



Nutfield Park Developments Limited (Ltd)

Nutfield Green Park

Update Great Crested Newt Report & Mitigation Strategy

July 2024

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1.0 INTRODUCTION

2.1 The following strategy report has been prepared by FPCR Environment and Design Ltd on behalf of Nutfield Park Developments Limited (Ltd). It provides a strategy for the proposed redevelopment (planning application reference 2023/1281) to avoid impacts to Great Crested Newts and to maintain this European Protected Species' Favourable Conservation Status. It also provides a summary of updated Great Crested Newt survey undertaken onsite through April-June 2024.

2.2 The Site comprises Nutfield Green Park, Former Laporte Works Site, Nutfield Road, Nutfield, Surrey (central OS grid reference TQ 30533 50982), hereafter referred to as 'the Site'. It is the subject of an outline planning permission application (Ref: 2023/1281) for development of the site for 166 new homes (Use Class C3) and an Integrated Retirement Community with 70 care home beds and 41 extra care facility beds. In addition, proposals include the creation of new access, landscaping and associated works to facilitate the development, in phases which are severable (Outline with all matters reserved, except for Access).

2.3 A suite of ecological surveys have been undertaken on the Site and this report should be read in conjunction with the Ecological Impact Assessment (EcIA, FPCR 2023). This document includes a Great Crested Newt Survey Report (Appendix I) which details the results of GCN surveys undertaken across the Site and surrounding landscape.

2.4 The scope and objectives of the report are to:

- present the findings of the GCN surveys undertaken in 2024.
- assess the relative importance of the survey area for GCN.
- review the site proposals and provide recommendations for mitigation, compensation and enhancement.
- Provide an indicative mitigation strategy that will be employed to avoid impacts to GCN.

Site Location and Context

2.5 The Site is approximately 58.8ha in size and is located to the North of the Village of Nutfield in the Tandridge borough area. It comprises a former quarry that has been historically restored and has become dominated by a mix of habitats. A large portion of the site is wooded, with some example of mature semi-natural woodlands present in the south, plantation woodlands in the centre/north of the Site and a large area of self-set birch/willow woodland in the centre of the Site. Two large pasture grasslands are present in the central/northern part of the Site, while a compartment of coarse grassland is present in the south-west of the Site. Small blocks of mixed scrub are scattered around the site while extensive areas of bramble scrub are present in the south-east and south-west. Three waterbodies are also present on Site which comprise two fishing lagoons in the north of the site and a central woodland pond.

2.6 In the surrounding landscape, the Site abuts the residential environs of Nutfield to the south. To the west lies a restored landfill site which sits between the Site and the extant Patteson Court Landfill Site. Eastwards, the landscape comprises a mix of woodlands, pasture grassland, arable fields and the Mercers South Quarry Site to the north-east. To the North lies additional areas of woodland and farmland before the landscape becomes dominated by the residential environs of South Merstham.

3.0 LEGISLATION AND POLICY

- 3.1 Great crested newts and the places they use for refuge and breeding are protected under Schedule 2 of the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats & Species Regulations 2017 (as amended).
- 3.2 They are also a European Protected Species (EPS) and protected under Annexes II and IV of the EU Habitats and Species Directive and Appendix II of the Bern Convention.
- 3.3 In summary, it is an offence to:
 - deliberately or recklessly take, injure or kill a great crested newt.
 - intentionally or recklessly damage, destroy or obstruct access to any structure or place used for breeding, shelter or protection by the species.
 - intentionally or recklessly disturb while it is occupying a structure or place which it uses for such purpose.
 - intentionally take or destroy the eggs of a great crested newt.
- 3.4 This legislation equally protects all life stages, including eggs, efts and adults.
- 3.5 Proposals which could lead to any of the above would require a derogation licence from Natural England alongside appropriate avoidance, mitigation and compensation measures.

4.0 METHODOLOGY

Update Habitat Suitability Index (HSI) Survey

4.1 The habitats within the survey area were assessed for their potential to support GCNs during both their breeding and terrestrial phases, including an assessment of waterbodies. In addition, access was sought to assess waterbodies within a 250m radius of the site which had suitable connective habitat to the site.

