adequate surveys and, where required, mitigation strategies, which will need to be submitted to inform a planning application.
- 2.10 The local planning authority (LPA) has a duty to ensure that protected and priority species (e.g. Species of Principal Importance, Biodiversity Action Plan species) are fully considered

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<sup>1</sup> As amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 which continue the same provision for European protected species, licensing requirements and protected areas after Brexit.

in a planning decision. Therefore, up to date survey information and, where required, mitigation strategies adequate to assess the impacts of the proposals and to demonstrate that opportunities for species using the site can be maintained, must be provided in support of a planning application.

### **3.0 Methodology**

- 3.1 The reptile survey followed the standard best practice methodology set out in Froglife Advice Sheet 10: Reptile Survey (1998).
- 3.2 Being cold blooded, reptiles are known to utilise artificial refugia for basking in order to raise their body temperature high enough to enable them to become active and hunt. These refugia are usually made from corrugated metal sheeting or roofing felt and placed in suitable areas of the survey site.
- 3.3 Suitable areas are those that are exposed to the sun but hidden away in vegetation, for example areas exposed to the sun with good vegetative structure provided by grassland, scrub/heath mosaic. Areas of rough grassland on the edge of dense scrub are considered ideal habitat for reptiles as this provides vegetative structure, which is both at and just above ground level. Areas with rabbit warrens and holes are also favoured as they provide ideal opportunities for shelter and hibernation. The density of refugia will affect the chances of identifying reptiles (the more refugia there are, the higher the chances of recording reptiles).
- 3.4 Artificial refugia consisting of 0.5 metre squares of roofing felt were deployed at suitable locations at a density of at least 10-20 refugia per hectare. Each refugia was then given a number so that results could be analysed. The refugia were then left for up to 7 days to bed-in to allow animals to find and become accustomed to them. The refugia were checked on seven occasions of suitable weather over the survey period (successive days are acceptable). Following completion of the survey, all refugia were removed off site.

### **4.0 Results**

#### ***Desktop Study Results***

- 4.1 The desktop study found several records of reptiles, see Appendix 1 for Data Results Plan from the 13<sup>th</sup> November 2020.
- 4.2 The data search found 92 records of grass snake located within 2km of the site, dating from 1990 to 2020, with records containing anywhere between 1 and 27 individual snakes, including both adults and juveniles. A large collection of records is from the Maes-y-Grug SSSI located approximately 1-1.3km from the site. One grass snake record from 2001 is located within 50m of the site, to the east.
- 4.3 There are three records of adder dating from 1999 to 2013, all three records were over 1km from the site. There was one record of common lizard found within 2km of the site dating back to 2008. There was a record of slow worm just over 2km from the site, dating from 2011.
- 4.4 The data search contained some historic records, but it does highlight that reptile species are present in the local area.

### Evidence of Reptile

- 4.5 The refugia were located around the site, mainly in areas of a southern aspect, which possessed the suitable vegetative structure and exposure to the sun where reptiles would most likely bask. Drawing 1 identifies the locations of the refugia.
- 4.6 The surveys were undertaken between the 19<sup>th</sup> of May 2021 and June 2021; see Table 1 below for survey dates and temperatures. Dates in June are provisional and may be changed due to weather conditions.

**Table 1: Survey Dates & Temperatures**

Survey Dates	Surveys Rounds	Temperatures (°C)	Time of Survey
16th April 2021 &	Refugia laid	-	-
19 <sup>th</sup> May 2021	Survey 1	13	16:00 to 17:10
27 <sup>th</sup> May 2021	Survey 2	12.3 to 13.7	08:50 to 10:00
30 <sup>th</sup> May 2021	Survey 3	13.2 to 15.7	08:25 to 09:50
4 <sup>th</sup> June 2021	Survey 4	TBC	TBC
7 <sup>th</sup> June 2021	Survey 5	TBC	TBC
11 <sup>th</sup> June 2021	Survey 6	TBC	TBC
16 <sup>th</sup> June 2021	Survey 7	TBC	TBC

- 4.7 A total of 45 refugia were initially laid and checked and no reptiles were recorded during any of the surveys although common toad (*Bufo bufo*) and common frog were found on site; see Table 2 below for the survey results. Dates in June are provisional and may be changed due to weather conditions.

**Table 2: Survey Results**

Survey Date	Reptile Results	Amphibian Results
19 <sup>th</sup> May 2021	None	2 Bb & 1Rt
27 <sup>th</sup> May 2021	None	19Bb
30 <sup>th</sup> May 2021	None	15Bb & 2Rt
4 <sup>th</sup> June 2021	TBC	TBC
7 <sup>th</sup> June 2021	TBC	TBC
11 <sup>th</sup> June 2021	TBC	TBC
16 <sup>th</sup> June 2021	TBC	TBC

Note: Bb = common toad, Rt = common frog

- 4.8 During these visits, visual and terrestrial searches were also carried out and no reptiles were observed.

### Timing

- 4.9 Reptile survey works were undertaken during May and June 2021. May is an optimal survey period, but the surveys needed to be extended in to June, which is also a suitable survey period. Adverse weather conditions occurred in early to mid-May.

