

Great Crested Newt eDNA Sampling

Survey site:

Land South of Floran Farm, Hophurst Hill, Crawley Down, RH10 4LP

Client:

Paul Batten

Survey date:

4th May 2026

Project:

This report is prepared to inform a planning application with the Mid Sussex District Council. The proposal is described as:

The erection of 6 dwellings.

Survey methodology and legislation can be found in Appendix 6.

The site survey was undertaken by Anya White BSc (Hons) Consultant Ecologist – accredited on Natural England Protected Species Licence Number: [Great Crested Newts] (2015 -16682 -CLS -CLS).					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
04/05/2026	11.6	96	100	9	None

Ecological Survey Factor Conclusion, Impact or Recommendations	Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.
See habitat map in appendix 1, location plan in appendix 2, proposal plans in appendix 3, photos in appendix 4 and eDNA results in appendix 5).	
<i>Scope of report</i>	This report describes the suitability of the habitats on the site and any surveyed ponds for GCN and identifies the presence or absence of GCN in these ponds. It identifies possible constraints in relation to GCN as a result of the proposed development and summarises the requirements for further surveys and mitigation measures to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation. To achieve this, the following steps have been taken: • A field survey has been undertaken, including an assessment of the suitability of the site and any ponds within influencing distance of the site for GCN. • An outline of potential impacts on GCN has been provided, based on the proposed development. • Recommendations for further surveys and mitigation have been made, along with advice on the requirements for a European Protected Species Licence (EPSL) for GCN if appropriate. Opportunities for the enhancement of the site for GCN have been set out.

<i>Site location and context</i>	The survey site is centred on National Grid Reference TQ 35843 38586 and has an area of approximately 0.55ha. The site contains one building, sealed surfaces, other neutral grassland with ruderal vegetation, bare ground, and an ornamental hedgerow. The soil type is classified by Landis.org as slightly acid loamy and clayey soils with impeded drainage. The site is situated near the village of Crawley Down, West Sussex. The site exists within a wider ownership boundary that features areas of grassland, scrub, scattered trees, and hedgerows. The hedgerow on site extends into the wider ownership boundary and landscape. Aerial imagery shows the local landscape to feature grassland, arable land, and woodland, with built-up areas to the southwest and east. There are 10 ponds within 500m of the site. Felbridge Water runs 250m north of the site. Such features likely enhance the area for a variety of species, including bats, amphibians and reptiles.				
<i>Field survey results</i>	Pond descriptions A review of OS and aerial imagery identified 10 ponds within 500m of the site. One of these ponds, P1, was subject to survey. The remaining ponds were not surveyed, as they were located >100m from the site, and when completing the rapid risk assessment published by Natural England (Natural England 2015), the proposed development produced a green risk score for the remaining nine ponds. Pond descriptions are provided in table 1 below. <i>Table 1: Surveyed Ponds</i> <table data-bbox="465 906 2018 1043"> <tr> <th data-bbox="465 906 624 943">Pond Ref</th><th data-bbox="624 906 2018 943">Description</th></tr> <tr> <td data-bbox="465 943 624 1043">1</td><td data-bbox="624 943 2018 1043">Small field pond, located ~60m to the southwest of the site. This pond is directly connected to the site through green spaces and agricultural land.</td></tr> </table> Habitat Suitability Index (HSI) Assessment Ponds were assessed for their suitability to support GCN using the Habitat Suitability Index (HSI) Assessment Methodology (Oldham et al, 2000). HSI is a standard measure of calculating the suitability of a pond to support breeding great crested newts, based on an assessment of 10 characteristics (indices), including size, shading, depth and vegetation profile. The assessment generates a number between 0 and 1 for each of the indices which are combined to provide an overall assessment of a pond's suitability to support GCN on a categorical scale (Table 2). The assessment has not been designed for or tested on other waterbodies such as ditches. HSI assessment results are provided in Table 3 below.	Pond Ref	Description	1	Small field pond, located ~60m to the southwest of the site. This pond is directly connected to the site through green spaces and agricultural land.
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Table 2: HSI Suitability Scores

HSI Score	Suitability	Predicted GCN Occupancy of Ponds in each Category
<0.5	Poor	3%
0.5 to 0.59	Below Average	20%
0.6 to 0.69	Average	55%
0.7 to 0.79	Good	79%
>0.8	Excellent	93%