4.2 All accessible waterbodies were assessed using a Habitat Suitability Index (HSI)¹. The HSI incorporates ten suitability indices, all of which are factors known to affect this species:

- Geographic location
- Pond area
- Pond drying
- Water quality
- Shade
- Present of waterfowl
- Presence of fish
- Number of linked ponds
- Terrestrial habitat
- Macrophytic coverage

4.3 A score is assigned for each attribute and a total score is calculated between 0 and 1. Pond suitability is then determined according to the scale in *Table 1*.

Table 1: HSI scale

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

eDNA Survey

4.4 eDNA sampling was updated again in 2024 in accordance with the recommended protocol², on 18 waterbodies, on 25th April 2024. The locations of these ponds are shown in *Figure 1*.

4.5 Sampling was undertaken by suitably trained and licenced ecologists (2019-39014-CLS-CLS; 2022-10624-CL08-GCN). From each pond, 20 agitated water samples were taken, mixed thoroughly and then 15ml placed into six sample tubes. They were sent to the ADAS laboratory in Helsby, Cheshire for analysis. The possible results are summarised in *Table 2*.

¹ Oldham, R.S., Keeble, K., Swan, M.J.S. & Jeffcote, M. (2000) Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal*, 10(4), 143-155.

² Biggs, J. et al. (2014) *Analytical and Methodological Development for Improved Surveillance of the Great Crested Newt*. Appendix 5: Technical advice note for field and laboratory sampling of great crested newt (*Triturus cristatus*) environmental DNA. Freshwater Habitats Trust, Oxford.

Table 2: Possible results of eDNA analysis

Result	Description
Positive	A positive result means GCN eDNA was detected and they have been present within the water in the 20 days preceding sampling. A score is provided indicating the number of positive replicates from a series of twelve.
Negative	GCN eDNA was not detected. Where samples are negative, further testing for PCR inhibitors and degradation of the sample is undertaken.
Indeterminate	Controls indicate degradation or inhibition of the sample. Therefore, the lack of detection of GCN eDNA is not conclusive evidence for determining the absence of this species using the sample provided.

Presence/Absence Aquatic Surveys

4.6 To determine the presence or absence of great crested newts, six individual survey visits were performed on all ponds that returned positive eDNA survey results (i.e. Ponds P2, P3 and P5 as shown on figure 1). Survey methods followed those recommended by Natural England as detailed in the Great Crested Newt Mitigation Guidelines (English Nature, 2001). On each survey occasion, three of a possible four different techniques (egg search, sweep net, bottle-trap and torch) were used where suitable.

4.7 All surveys were undertaken during suitable conditions (i.e. when ambient air temperatures exceed 5°C, with little/no wind and no rain). All ponds were surveyed on a single date where possible, however due to access issues survey occasions varied, therefore all date are supplied for the initial four survey occasions, these were as follows 7th – 8th May, 9th – 10th May, 13th – 14th May, 21st – 22nd May, 30th – 31st May, and 10th – 11th June 2024. All surveyors either held a Natural England GCN licence or worked under the supervision of a GCN licensed surveyor.

Limitations

4.8 As with the 2023 surveys, access was not granted to survey two out of 20 ponds within 250m of the Site in 2024. However, a sufficient number of waterbodies were surveyed, including all ponds present on-site, to give a reliable indication of the presence of GCN in the area. This assessment is also supported by publicly available data from surrounding applications. Therefore, the information provided in this report allows for a suitable assessment of the potential impacts on the local GCN population as a result of the development.

5.0 RESULTS

Historic Survey Results

5.1 Eight historical GCN records within 2km of the site were provided by SBIC in 2023. The eight records were from seven ponds, which included P1, P2 and P3. The remaining ponds were all located over 1km from the site boundary.

5.2 In total, 20 ponds were identified within the search area (i.e. onsite or within 250m) as shown on figure 1. Of these, access was granted to survey all ponds with the exception of ponds P18 and P19.

5.3 Historical surveys were undertaken of ponds P1 to P17 in 2018 by ESL (Ecological Services) Ltd. GCN were only recorded within Ponds P2 and P3, which supported a medium size class population of GCN's. None of the other waterbodies were found to contain GCN.

5.4 Surveys were updated in 2023, including eDNA surveys during which two ponds within the survey area have been confirmed as supporting GCN. This included pond P2 onsite near to the northern boundary and pond P3 present offsite, to the north as shown on Figure 1.

5.5 eDNA surveys for all other ponds, with the exception of pond P5, returned negative results indicating the likely absence of this species from ponds P1, P3-4, P6-17 and P20. An indeterminate results was returned for pond P5.

