Whitcher Wildlife Ltd.
Wildlife Consultants.

WENTWORTH BUSINESS PARK.

GREAT CRESTED NEWT SURVEY.

Ref No:- **090365**

Date: **4th June 2009.**

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1. INTRODUCTION.

1.1. A planning application is to be submitted for the construction of a new warehouse and staff shop on the Wentworth Business Park, Tankersley, Barnsley.

1.2. A protected species survey and mitigation strategy is required in support of that planning application in line with the requirements of PPS9.

1.3. Whitcher Wildlife Ltd has therefore been commissioned to carry out a survey of the site and to carry out great crested newt surveys of all ponds within 500m of the site. The surveys were carried out between 8th May and 3rd June 2009. This report outlines the findings of the survey and makes appropriate recommendations.

1.4. Great crested newts are protected under both British and European legislation. Appendix I of this report provides details of that protection and some basic guidelines into great crested newts and their behaviour to assist the reader of this report to understand the contents.

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2. SURVEY METHODOLOGY.

The survey area was thoroughly searched for evidence of great crested newt (*Triturus cristatus*) activity by carrying out the following survey techniques:-

Searching aquatic habitats by:-

- Examining vegetation in ponds and areas of static water for newt eggs.
- Looking for newts in ponds and areas of static water with a high-powered torch during hours of darkness.
- Setting bottle traps, leaving them overnight and returning the next morning to inspect and record all animals trapped before immediate release.

Searching terrestrial habitats by:-

- Looking for newts under refuges including logs, rocks and debris.
- Looking for newts on land with a high-powered torch during hours of darkness.

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3. SURVEY RESULTS.

3.1. Site Description.

3.1.1. The site lies within the existing Wentworth Business Park, as outlined in red on the aerial photograph below.



3.1.2. The site presently comprises car parking areas and open, mown, amenity grassland on the business estate, with occasional ornamental shrubberies and trees and with one pond.

3.1.3. With the exception of the pond on the site, there are no environmentally sensitive habitats on the site and no protected species issues.

3.1.4. The main issue this report addresses is the presence of a known great crested newt population on the estate, within ponds that lie within 500m of the site.

3.2. Great Crested Newt Survey Results.

3.2.1. Four surveys were carried out in all ponds that lie within 500m of the site, in line with the English Nature Great Crested Newt Mitigation Guidelines, to establish the presence or absence of great crested newts. Where a population of great crested newts was identified in a pond, the survey effort was increased to six surveys to establish a population class size.

3.2.2. Five ponds were included within the survey. One of these, Pond 3, was located within the proposed development site, two were located to the south, within 50m to 100m of the site and two were located approximately 500m to the west of the site.

3.2.3. Pond 1 is Sowell Pond, located approximately 100m to the south of the site. This is a medium sized, shallow pond as shown in the photograph below with a known population of great crested newts. The area around this pond has been retained within the Business Park development with permanent amphibian fencing erected along the southern boundary of the area to deter amphibians from crossing the main estate road, Maple Road.



3.2.4. Pond 2 is a small pond that has been excavated within the retained area around Sowell Pond as a mitigation measure under an earlier European Protected Species Licence in connection with a previous development on the Business Park. The pond is small and yet to become fully established.



3.2.5. Pond 3 is the pond located on the development site. It has been constructed as a drainage balancing pond to collect surface water from the adjacent site. The pond is small but deep with a fish population.



3.2.6. Pond 4 is a large pond and wetland area located on open grassland to the west of the Wentworth Business Park, just south of the belt of woodland alongside Carr Lane.



3.2.7. Pond 5 is another group of very new and very recently dug great crested newt mitigation ponds. These ponds have yet to become established and at the time of this survey contained very muddy water and no pond vegetation.



3.2.8. Full survey results are provided within Appendix III of this report along with Habitat Suitability Index calculations for each pond. The following is a summary of the results.

3.2.9. A great crested newt population was identified in three of the ponds surveyed.

3.2.10. Pond 1, Sowell Pond was found to have a medium population of great crested newts with a maximum of fifteen bottle trapped and five seen during the torch search in the fourth survey. The true population will be higher than this as there were constraints to the survey. It was only possible to set bottle traps around 75% of the pond due to the depth of water and the presence of nesting birds. In addition, the torch survey was limited by a wide margin of vegetation that made access to torch search some areas of the pond.