### **Weather Conditions**

- 4.10 Survey visits were not carried out during rain or when it was windy as reptiles do not emerge or bask in such conditions. The temperature should ideally be between 10°C and 18°C. If temperatures are over 18°C then reptiles are less likely to use refuges as they will be warm enough and have no need to bask. The ambient air temperature will ensure that they remain warm. Visits were therefore more commonly made in the mid-morning period before temperatures had risen too high or later in the afternoon/evening when temperatures were suitable.
- 4.11 Weather conditions prior to and during the reptile surveys were dry and conditions were suitable to undertake such a survey.

### **Personnel**

- 4.12 All survey works were undertaken by experienced Ecologists Mr. C. Smith.

### **Constraints**

- 4.13 There were no constraints encountered during the survey period.

## **5.0 Conclusion & Recommendations**

- 5.1 The desktop study found multiple records of reptiles, specifically grass snakes, within 2km of the proposed development site. Other reptile species include adder and common lizard which were also recorded within 2km of the site and slow worm just over 2km from the site.
- 5.2 The surveys identified habitats that are considered suitable for the common reptile species, mainly in association with the boundaries of the site and the tree line, but surveys to date in 2021 have found evidence of reptiles to be absent. The reptile survey strictly followed standard best practice survey methods and were undertaken by suitably experienced Ecologists.
- 5.3 The 2018 reptile survey found reptiles to be absent at the site. To date, during the 2021 reptile survey found reptiles to be absent at the site, therefore, at this time it is considered unlikely that reptiles are present on site, there are no apparent implications with regards to the proposed development and reptiles.
- 5.4 It is noted that there are there are multiple grass snakes recorded in the local area and it is acknowledged that habitats are suitable to support this species within parts of the site. The site is also suitable to support common lizard, however, it offers low suitability for adder.
- 5.5 Although reptiles were found to be absent in 2018 and to date for 2021, given the number of records of grass snake in the local area, protection measures for common reptiles should be implemented. The Precautionary Compensatory Scheme for Great Crested Newt (*Triturus cristatus*) (Ecology Services Limited, May 2021) details the avoidance and mitigation measures to safeguard amphibians which will also serve to provide adequate provision for exclusion and protection of reptiles during habitat clearance and the development phase.
- 5.6 To compensate the loss of suitable reptile habitat within the site, hibernacula comprising logs / rubble, approximately 2m long and 1.5m high. Dig out a 50 cm base and line with sand and gravel. Fill the area with stones, rocks and logs and then pile branches and brash over the top, creating lots of nooks and crannies where snakes and lizards can hibernate. Wood from tree felling or scrub clearance is ideal for this. Place soil and turfs from the

excavation over the pile as an insulating layer and to protect it from frost. Ensure gaps are left for reptiles to enter and exit the finished hibernaculum. Seven hibernacula are proposed within the site.

- 5.7 The development layout (Drawings 2) and detailed landscape plans also includes a dedicated 0.155ha great crested newt compensation area including a pond in the north west of the site; a large SuDS pool, locally deepened to provide permanent standing water with the surrounding grassland managed to provide terrestrial habitat for amphibians; and 190m new native species hedgerow to increase habitat connectivity. These measures will also benefit reptiles.
- 5.8 As best practice it is advised that all the contractors are subject to a toolbox talk, to raise awareness of the potential presence of reptiles. The toolbox talk should raise awareness by reviewing photographs of reptiles likely to be present on site, discussing their habitat preferences, legal protection and what to do should a reptile be suspected or found on site.
- 5.9 If at any time a reptile is suspected or found on site, works should cease in that area and the acting consultant or Natural Resources for Wales contacted for advice.

## 6.0 References

Beebee, T. C, & Griffiths, R A. (2000). Amphibians and Reptiles. A Natural History of the British Herpetofauna.

Bennett, D. (1999). Reptiles and Amphibians. Expedition Field Techniques.

Ecology Services Limited (May 2021) Land off New Brighton Road, New Brighton, Precautionary Compensatory Scheme for Great Crested Newt (*Triturus cristatus*).

Ecology Services Limited (August 2020) Protected Species Survey (Reptile) Report, New Brighton (Version 4)

Gent.T & Gibson, S. (2010) Herpetofauna Worker's Manual. Joint Nature Conservation Committee. Peterborough.

Herpetofauna Groups of Britain and Ireland. Evaluating Local Mitigation/Translocation Programmes: Maintaining best practice and lawful standards.

Langton, T. (1989). Snakes and lizards. Whittet Books. London.

Stafford, P. (1987). The Adder.

The Conservation of Habitats and Species Regulations 2017 (as amended)

The Wildlife & Countryside Act 1981 (As amended)