Table 3: HSI Assessment Results

SI Description	P1
Geographic location	1
Pond Area	0.2
Pond permanence	1
Water quality	0.33
Shade	0.8
Waterfowl effect	1
Fish presence	1
Pond Density	1
Terrestrial habitat	1
Macrophyte cover	0.7
HSI score	0.72
HSI category	Good

eDNA Sampling

Sample kits and analysis was provided by SureScreen. Sampling followed the relevant sections of the method set out in the DEFRA funded study endorsed by Natural England (Biggs et al 2014). In summary the sampling protocol is as follows:

- 20 samples were taken from around the entire perimeter of the waterbody. *The entire perimeter of the waterbody was not accessible, so samples were taken from accessible areas, where possible.*
- The surveyor stayed out of the water while taking the samples.

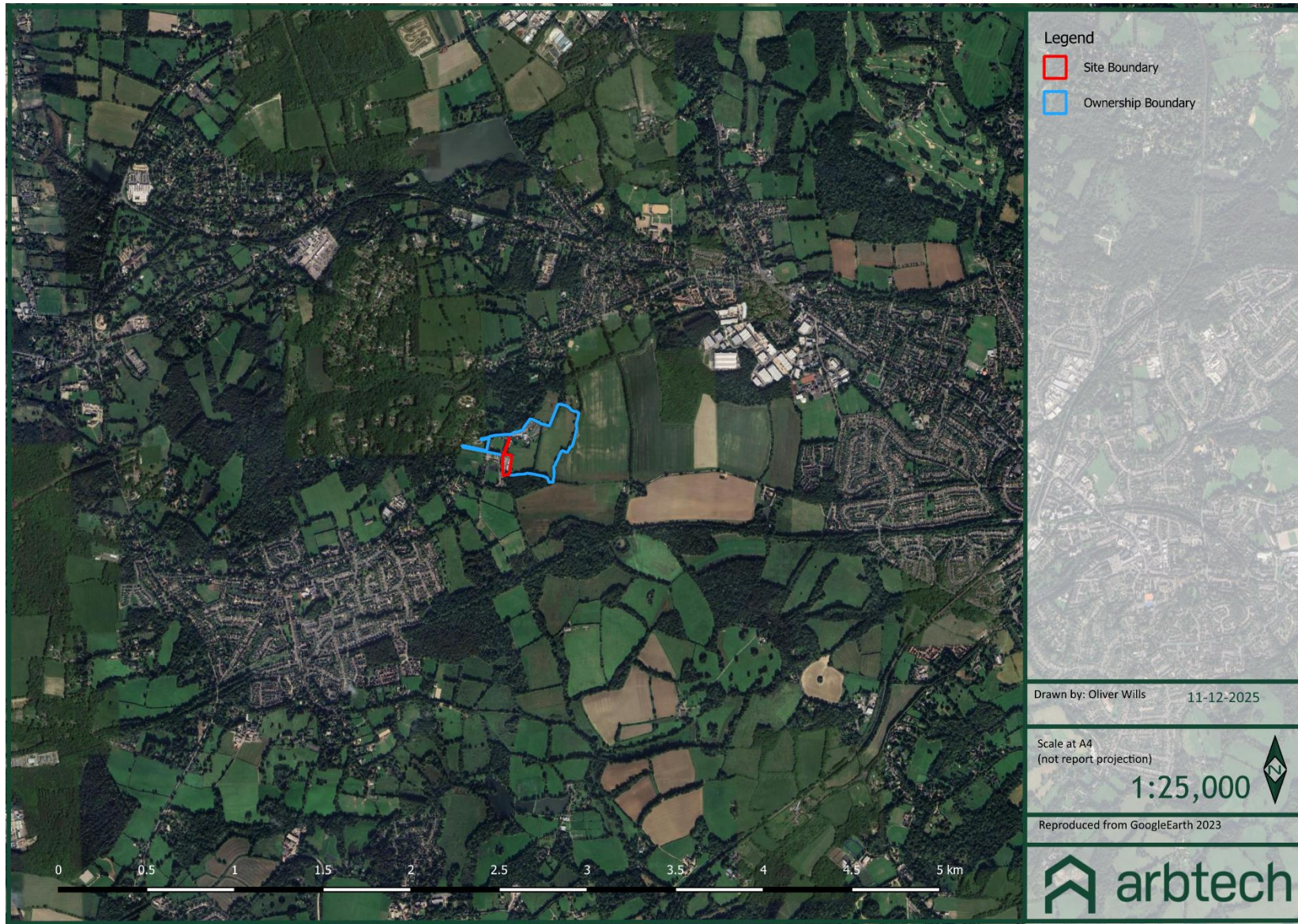
	- Survey locations were distributed around the pond perimeter but micro-siting was used to select locations most likely to be used by GCN. <i>As above - The entire perimeter of the waterbody was not accessible, so samples were taken from accessible areas, where possible.</i> - At each sample location the water column was stirred prior to taking the sample but care was taken to avoid disturbing the sediment on the base of the pond. - Once all 20 samples were taken, 15ml of the total sample were pipetted into each of the 6 sampling tubes, whilst ensuring that the water in the sample bag was mixed before taking each 15ml sample and that only one sample tube was opened at any one time. - At all times the surveyor ensured that the risk of contaminating the sampling equipment was minimised. Samples were sent to SureScreen for