3.2.11. Pond 2 was also found to have a medium population of great crested newts with a maximum of thirteen great crested newts bottle trapped during the fifth survey.

3.2.12. No great crested newts were identified in Pond 3, on the development site. Tadpoles were identified and a fish population.

3.2.13. Pond 4 was found to contain a small population of great crested newts with a maximum of nine great crested newts bottle trapped during the fourth survey. This is also a low estimate of the number present as bottle traps could only be set in 60% of the pond and the torch search was limited by a wide and dense margin of vegetation.

3.2.14. No newts were found in Ponds 5 although tadpoles were found. The ponds are very new and have yet to become established.

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4. EVALUATION OF FINDINGS.

4.1. Pond 3, the pond on the proposed development site does not support a newt population although tadpoles were found. The pond is designed as a drainage balancing pond, is deep and contains a fish population. Nevertheless, the Mercedes factory security personnel report regularly seeing newts on the site and in particular in the drainage system.

4.2. Pond 1, Sowell Pond contains a medium population of great crested newts and the adjacent Pond 2 a small population and both are within 50m to 100m of the proposed development site.

4.3. Pond 4 is approximately 500m from the site. The survey results show this to contain a small population of great crested newts but with the limitations to the survey taken into consideration, this is more likely to contain a medium population.

4.4. Pond 5 is a new set of ponds constructed as part of the mitigation measures in connection with another European Protected Species Licence for another development. The ponds are not yet established and there are no water plants growing in the ponds at this time. No newts were found in this set of ponds.

4.5. The proposed development site is predominantly hard standing and mown amenity grassland with little in the way of terrestrial refugia or hibernacula. Nevertheless, the open grassland will offer suitable night time foraging habitat.

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5. RECOMMENDATIONS.

5.1. To comply with PPS9, it will be necessary to not only determine the presence of protected species on the site, but also to present, as part of the planning application, a mitigation strategy outlining how the protected species will be maintained at its present conservation status during and after the development.

5.2. It will be necessary to apply for a Natural England European Protected Species Licence with respect to great crested newts before any works can commence on the site. A licence application cannot be submitted until planning consent has been granted for the site.

5.3. It is therefore recommended that the attached mitigation strategy be submitted in support of the planning application and then subsequently used as part of the EPS Licence application to Natural England.

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6. MITIGATION STRATEGY.

6.1. The following mitigation strategy has been prepared in the old Natural England licence application format for clarity.

E. Mitigation and compensation.

E1. *Mitigation* strategy.

To reduce adverse impacts;

- To erect amphibian fencing (TAF) around the worksite.
- To exclude the newts from the site prior to development commencing.
- To keep the newts out of the site during development by retaining the perimeter TAF.
- To provide terrestrial refuges to which excluded newts can be relocated.
- To provide a wildlife area on the site with improved terrestrial habitat.

E1.1. Once the Natural England licence has been issued, temporary amphibian fencing (TAF) will be erected around the perimeter of the development site. As the site is currently close mown amenity grassland and hard standing, newts and amphibians will be excluded by torch searching on suitable nights. Once the ecologist is satisfied that no amphibians remain on the site, he will release the site to the developer to commence the development.

E1.2. The perimeter TAF will be retained for the duration of the development to prevent the return of newts and amphibians. The integrity of the TAF will be maintained and vegetation controlled to avoid this from bridging the TAF.

E1.3. Temporary terrestrial refugia will be installed outside the worksite in a safe location where excluded newts can be released.

E1.4. All personnel working on the project will be briefed prior to commencing work. All will receive a handout that includes identification information and the importance of retaining the integrity of the perimeter TAF will be emphasised. All personnel briefed will sign an appropriate log to demonstrate that they have completed the briefing.

E1.5. A wildlife area will be provided on the site. Within this wildlife area additional terrestrial refugia will be provided in the form of a rock pile covered with a membrane and top soil.

E2. Receptor site selection.

All terrestrial newts and amphibians identified within the work site will be relocated to temporary terrestrial refugia provided outside the work site. This will be within their existing terrestrial habitat.

E2.1. Existing great crested newt status.

The receptor site is within the existing terrestrial habitat area for the newts and amphibians.

E2.2. Location, ownership and status.