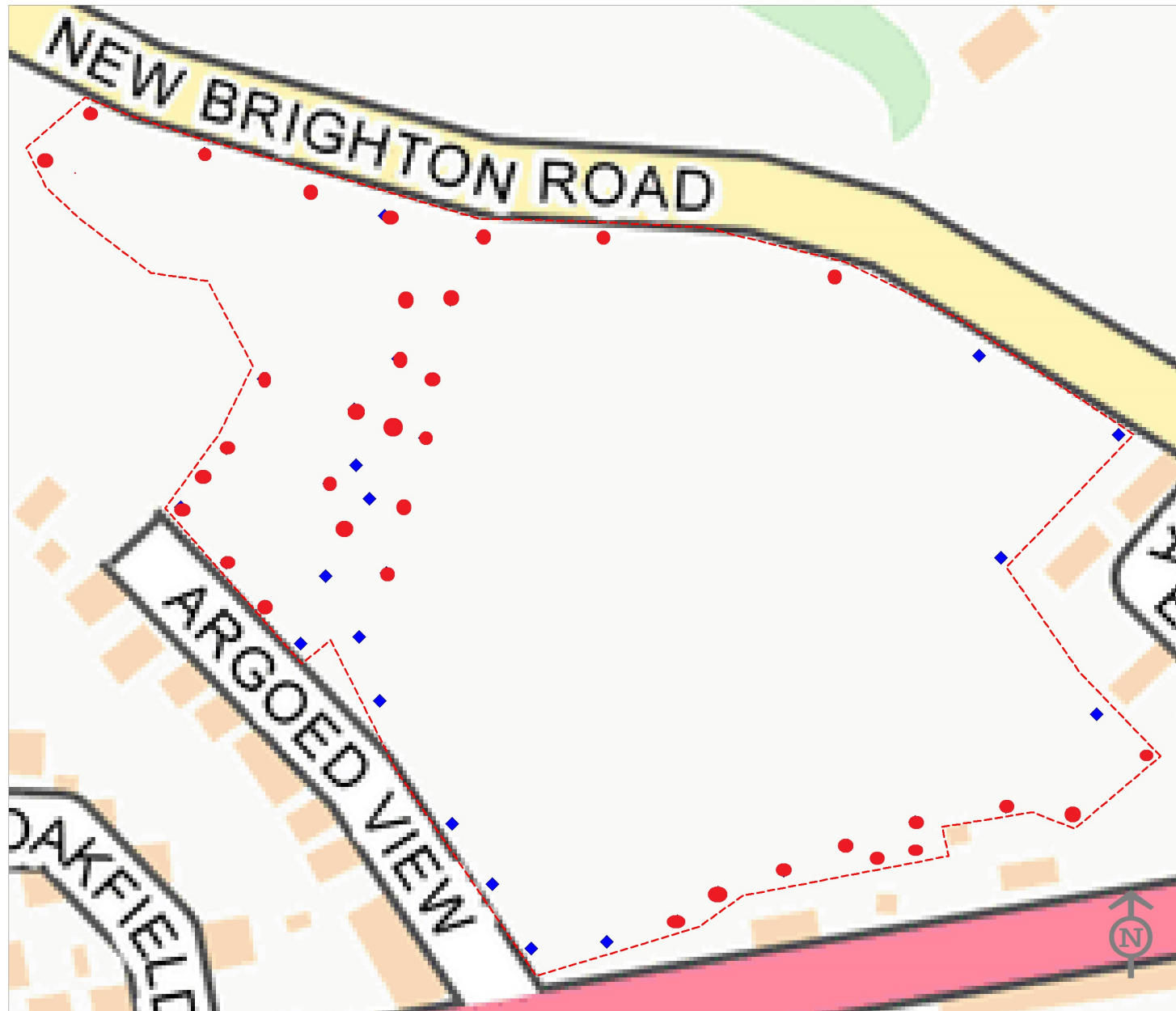
UK Biodiversity Steering Group (1995) Biodiversity – the UK Steering Group Report. Volume 2: Action Plans. P89 SAP for Pipistrelle. London, HMSO.

Welsh Assembly Government (2009) Planning Policy Wales Technical Advice Note 5: Nature Conservation and Planning.



Welsh Assembly Government (2018) Planning Policy Wales Edition 11. Online – available from: <https://gov.wales/planning-policy-wales>

**Drawing 1:**  
Location of Reptile Refugia






New Brighton, Mold

Drawing 1:  
Location of  
Reptile Refugia.

Map Ref: (NGR) 325199, 365552  
Map Scale: 1:850 @ A3

KEY

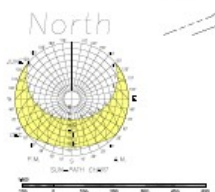
-  Site boundary
-  Location of placed refugia
-  Mats put down on 16.04.21

**Drawings 2:**  
Proposed Planning Layout (V23 07.04.21) & Precautionary Compensation  
Scheme

# Argoed View, Nr Mold Proposed Sketch Layout - 1:500

Planning Layout Legend

-  Allotment
-  Allotment (with house)
-  Allotment (with house and garden)
-  Allotment (with house and garden, larger)
-  Allotment (with house and garden, larger, different style)
-  Allotment (with house and garden, larger, different style)
-  Allotment (with house and garden, larger, different style)
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-  Allotment (with house and garden, larger, different style)
-  Allotment (with house and garden, larger, different style)



**STEWART Milne HOMES**

**Schedule of Accommodation**

Code	Description	Area (sqm)	Volume (cu m)
01	Residential	100.0	100.0
02	Commercial	50.0	50.0
03	Public Open Space	200.0	200.0
04	Other	10.0	10.0
<b>Total</b>		<b>360.0</b>	<b>360.0</b>

DATE	03/2021	DRAWN	DIM
SCALE	1:500	CHK	
Argoed View, Nr Mold			
Proposed Planning Layout			
Dwg No	SK298/NBM/PL50	Rev	
		Stewart Milne Homes Market House 2 Lumley Road Cabre Business Park Trafford Park Manchester Telephone (0161) 866 6900 Fax (0161) 866 6909	