analysis. Full eDNA results are provided in Table 4. The SureScreen lab results are included in Appendix 5. <i>Table 4: eDNA Survey Results</i> <table> <tr> <th>Pond Ref</th><th>eDNA Result</th></tr> <tr> <td>1</td><td>Positive (11/12)</td></tr> </table>	Pond Ref	eDNA Result	1	Positive (11/12)
Pond Ref	eDNA Result				
1	Positive (11/12)				
<i>Foreseen Impacts</i>	When georeferencing the proposed development plans over scaled mapping of the site, it is noted that the development area is likely to result in the loss of 0.072ha of other neutral grassland and 0.002ha of bare ground. If great crested newts are present within the pond 60m to the southwest of the site, when completing the rapid risk assessment published by Natural England (Natural England 2015), the proposed development produces an Amber risk score, which states: Offence Likely (see Figure 1 below).				
<i>Recommendations</i>	An EPSL application to Natural England will be required to legally permit impacts to GCN terrestrial habitat within influencing distance of a confirmed GCN pond. The EPSL application requires that surveys have been undertaken within the most recent active GCN season (March to June) and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission. GCN population estimate surveys may be required to inform the EPSL application. This will comprise up to six visits between mid-March and end of June with at least two visits between the core period of mid-April to mid-May to establish a population size estimate. A Material Changes Check will be required within three months of the EPSL submission, if no survey work has been undertaken within that period.				