The land where amphibians will be relocated will be the edge of the site, outside the TAF but within the same land ownership.

E2.3. Habitat description, size and boundaries.

The receptor site will be the edge of the current site, which is within the existing great crested newt terrestrial habitat.

E3. Habitat creation, restoration and/or enhancement.

E3.1. Aquatic habitats.

No aquatic habitat will be affected by the proposed works and therefore no aquatic habitat will be created or enhanced.

E3.2. Terrestrial habitats.

Additional terrestrial refugia and hibernacula will be created in the form of a pile of stone or rubble, approximately 15 sq m in size and 1.5m deep, covered by a membrane and top soil to create additional terrestrial refugia and hibernacula.

E3.3. Integration with roads and other hard landscapes.

The relationship with roads and hard standing will not significantly change although the existing drainage that can trap amphibians will be replaced with new newt friendly drainage.

E3.4. Integration with other species/habitat requirements.

There will be no change from the present situation on the site.

E4. Capture, exclusion and translocation.

E4.1. Timing, effort, methods, layout of capture/exclusion methods, translocation.

E4.1.1. As soon as a Natural England licence has been granted, temporary amphibian fencing (TAF) is to be installed around the site boundary to trap any terrestrial amphibians within the development footprint. Carpet tiles or equivalent will be placed at 10m intervals along the inside of the TAF. Pitfall traps will not be employed across the site as it comprises almost entirely of close mown amenity grassland and hard standing.

E4.1.2. Two channels will be installed across the four site entrances with a space between so that any amphibians that attempt to enter the site will fall into the space. The channels will be arranged so that the only way out of the space will be outside the TAF surrounding the site.

E4.1.3. The site will be torch searched by a team of experienced ecologists on three suitable nights when the weather is wet and the night temperature is above 5°C. Any amphibians found will be collected and placed under suitable temporary terrestrial refugia outside the perimeter TAF. If necessary, additional nights torch searching will be carried out until the ecologist is certain no amphibians remain inside the perimeter fence.

E4.1.4. Once the ecologist is satisfied no amphibians remain within the development footprint the area will be released for development to commence.

E4.1.5. Throughout the life of the project, the integrity of the perimeter TAF will be maintained and any vegetation growth that might enable great crested newts to cross the fencing into the development area will be controlled.

E4.1.6. All personnel working on the site will be briefed prior to commencing work. All will receive identification information and will be briefed with respect to the necessity of maintaining the integrity of the TAF throughout the development. All personnel briefed will sign an appropriate log to demonstrate that they have completed the briefing.

E4.1.7. On completion of the development, the TAF will be carefully removed from around the work site and compound area under the supervision of the licensee or his appointed agent to ensure any amphibians sheltering against the fence are rescued and relocated.

E4.1.8. Plans of the proposed capture and exclusion works are shown in map E10.1.

E4.1.9. Summary.

Great crested newts and amphibians are to be excluded from the development site. Temporary amphibian fencing, (TAF), will be erected around the perimeter of the site and all amphibians will be found by torch searching with 1 million candle power torches after dark, on suitable wet nights when the temperature is above 8°C. This method of capture is assessed to be suitable because the site comprises close mown amenity grassland and hard standing.

The perimeter TAF will remain in place for the duration of the works and will be removed on completion of the works. Additional terrestrial habitat will be provided to compensate for the area to be lost to the development.

E5. Post-development site safeguard.

E5.1. Habitat management and maintenance.

E5.1.1. The site management plan will clearly outline the areas that are to be provided for amphibians along with specific instructions as to limitations that apply within that area. The grass around the terrestrial refugia will not be close mown and all pond maintenance will be undertaken during December and January.

E5.1.2. Future maintenance will be carried out by the site owners.

E5.2. Population monitoring.

Two pond monitoring surveys will be carried out per year during the first two years after the development works have been completed. These will be bottle trapping and torch search surveys and will be carried out on all ponds within 500m of the site.

E5.3. Mechanism for ensuring delivery.

The licence holder will ensure that all works are carried out to the required standards and programme and in accordance with the Natural England licence. The ecologist will make periodic monitoring visits.

E6. Timetable of works.

The timetable of the works will depend upon receipt of planning consent.