Figure 2:  
Precautionary  
Compensation Scheme

Map Ref: (NGR) 325188, 365550  
Map Scale: 1:900 @ A3

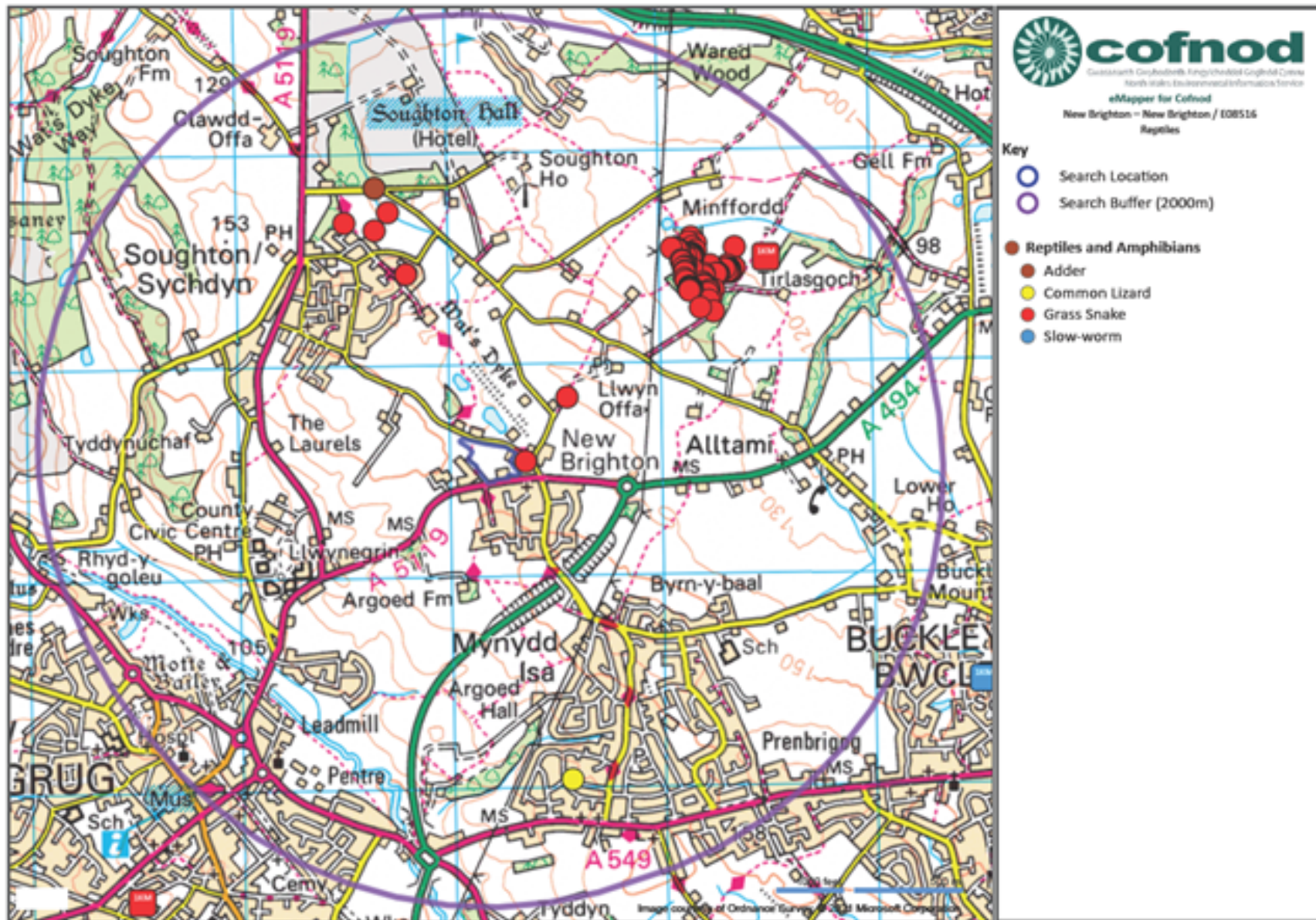


**KEY**

-  Site boundary
-  Pond
-  Amphibian habitat
-  Existing hedgerow
-  New hedgerow
-  Area of scrub planting
-  SUDs
-  POS
-  Hibernacula

**Appendices**  
Appendix 1: Desktop Study Plan

Land off New Brighton Road, New Brighton





**Appendix 2:**  
ESL - Protected Species Survey (Reptile)  
Report, New Brighton (Aug 2020) V4

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*Land off New Brighton Road, New Brighton*

# Protected Species Survey (Reptiles)

Compiled by Ecology Services Ltd.