HSI Surveys

5.6 HIS survey results have remained consistent with the 2023 surveys. Suitable terrestrial habitat onsite included woodland, hedgerows, scrub and taller grass around ponds and hedgerows throughout site. Most of the grassland onsite is grazed and therefore suboptimal for GCN. Rank grasslands in the south of the Site provided better quality foraging habitats for GCN.

5.7 The HSI scores for 18 accessible ponds in 2023 are summarised in *Table 3*.

Table 3: HSI scores and pond suitability

Pond	HSI Score	HSI Category	Predicted Presence
P1	0.20	Poor	3%
P2	0.28	Poor	3%
P3	0.50	Below average	20%
P4	0.74	Good	79%
P5	0.48	Poor	3%
P6	0.64	Average	55%
P7	0.53	Below average	20%
P8	0.58	Below average	20%
P9	0.47	Poor	3%
P10	0.47	Poor	3%
P11	0.51	Below average	20%
P12	0.41	Poor	3%
P13	0.51	Below average	20%
P14	0.51	Below average	20%

Pond	HSI Score	HSI Category	Predicted Presence
P15	0.42	Poor	3%
P16	0.74	Good	79%
P17	0.69	Average	55%
P20	0.41	Poor	3%

2024 eDNA Survey Results

5.8 In accordance with the 2023 surveys, of the 18 waterbodies surveyed in 2024 for GCN eDNA, the results are as follows:

- Positive indicating GCN presence: P2 & P3
- Negative indicating GCN absence: P1, P4, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P20
- Indeterminate indicating that neither presence nor absence could be determined by eDNA analysis: P5

Aquatic Presence/Absence Survey Results

5.9 The survey confirmed the presence of GCN within three waterbodies, P2, P3 and P5. The results of surveys are summarised in Table 4, with detailed results provided in *Appendix A*.

Table 4: Summary of GCN Aquatic Survey Data

Survey Number	Date	Pond	Peak Count	Egg Search?	Juveniles?	Other Species Recorded
1	8.05.24	P2	5	None	No	Smooth newt, palmate newt
		P3	32	None	No	Smooth newt, common toad
		P5	94	None	Yes	Smooth newt, palmate newt
2	10.05.24	P2	2	None	No	Smooth newt
		P3	0	Smooth Newt	No	Smooth newt, palmate newt, common frog
		P5	67	None	Yes	Smooth newt
3	13.05.24	P2	7	None	Yes	Smooth newt
		P3	3	None	No	Smooth newt
		P5	27	None	Yes	Smooth newt, palmate newt, common frog
4	22.05.24	P2	3	None	No	Smooth newt
		P3	0	None	No	Smooth newt
		P5	0	None	No	Smooth newt, palmate newt
5	30.05.24	P2	0	None	Yes	Smooth newt
		P3	1	None	No	Smooth newt
		P5	25	None	No	Smooth newt
6	11.06.24	P2	3	None	No	Smooth newt
		P3	1	None	No	Smooth newt
		P5	10	None	Yes	Smooth newt

5.10 Assessment of population determines the population class-size presents as either, small, medium or large, as outlined by English Nature (2001) as follows:

- Small – maximum counts of up to 10 adults

- Medium – maximum counts between 11 and 100 adults
- Large – maximum counts over 100 adults

5.11 Surveys have identified a medium population of GCN in ponds P2 (peak count of 7 adults), P3 (peak count of 32 adults) and P5 (peak count of 94 adults). All three ponds were confirmed to be breeding ponds by the presence of juvenile GCN.

6.0 DISCUSSION

6.1 The survey confirmed the presence of medium GCN populations in three confirmed breeding ponds, P2, P3 and P5. GCN are likely absent from all other ponds suitable waterbodies within 250m of the Site (i.e. the normal dispersal distance for GCN), as confirmed by eDNA surveys.

Impact Assessment

6.2 An important consideration of this scheme is that the vast majority of the development proposals are in the south of the Site, with the majority of the Site area comprising habitat enhancement works that will benefit a wide range of species, including amphibians (*Figure 2*). Works in the Northern part of the Site will be low impact and will comprise path resurfacing, pond creation, planting and habitat management. During the previous GCN report submitted with the application, aquatic surveys had not been undertaken yet and the assessment relied on an indeterminate eDNA result for pond P5 to assess the likelihood of GCN being present within the development platform area.