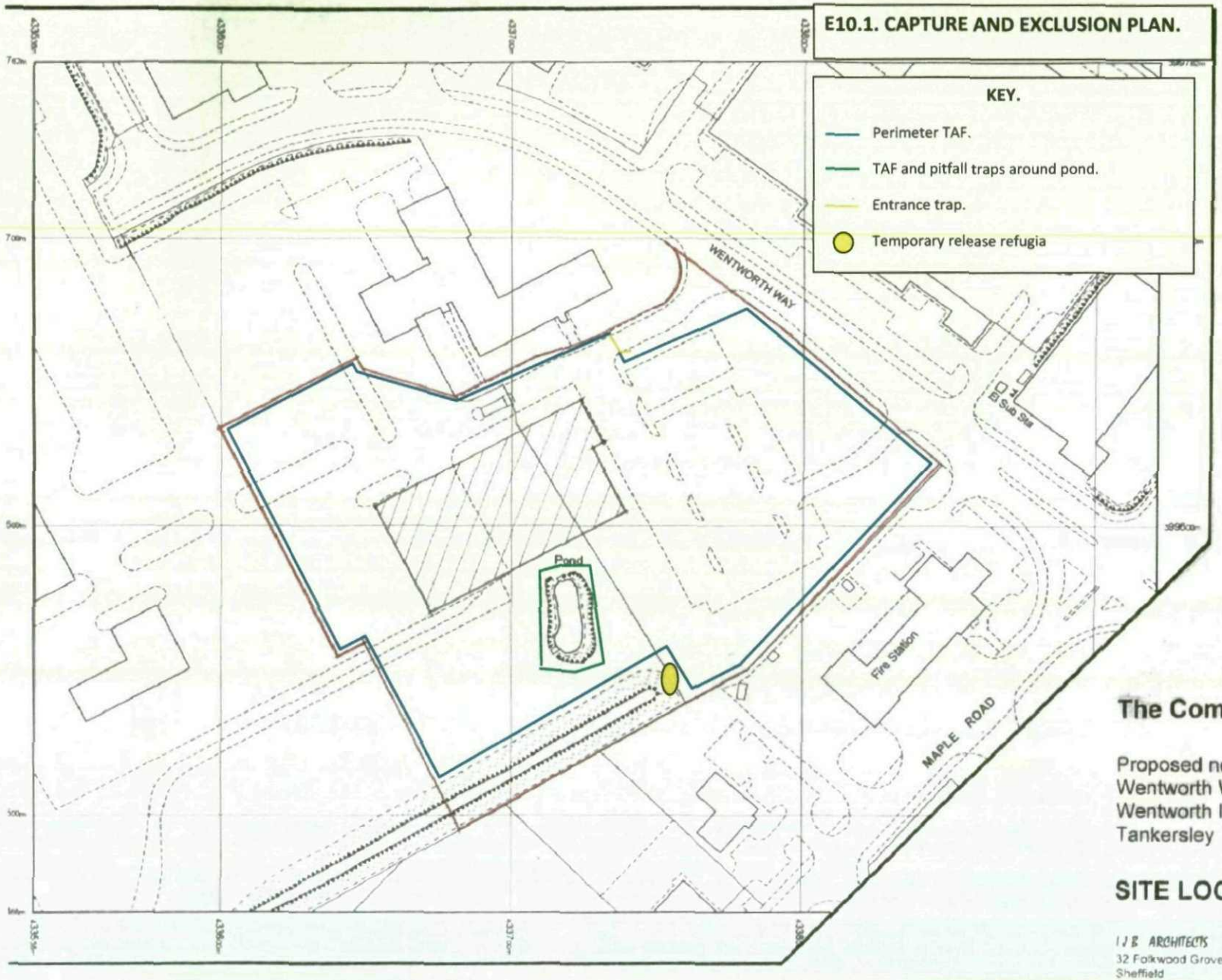
Mid August 2009.	Receive Planning Consent and submit licence application to Natural England.
End September 2009.	On receipt of licence, install amphibian fencing, pitfall traps and refugia and commence exclusion.
Mid Oct 2009.	Depending on weather, complete trapping and hand the site over for development works to start. Continue to exclude around the pond.
End Oct 2009 to Mar 2010.	Development works.
End Oct 2009 to Dec 2009.	Create new pond and terrestrial habitat.
Mar/April 2010.	Remove all TAF on completion.