*on behalf of*

Stewart Milne Homes North West England

**January 2019 (revised August 2020)**



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**Drawings**

Drawing 1: Location of Reptile Refugia

Drawing 2: Proposed Planning Layout (Rev R)

**Tables**

Tables 1: Survey Dates & Temperatures

Tables 2: Survey Results

**Appendices**

Appendix 1: Desktop Study Plan

## 1.0 Introduction

- 1.1 Ecology Services Ltd. was commissioned by Stewart Milne Homes NW England Ltd. in May 2018 to undertake an ecological appraisal on land off New Brighton Road, New Brighton, Mold, CH7 6RQ; National Grid Reference; (NGR) 325193, 365564.
- 1.2 The ecological assessment identified over 40 records of grass snake within 2km of the development site, one of which was within 50m of the site. Other reptiles identified included within 2km are adder and common lizard.
- 1.3 Habitats in the wider survey area and the site are considered suitable to support reptiles. Suitable habitats within the site include; grassland edges, hedgerows, scrub and tall ruderal. The ecological assessment made recommendations for a reptile survey, the results of which are presented in this report.
- 1.4 The aims of the survey were to:
  - Review the desktop study of reptile records in the local area.
  - Undertake a reptile presence/absence survey of habitats considered suitable to support such species. See Drawing 1 showing the location of reptile refugia.
  - Record/map any locations of reptiles.
  - If evidence is found within the proposed development site, provide advice to protect reptiles and their habitat.
- 1.5 All survey works were undertaken by experienced Ecologists during suitable weather conditions and at an appropriate time of year.
- 1.6 Proposed development works include, the construction of residential houses and associated infrastructure (see Drawing 2).

## 2.0 Regulatory & Planning Framework

- 2.1 All British terrestrial native reptiles are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are protected under Section 9 of the Act.
- 2.2 Common reptile species comprise of adder (*Vipera berus*), slow worm (*Anguis fragilis*), grass snake (*Natrix natrix*) and common lizard (*Lacerta vivipara*) which are protected under Section 9 (parts 1 and 5) of the Act, against intentionally killing, injury and taking. The Act also prohibits selling, offering for sale, possessing or transporting for the purpose of sale or publishing advertisement to buy or sell.
- 2.3 Where any works affect the common reptile species, appropriate mitigation measures would be required to prevent intentional killing or injury.
- 2.4 Rarer reptiles are afforded additional protection; the species include smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*). These are afforded additional protection under the Conservation of Habitat and Species Regulation 2017<sup>1</sup> (as amended). Collectively the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended) make it an offence to:
  - Intentionally or deliberately kill, injure or capture.

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<sup>1</sup> As amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 which continue the same provision for European protected species, licensing requirements and protected areas after Brexit.

- Deliberately disturb.
- Damage or destroy breeding or resting places or places used for shelter or protection.
- Possess, or any part of a smooth snake or sand lizard, unless acquired legally.
- Sell, barter, exchange or transport for sale, etc., smooth snake and sand lizards or any part of them.

2.5 Disturbance is defined as that which is likely:

- to impair their 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, to hibernate or migrate; or
- To affect significantly the local distribution or abundance of the species to which they belong.

2.6 The legislation covers all life stages. Eggs, juvenile and adults are covered equally by the legislation.

2.7 Where any works affect smooth snake or sand lizard, licences can be issued to allow otherwise prohibited acts (e.g. capturing or handling sand lizards). Licences for scientific study and conservation, education and photography are issued by the statutory nature conservation organisations. Smooth snake and sand lizard are not present at this site.

#### ***Planning Policy Wales (PPW)***

2.8 In brief the Planning Policy Wales Edition 10 (December 2018) sets out the Welsh Government's objectives for biodiversity and ecological networks. Development plan strategies, policies and development proposals must consider the need to: support the conservation of biodiversity, in particular the conservation of wildlife and habitats; ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats; ensure statutorily and non-statutorily designated sites are properly protected and managed; safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks.

2.9 Planning Policy Wales Technical Advice Note 5: Nature Conservation and Planning (Welsh Assembly Government, 2009) states that the presence of a protected species is a material consideration when a local planning authority is considering a development proposal that, if carried out, would be likely to result in disturbance or harm to the species or its habitat.

#### ***Environment (Wales) Act 2016***

2.10 The Environment (Wales) Act 2016, sets out the requirement for the 'sustainable management of natural resources' together with new ways of working to achieve this. Part 1 of the Environment Act sets out Wales' approach to planning and managing natural resources at a national and local level with a general purpose linked to statutory 'principles of sustainable management of natural resources' defined within the Act.

- 4.2 There were over 40 records of grass snake within 2km of the development site dating from 1990 to 2017, with records containing anywhere between 1 and 27 individual snakes. A large collection of records is from the Maes-y-Grug SSSI located approximately 1-1.3km from the site. One grass snake record from 2001 is located within 50m of the site, to the east.
- 4.3 There are several records of adder, and common lizard, over 1km from the development site.
- 4.4 The data search contained some historic records, but it does highlight that reptile species are present in the local area.

#### Evidence of Reptile

- 4.5 The refugia were located around the site, mainly in areas of a southern aspect, which possessed the suitable vegetative structure and exposure to the sun where reptiles would most likely bask. Drawing 1 identifies the locations of the refugia.
- 4.6 The surveys were undertaken between the 4<sup>th</sup> September 2018 and the 30<sup>th</sup> September 2018; see Table 1 below for survey dates and temperatures.