Pond P5

6.3 Aquatic surveys have now confirmed that a medium population of GCN is present in P5, which lies approximately 200-250m from the development area of the Site at its closest point. This is an ephemeral pond that has been observed to dry annually and has large fluctuations in water levels and overall size, depending on rainfall and seasonality. The likelihood of GCN being present within the main development platform for the proposals is consequently considered to be low as GCN typically spend their terrestrial life stage within 50m of breeding ponds and there are no ponds within the development area to draw GCN. However, given that the intervening habitat between the development area and P5 comprises optimal terrestrial habitat including woodland and scrub, this updated assessment considering aquatic survey data has determined that the presence of GCN within the development area cannot be ruled out.

6.4 Despite this, and in accordance with the previous assessment, given that the proposals include habitat creation and enhancement works across 88% of the Site boundary area (51.8ha), it is still considered that the proposals will result in a positive effect on GCN and other amphibian species recorded. Habitat creation and enhancement works proposed include:

- SuDS basins and swales will provide a green/blue corridor through the scheme. These offer opportunities for habitat creation and increased habitat diversity. These will also be designed to hold water permanently in order to provide additional breeding ponds for great crested newts.
- New hedgerow planting around residences throughout the Site.
- Additional tree planting within the development area, with them included along streets and within GI areas around the Site peripheries.
- Enhancement of existing grasslands to create large areas of species-rich meadows
- Creation of blocks of mixed scrub and new woodlands to contribute to site wide mosaics of habitats. These will provide optimal habitat for GCN.
- Enhancement of existing woodland to promote diversity and improve their biodiversity value. This will include improving the availability of deadwood.

- Creation of habitat features for amphibians and reptiles, including deadwood piles artificial hibernacula.

6.5 Consequently, the proposal will not negatively impact the Favourable Conservation Status (FCS) of newts, rather it will have a positive impact by providing additional breeding habitats and enhancing the suitability of terrestrial habitats in the long-term. Therefore, further mitigation is not required in order to maintain the FCS of GCN.

6.6 The proposals are however at risk of breaching the WCA protection of GCN during construction operations as the presence of this species within proposed development areas cannot be ruled out.

Ponds P2 and P3

6.7 Works within 250m of ponds P2 and P3 are limited to the resurfacing of a footpath running north from the development adjacent to pond P2, the creation of a series of ponds within 250m of these ponds and the habitat planting and management measures for enhancing existing habitats.

6.8 In the absence of mitigation, there is therefore potential for adverse impacts on GCNs including:

- Loss of terrestrial habitat through vegetation clearance to facilitate pond digging.
- Incidental harm during site clearance and path resurfacing.

Ponds P18 and P19

6.9 It is acknowledged that the works will be undertaken in close proximity to two ponds that were not surveyed, including ponds P18 and P19 to the south of the Site. Numerous access requests were made to survey these ponds including by ESL in 2018 and FPCR in 2023 and 2024. No response was received for pond P18 in 2018 or in 2023 and in 2024 access was refused. No response was received in any year for pond P19.

6.10 Habitat Suitability Index Surveys have been completed in a precautionary manner using aerial imagery.

6.11 Pond P18 appears to be a reservoir that supports fishing pontoons, suggesting it is used as a fishing lake and is therefore considered to be of very limited suitability for GCN. The HSI score for the pond was assessed as being 0.49, Poor suitability with a predicted presence of 0.03.

6.12 Pond P19 appears to be an ornamental pond with artificial banksides. The HSI score for the pond was assessed as being 0.49, Poor suitability with a predicted presence of 0.03.

6.13 Furthermore, both ponds are separated from the Site by the A25 which is a known busy road and likely to form a major barrier to dispersal for GCN. It is therefore considered extremely unlikely that in the unlikely event that GCN are present in either pond P18 or 19, they would use habitats onsite. Impacts on these ponds are therefore not considered further,

Mitigation Strategy

6.14 As the proposals are anticipated to result in a positive impact on the FCS of GCN in the local area post-development on account of the extensive habitat enhancement works proposed, the mitigation strategy for GCN will aim to avoid killing or injuring GCNs during works to avoid breaching legislation.