	The EPSL will detail any mitigation and compensation measures that will be required for the proposed development to comply with the standing advice and will be designed to reduce any impacts to an acceptably low level so as to maintain (or enhance) the Favourable Conservation Status (FCS) of the local GCN population. The EPSL will include the following measures: • Timing of works to avoid the hibernation season (November to February) • The installation of one way GCN fencing around the working area and completion of a trapping scheme of at least 30 days in appropriate conditions with a designated receptor site (subject to the size of the GCN population that is present). • The provision of a toolbox talk to contractors, by the Named Ecologist or an Accredited Agent, to inform them of the presence of GCN. • Staged vegetation clearance under the supervision of the Named Ecologist or an Accredited Agent including hand searches where appropriate. • Habitat creation and/or enhancement suitable for GCN and other amphibians to compensate for loss of terrestrial habitat. • Subject to population size, post-development monitoring surveys and site management may be required. An alternative route to the EPSL would be participation within the District Level Licensing (DLL). This involves the payment of an agreed financial sum to the DLL scheme provider which will be used for GCN habitat creation in the local area. This negates the requirement for the completion of trapping or provision of onsite mitigation; however, the cost of DLL can be prohibitive to smaller developments.
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Appendix 1: Survey map



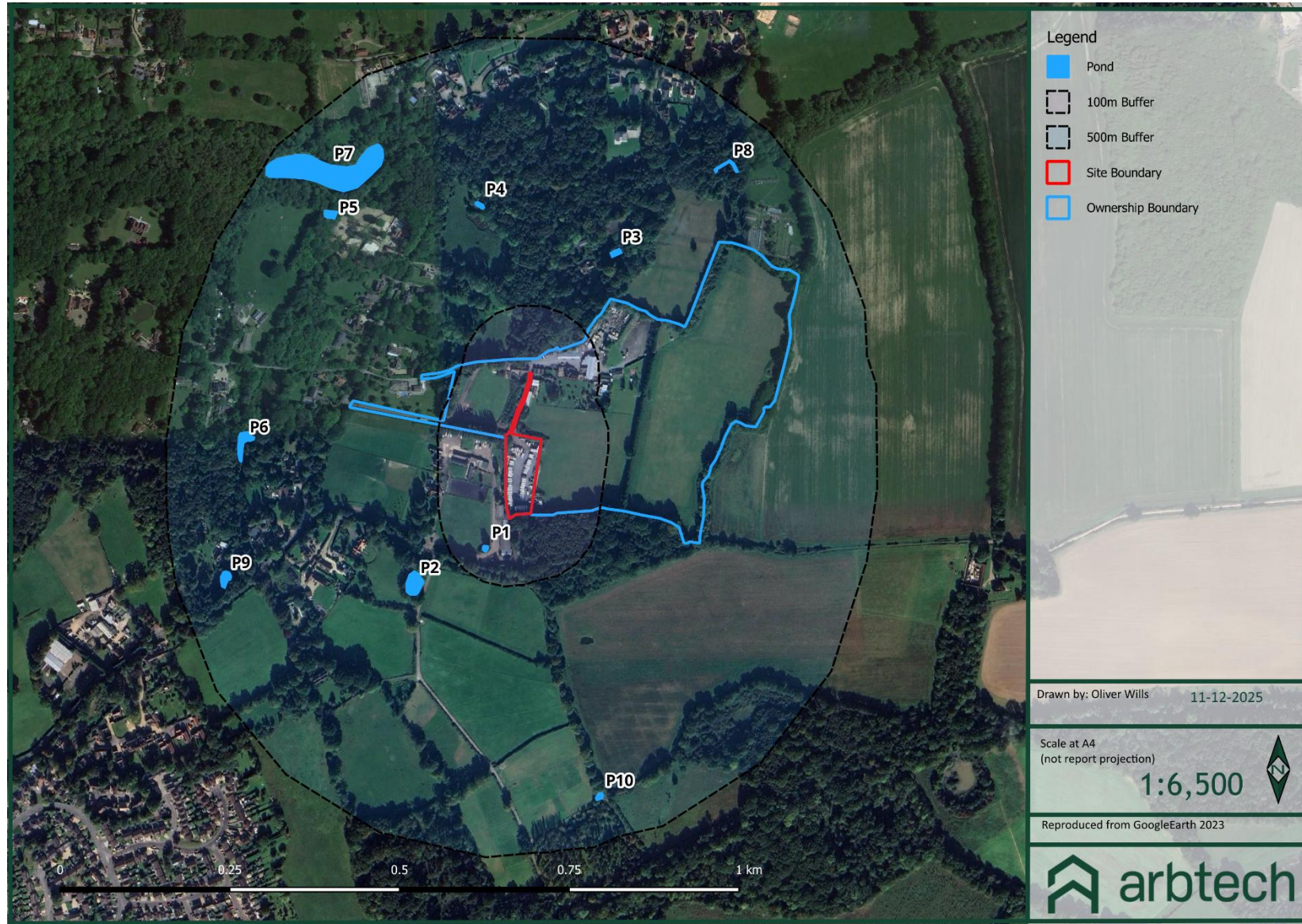
Appendix 2: Location map



Appendix 3: Proposed plan



Appendix 4: Pond location map



Appendix 5: eDNA results

Folio No:
Purchase Order:
Contact:
Issue Date:
Received Date:

2035-2026
RH10 4LP
Arbtech
12.06.2026
29.05.2026



GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN26 04710	RH10 4LP - Pond 1	TQ 35688 38488	Pass	Pass	Positive	11/12

Matters affecting result: none

Reported by: Ruby Fielding

Approved by: Vanessa Hind

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Appendix 6: Legislation and planning policy

LEGAL PROTECTION

The great crested newt receives full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

This species are also listed on Schedule 5 of the Wildlife and Countryside Act and they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

NATIONAL PLANNING POLICY

National Planning Policy Framework 2021

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) will be required for works likely to affect the breeding sites or resting places of great crested newts protected. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

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Version control			
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