EVOLUTION ECOLOGY LTD

***Smart Thinking** – Specific, Measurable, Achievable, Relevant, Time/Cost Limited*

Mr & Mrs Bain,
Rose Hill,
Nabb Lane,
Alton,
Staffordshire,
ST10 4AY

Mr. Paul Keeling
Evolution Ecology Ltd
Lulworth House,
51 High Street,
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ST10 1AR

25th November 2019

Dear Mr. & Mrs. Bain,

This letter-statement relates to the **'Site Access at Rose Hill, Nabb Lane, Alton, Staffordshire, ST10 4AY.** The work commissioned, was to carry out a 'Walkover Survey' of the 'Existing Access of the Site' and the immediately surrounding land and identify the presence of any ecological features of interest, if any.

The primary objectives of the survey were to assess the presence of the habitats at the above site, and the flora species that make up these habitats. Therefore, also assessing the likelihood of protected fauna species being present during the proposed works at the site.

1.1.1 The site visit took place on the 25th of November 2019 by Mr. Paul Keeling BSc (Hons) MCIEEM (Ecologist), and Tiffany Jenkinson (Assistant Ecologist). Mr. Paul Keeling has more than ten years' experience in undertaking Preliminary Ecological Appraisals of a variety of sites.

1.1.2 The main purpose of this assessment was to identify the habitats and flora species present onsite and any evidence of protected species usage and/or features of potential ecological interest.

1.1.3 This letter-statement outlines the survey methodologies undertaken and assesses the survey results, so that appropriate ecological provisions (including whether further surveys are required) can be devised.

1.2 Site Description

1.2.1 The site consists of a hedgerow made up of holly (*IIex aquifolium*) and hawthorn (*crataegus monogyna*) and is approximately 63 metres in length. The hedgerow creates a boundary between the road and a garden, and the dominant habitats within the garden are a pond and amenity grassland.

1.2.2 Photographs of the site are presented in Appendix One. Please see below Figure 1 for the boundary of the works.

Figure 1: A site plan showing the existing/proposed access point (please contact nathan@smytheman.co.uk, for a clear image)