**Table 1: Survey Dates & Temperatures**

Survey Dates	Surveys Rounds	Temperatures (°C)
<b>6<sup>th</sup> August 2018</b>	<b>Refugia laid</b>	
<b>4<sup>th</sup> September 2018</b>	<b>Survey 1</b>	<b>18</b>
<b>6<sup>th</sup> September 2018</b>	<b>Survey 2</b>	<b>14</b>
<b>12<sup>th</sup> September 2018</b>	<b>Survey 3</b>	<b>16</b>
<b>13<sup>th</sup> September 2018</b>	<b>Survey 4</b>	<b>16</b>
<b>22<sup>nd</sup> September 2018</b>	<b>Survey 5</b>	<b>15</b>
<b>27<sup>th</sup> September 2018</b>	<b>Survey 6</b>	<b>18</b>
<b>30<sup>th</sup> September 2018</b>	<b>Survey 7</b>	<b>14</b>

- 4.7 A total of 45 refugia were initially laid and checked and no reptiles were recorded during any of the surveys although common toad (*Bufo bufo*) were found on site; see Table 2 below for the survey results.

**Table 2: Survey Results**

Survey Date	Reptile Results	Amphibian Results
<b>4<sup>th</sup> September 2018</b>	<b>None</b>	<b>-</b>
<b>6<sup>th</sup> September 2018</b>	<b>None</b>	<b>-</b>
<b>12<sup>th</sup> September 2018</b>	<b>None</b>	<b>-</b>
<b>13<sup>th</sup> September 2018</b>	<b>None</b>	<b>3Bb</b>
<b>22<sup>nd</sup> September 2018</b>	<b>None</b>	<b>8Bb</b>
<b>27<sup>th</sup> September 2018</b>	<b>None</b>	<b>-</b>
<b>30<sup>th</sup> September 2018</b>	<b>None</b>	<b>-</b>

Note: Bb = common toad

### **Section 6 – Biodiversity and resilience of ecosystems duty**

- 2.11 Section 6 under Part 1 of the Environment (Wales) Act 2016 introduced an enhanced biodiversity and resilience of ecosystems duty (the S6 duty) for public authorities in the exercise of functions in relation to Wales.
- 2.12 The S6 duty requires that public authorities must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems.

### **Section 7 - Biodiversity lists and duty to take steps to maintain and enhance biodiversity**

- 2.13 This section replaces the duty in Section 42 of the Natural Environment and Rural Communities (NERC) Act 2006. The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales.
- 2.14 The Welsh Ministers must also 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. Part 1 of the Act, including Sections 6 and 7, came in to force on May 21, 2016.

## **3.0 Methodology**

- 3.1 The reptile survey followed the standard best practice methodology set out in Froglife Advice Sheet 10: Reptile Survey (1998).
- 3.2 Being cold blooded, reptiles are known to utilise artificial refugia for basking in order to raise their body temperature high enough to enable them to become active and hunt. These refugia are usually made from corrugated metal sheeting or roofing felt and placed in suitable areas of the survey site.
- 3.3 Suitable areas are those that are exposed to the sun but hidden away in vegetation, for example areas exposed to the sun with good vegetative structure provided by grassland, scrub/heath mosaic. Areas of rough grassland on the edge of dense scrub are considered ideal habitat for reptiles as this provides vegetative structure, which is both at and just above ground level. Areas with rabbit warrens and holes are also favoured as they provide ideal opportunities for shelter and hibernation. The density of refugia will affect the chances of identifying reptiles (the more refugia there are, the higher the chances of recording reptiles).
- 3.4 Artificial refugia consisting of 0.5 metre squares of roofing felt were deployed at suitable locations at a density of at least 10-20 refugia per hectare. Each refugia was then given a number so that results could be analysed. The refugia were then left for up to 7 days to bed-in to allow animals to find and become accustomed to them. The refugia were checked on seven occasions of suitable weather over the survey period (successive days are acceptable). Following completion of the survey, all refugia were removed off site.

## **4.0 Results**

### ***Desktop Study Results***

- 4.1 The desktop study found several records of reptiles, see Appendix 1 for Data Results Plan.

4.8 During these visits, visual and terrestrial searches were also carried out.

**Timing**

4.9 Reptile survey works were undertaken throughout September 2018, all were therefore completed within the optimal survey period.

**Weather Conditions**

4.10 Survey visits were not carried out during rain or when it was windy as reptiles do not emerge or bask in such conditions. The temperature should ideally be between 10° and 18°C. If temperatures are over 18°C then reptiles are less likely to use refuges as they will be warm enough and have no need to bask. The ambient air temperature will ensure that they remain warm. Visits were therefore more commonly made in the mid-morning period before temperatures had risen too high.

4.11 Weather conditions prior to and during the reptile surveys were dry and conditions were suitable to undertake such a survey.

**Personnel**

4.12 All survey works were undertaken by experienced Ecologists Mr. A. Leishman, Mr. C. Smith and Mr. C. Piner.

**Constraints**

4.13 There were no constraints encountered during the survey period.

## **5.0 Conclusion & Recommendations**

5.1 The desktop study found multiple records of reptiles, specifically grass snakes, within 2km of the proposed development site. Other reptile species include adder and common lizard which were also recorded within 2km of the site.

5.2 The surveys identified habitats that are considered suitable for the common reptile species, mainly in association with the boundaries of the site and the tree line, but evidence of reptiles was found to be absent. The reptile survey strictly followed standard best practice survey methods and were undertaken by suitably experienced Ecologists.

5.3 Therefore, at the time of the survey, there are no apparent implications with regards to the proposed development and reptiles.