Pond P5

6.15 It will be necessary however to ensure works are carried out without breaching legislation protecting GCN. Consequently, a Natural England Derogation Licence will be applied for following receipt of full planning permission. This will include a detail mitigation strategy for preventing any breaches in legislation to be agreed by Natural England, the competent licencing authority under the Conservation of Species Habitats Regulations 2017 (as amended). This strategy will also include a description of the proposed habitat enhancement measures proposed onsite to demonstrate to Natural England how the FCS of great crested newts will be maintained

6.16 Subject to agreement with Natural England, the following measures are anticipated to be included within the mitigation strategy.

- The proposed development area will be subject to a trapping and translocation exercise. This will include installing amphibian fencing around the proposed development area (the exact areas of which will be determined at the detailed design stage and will be agreed with NE).
- The trapping and translocation exercise will be undertaken for a suitable period as agreed with Natural England during the licence application process.
- A suitable receptor site will be identified, and any newts caught during the trapping and translocation exercise will be moved there.
- Works will only commence onsite once the agreed trapping and translocation exercise has been completed.
- Subject to agreement with natural England, habitat creation and enhancement works onsite will commence prior to completion of the trapping exercise to initiate the program of habitat enhancements across the Site that will also benefit GCN.

Ponds P2 and P3

6.17 The only ground-breaking works anticipated to be completed within 250m of these includes path resurfacing works and the creation of a series of ponds. These works are anticipated to be minor in nature, with pond creation works ultimately leading to an enhancement of the site for GCN by providing additional breeding opportunities.

6.18 It has been recommended that all works within 250m of a GCN pond are therefore completed under a precautionary working method statement to reduce the risk of these minor works causing an offence. This will include measures such as (but not limited to and subject to agreement with Tandridge Council at the Reserved Matters Stage or detailed site design):

- Works on suitable habitats that are considered to pose a risk of harming GCN (i.e. any ground breaking works within 250m of ponds P2 and P3) will be carried out under ecological supervision.
- Works will be timed to avoid the GCN hibernation period.
- The supervising ecologist will conduct a fingertip search of the works area prior to any vegetation or ground clearance.
- The supervising ecologist will supervise any dismantling of potential places of rest and shelter prior to their removal.
- Any newts identified will be removed to an agreed location by an appropriate licenced (or accredited) ecologist prior to works commencing.

6.19 The precautionary working method statement will be prepared at the detailed design stage and will cover all areas where it is considered likely that an offence could occur (i.e. all suitable habitats within 250m of the pond being subject to works that fall our of the remit of normal land management practices). This can be secured through an appropriately worded condition.