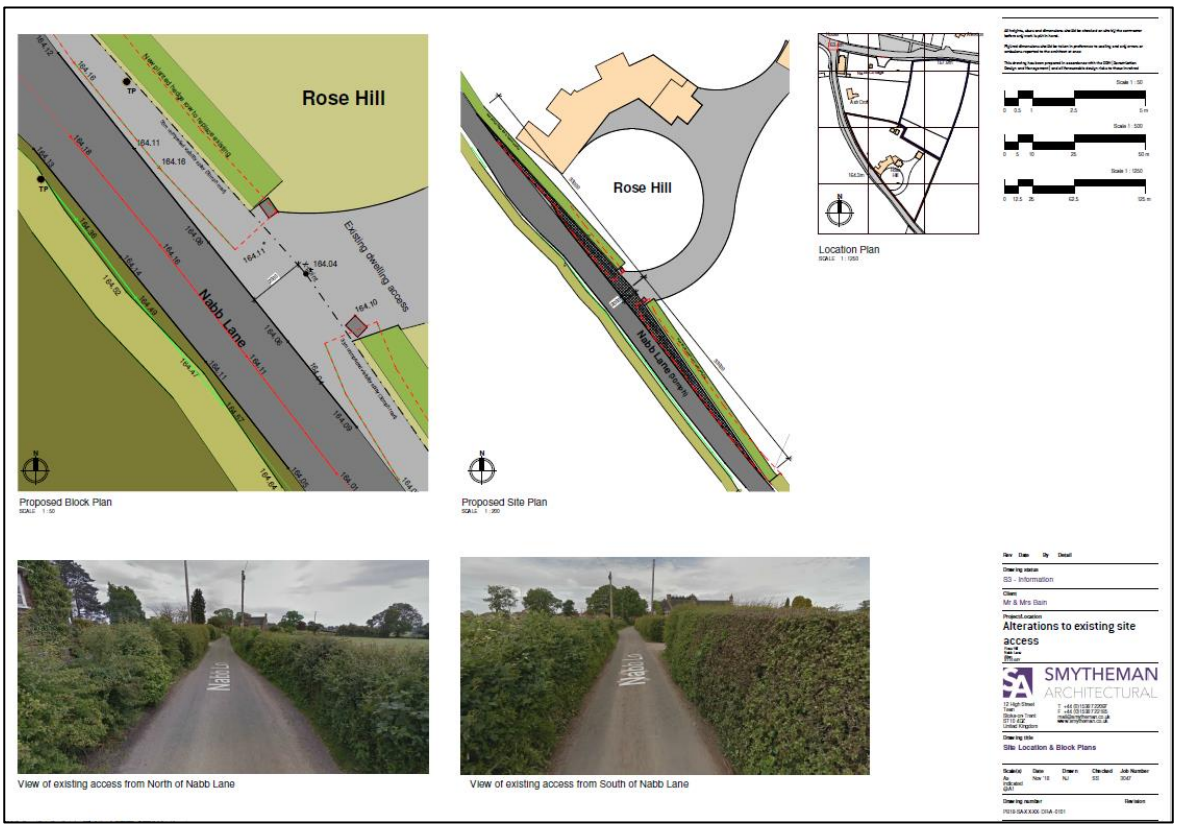
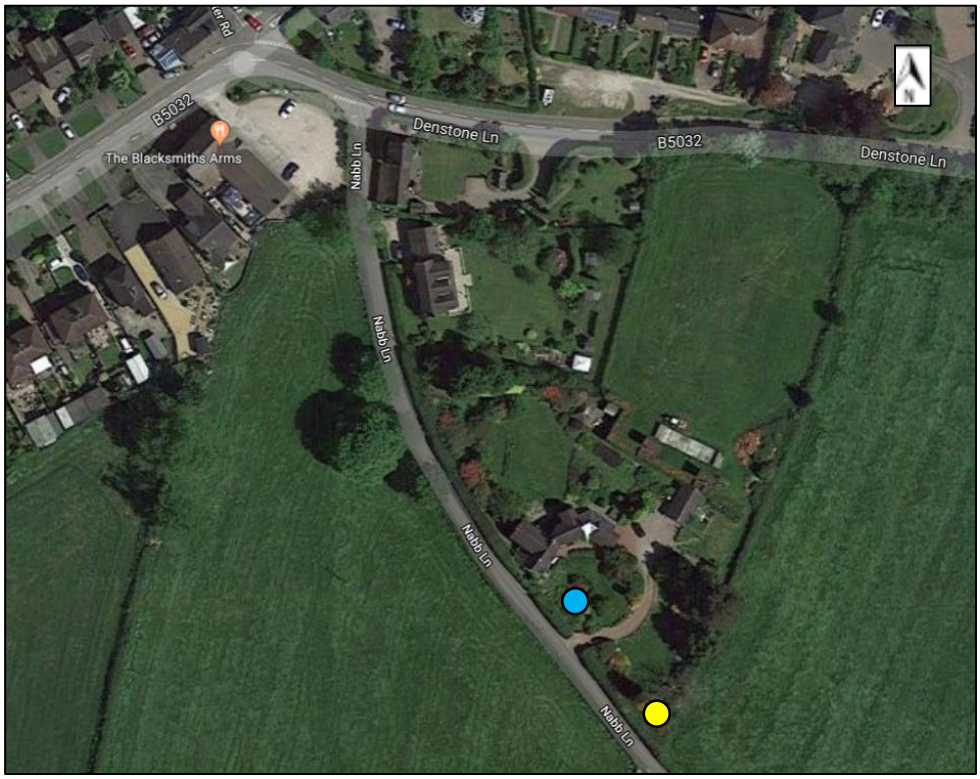


Figure 1a: An aerial image of the site - the blue dot indicates the pond within the garden, and the yellow dot indicates the location of the badger latrine/track.



1.3 Proposed Works

1.3.1 The proposed works involve alterations to the existing site access by removing part of the hedgerow for road safety/visibility reasons.

1.4 Site Survey

1.4.1 The survey involved a daytime walkover of the site to locate any ecological features of interest – ponds, mature trees, buildings, piles of rubble, non-native species (invasive), which might provide the various resources required for protected species to nest, roost, burrow, etc.

- **Pond** - The pond has been assessed using the 'Habitat Suitability Index' (HSI) criteria for assessing ponds suitability for the presence of Great Crested Newts (GCN). The pond scores 0.51, which is a below-average score for Great Crested Newts (GCN) due to the small size of the pond. Within the surrounding landscape, ten ponds are recorded, which could form a meta-population of GCN. Therefore, GCN could be present within the pond or hibernating newts may be within the root system of the hedgerow.