5.4 It is noted that there are there are multiple grass snakes recorded in the local area and it is acknowledged that habitats are suitable to support this species within parts of the site. The site is also suitable to support common lizard, however, it offers low suitability for adder.

5.5 Although reptiles were found to be absent, given the number of records of grass snake in the local area, protection measures for common reptiles should be implemented. The Precautionary Compensatory Scheme for Great Crested Newt (*Triturus cristatus*) (Ecology Services Limited, November 2019) details the avoidance and mitigation measures to safeguard amphibians which will also serve to provide adequate provision for exclusion and protection of reptiles during habitat clearance and the development phase.

5.6 To compensate the loss of suitable reptile habitat within the site, hibernacula comprising logs / rubble, approximately 2m long and 1.5m high. Dig out a 50 cm base and line with sand and gravel. Fill the area with stones, rocks and logs and then pile branches and brash



over the top, creating lots of nooks and crannies where snakes and lizards can hibernate. Wood from tree felling or scrub clearance is ideal for this. Place soil and turfs from the excavation over the pile as an insulating layer and to protect it from frost. Ensure gaps are left for reptiles to enter and exit the finished hibernaculum. Seven hibernacula are proposed within the site.

- 5.7 The development layout (Drawing 2) and detailed landscape plans also includes a dedicated 0.12ha great crested newt compensation area including a pond in the north west of the site; a large SuDS pool, locally deepened to provide permanent standing water with the surrounding grassland managed to provide terrestrial habitat for amphibians; and 190m new native species hedgerow to increase habitat connectivity. These measures will also benefit reptiles.
- 5.8 As best practice it is advised that all the contractors are subject to a toolbox talk, to raise awareness of the potential presence of reptiles. The toolbox talk should raise awareness by reviewing photographs of reptiles likely to be present on site, discussing their habitat preferences, legal protection and what to do should a reptile be suspected or found on site.
- 5.9 If at any time a reptile is suspected or found on site, works should cease in that area and the acting consultant or Natural Resources for Wales contacted for advice.

## 6.0 References

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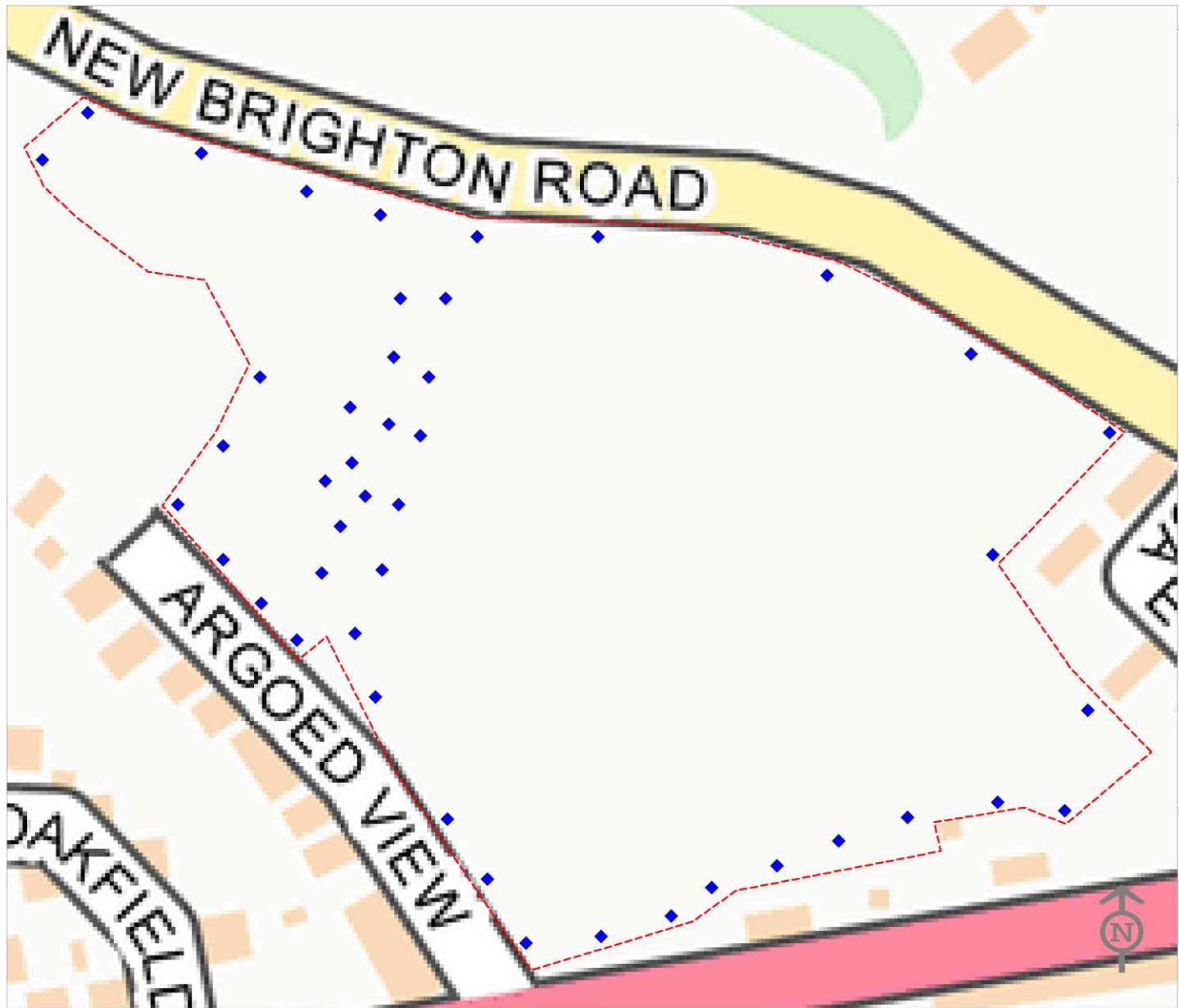
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**Drawing 1:**  
Location of Reptile Refugia





New Brighton, Mold

Drawing 1:  
Location of  
Reptile Refugia.