7.0 CONCLUSIONS

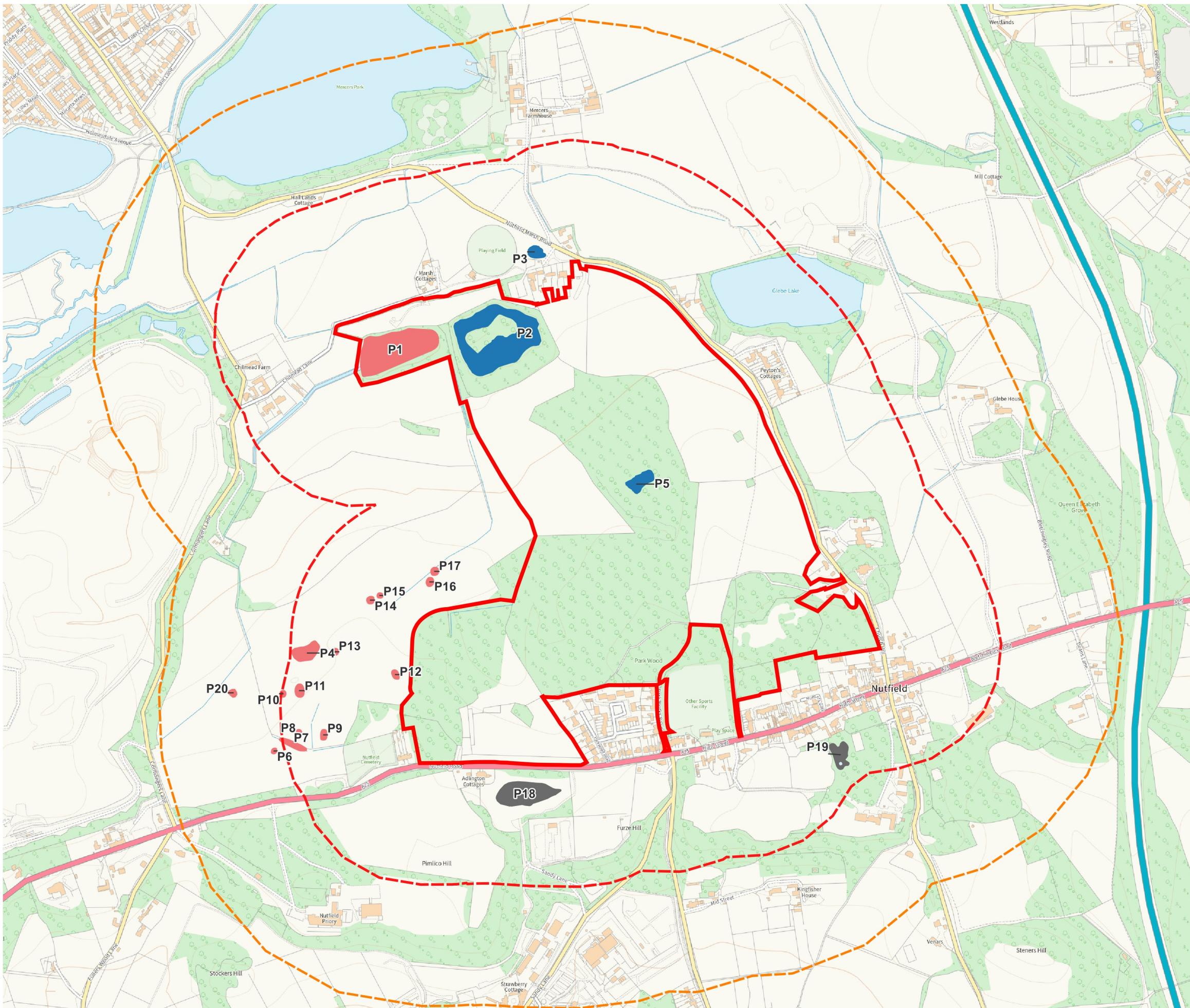
7.1 A large meta-population of GCN has been identified using 2 onsite ponds (P2 and P5) and one offsite pond (P3). The potential for the proposals to impact GCN cannot be ruled out.