- **Hedgerow** – The hedgerow is dominated by holly, with the occasional hawthorn growing in between the holly. It appears that the holly hedgerow was planted approximately 20 years ago, and is not the original hedgerow, which extends further along Nabb Lane. Therefore, it is not a species-rich hedgerow (five or more woody species within a 30-metre section).

1.5 Discussion and Ecological Provisions

The main habitat on the site is a hedgerow made up of holly and occasional hawthorn. Due to the possibility of hibernating GCN within the hedgerow root system, and the unexplored badger track/latrine area, the hedgerow should be cut down to the ground level to prevent disturbing any hibernating GCN, and a badger sett. This will achieve the visibility that is required for the site access, and the holly could be allowed to grow back (for aesthetic reasons), but maintained to keep the visibility requirement.

Please note - Site supervision will need to be carried out when works to the hedgerow are being undertaken around the badger track/latrine area. This is due to the area being dense and unable to be fully investigated during the initial walkover survey for any badger setts (protected under the Badger Act 1992).

The hedgerow should be cut back outside the bird breeding season (Bird breeding season is March to August), if there are any nesting birds. This is to ensure that no harm comes to birds, their chicks, or nests (Wildlife and Countryside Act 1981).

1.6 Biodiversity Legislation

1.6.1 The activities for the proposed works should comply with International, European, and UK nature conservation legislation, and with national and local biodiversity policies. The following legislation is relevant to this assessment:

- Conservation of Habitats and Species Regulations 2010 (as amended).
- Natural Environment and Rural Communities (NERC) Act 2006; and
- Protection of Badgers Act 1992;
- Wildlife and Countryside Act 1981 (as amended);

1.6.2 The key policy documents which influence ecology and nature conservation assessments are the:

- National Planning Policy Framework (NPPF);
- Biodiversity 2020;
- UK Biodiversity Action Plan (UKBAP).

1.6.3 In addition, there is usually a local BAP document that lists habitats and species of local significance. In this case, the 'Staffordshire BAP' applies to the area.

1.7 Habitat Suitability Index (HSI) Survey

1.7.1 Field Survey Methods

An HSI (Habitat Suitability Index) survey was carried out on the pond to verify the suitability of the paondy for GCN.

1.7.2 HSI (Habitat Suitability Index)

The GCN Habitat Suitability Index (HSI) is a quantitative measure of habitat quality (source: Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000)). This is used in order to evaluate the suitability of aquatic habitats for the GCN (*Triturus cristatus*). It is not a substitute for a presence/absence survey but indicates the likelihood of GCN being present.

1.7.3 Summary of Field Survey Results

An HSI was conducted on the pond located east of the hedgerow.

Table 1: Habitat Suitability Index Results

Pond ref	1
SI1 - Location	1
SI2 - Pond area	0.05
SI3 - Pond drying	0.90
SI4 - Water quality	0.67
SI4 - Shade	1
SI6 - Fowl	0.67
SI7 - Fish	0.67
SI8 - Ponds	1
SI9 - Terr'l habitat	1
SI10 - Macrophytes	0.09
HSI	0.51

Categorisation of HSI Scores

HSI	Pond Suitability
<0.5	Poor
0.5 - 0.59	**Below average**
0.6 – 0.69	Average
0.7 – 0.79	Good
>0.8	Excellent

1.8 - Appendices

Appendix 1: Photographic Records

Plate 1: An image of the roadside of the hedgerow on Nabb Lane, looking south. The hedgerow is made up of dense holly and occasional hawthorn.



Plate 2: Another image of the dense hedgerow, looking north. A pond is located on the dwelling side (east) of the hedgerow, next to the gate.



Plate 3: An image of the pond located on the east side of the hedgerow in the garden of the dwelling. The pond has a Habitat Suitability Index of 0.51 which is below average for Great Crested Newts (GCN).



Plate 4: This image shows where the badger track goes through the hedgerow (the red arrow) into the garden. A latrine is also present within the back of the hedgerow; however a full inspection could not be carried out due to dense vegetation.



1.9 - Additional Information

If you require any further information, please do not hesitate to contact me on my direct line (07838 377 612), or via email (paul@evolutionecology.co.uk)

Kind regards,

Paul Keeling BSc (Hons) MCIEEM

Paul Keeling

Director of Evolution Ecology Ltd