Map Ref: (NGR) 325199, 365552  
Map Scale: 1:850 @ A3

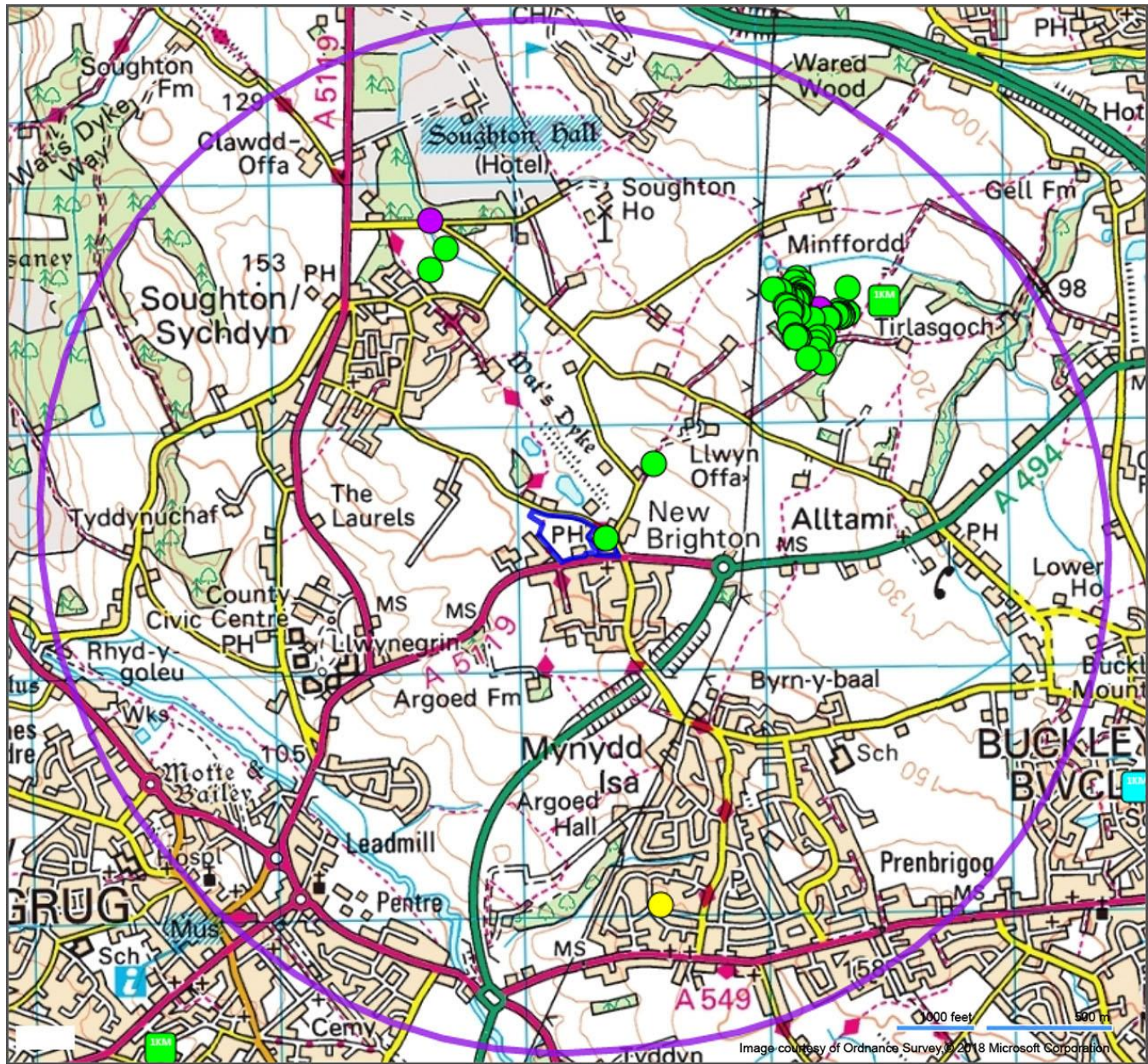
KEY

-  Site boundary
-  Location of placed refugia

**Drawing 2:**  
Proposed Planning Layout (Rev R)



**Appendix 1:**  
Desktop Study Plan



# eMapper

Mapping System for Cofnod  
 New Brighton – Wales Data Searches / E06534  
 2km Reptile Records

- Key**
- Search Location
  - Search Buffer (2000m)
  - Reptiles and Amphibians**
    - Adder
    - Common Lizard
    - Grass Snake
    - Slow-worm

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