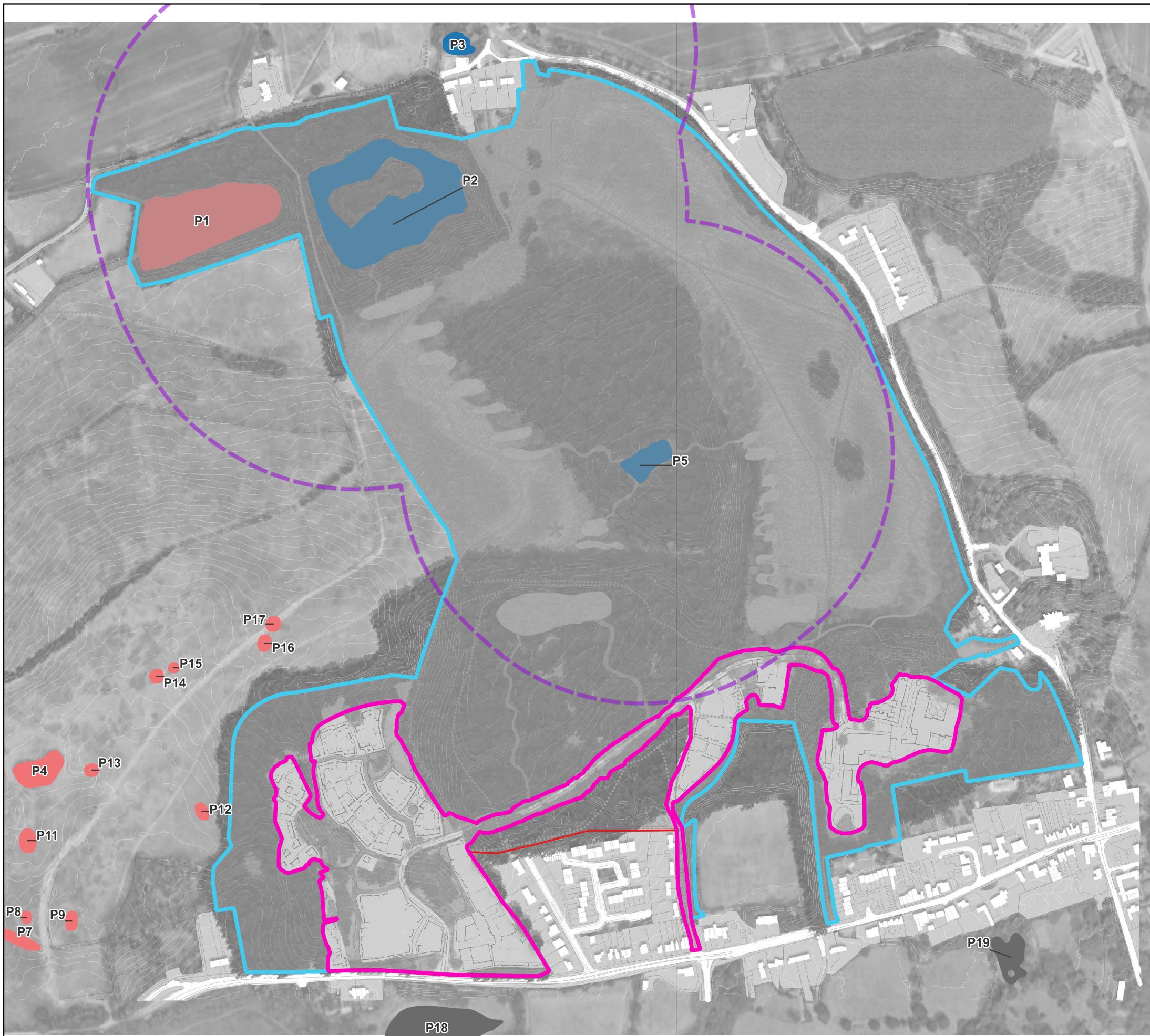
7.2 The proposals include the development of approximately 7ha in the south of the 58.8ha Site. The remaining 51.8ha (88% of the total Site area) will be subject to habitat creation and enhancement measures including species-rich grassland creation, mixed scrub and woodland planting, tree planting and new wetland habitats including a series of new ponds. Retained woodlands and ponds will also be subject to habitat enhancement measures and all retained, enhanced and created habitats will be managed for a minimum period of 30 years to enhance their biodiversity value in accordance with the requirements of the Environment Act. This is illustrated by the BNG metric score which demonstrates that the proposals are able to deliver a biodiversity net gain in excess of 20% for area habitats. These enhancements will all improve the Site for GCN by improving terrestrial habitat and providing potential new breeding ponds and this species, along with the other amphibian species recorded, will therefore benefit from the proposals.

7.3 The construction operations will however include areas within the normal dispersal distance for GCN, with the development platform located 200-250m from pond P5 at its closest point (depending on the size of this ephemeral pond). The proposals therefore have the potential to injure or kill GCN that may be present within the proposed development parcels. The works will therefore be undertaken under a Natural England Derogation Licence which will include a trapping and translocation exercise where required through consultation and agreement with Natural England in their role as the competent licencing authority under the Conservation of Species Habitats Regulations 2017 (as amended).

7.4 Limited works will also be undertaken within 250m of ponds P2 and P3, however these will be limited to low impact works including habitat creation/management operations and footpath/cycleway improvement works. These works will be delivered in accordance with a precautionary working method statement that will detail how works will be undertaken in an appropriate manner to avoid impacts to GCN. This can be secured at the detailed application stage through an appropriately worded condition.

7.5 The mitigation recommendations provided in this report are considered sufficient to avoid breaching legislation relating to great crested newts and, in accordance with the Ecological Impact Assessment produced to support the outline planning application for the Site, the proposals will results in positive impacts on GCN and other amphibian species as a result of the extensive habitat creation and enhancement measures proposed.





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Key

- Red Line Boundary**
- GCN Pond Buffer (250m)**
- Habitat Enhancement Parcels**
- Proposed Development Parcels**
- GCN Presence**
 - Positive (Large Metapopulation)**
 - Negative**
 - No Access**

client
Nutfield Park Developments
project
Nutfield Park,
Tandridge, Surrey
drawing title
GCN Mitigation Strategy Overview

fpcr

scale @ A3
1:4,500
drawn
DS / OGJ
issue date
2/7/2024

Appendix A – GCN Survey Results