E10.1. Capture and Exclusion Plan.

E10.2. Habitat Creation Plan.

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Derek A Whitcher.
04.06.2009.



The Company Shop Ltd.

Proposed new unit at
Wentworth Way
Wentworth Industrial Park
Tankersley

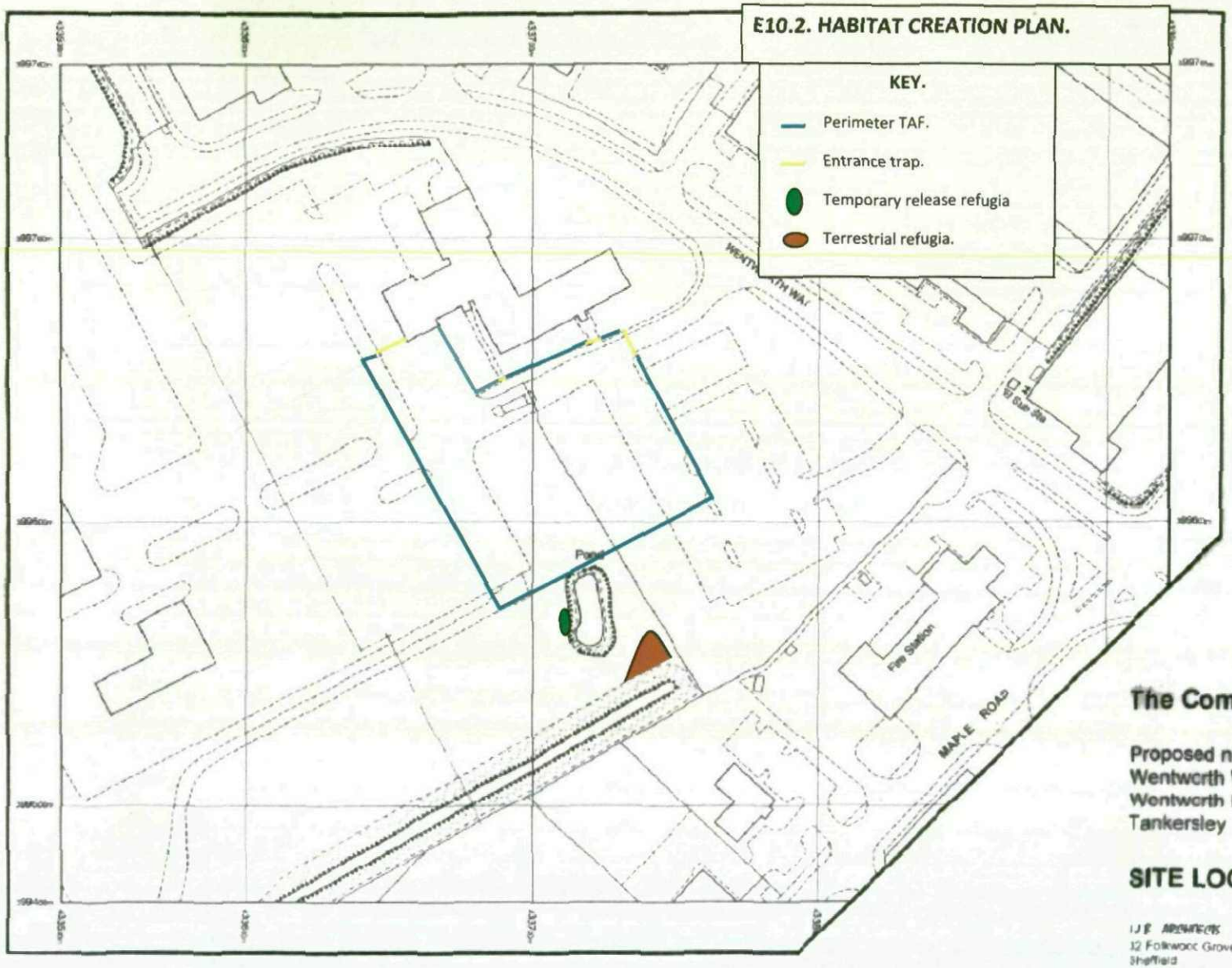
SITE LOCATION PLAN

IJB ARCHITECTS
32 Folkwood Grove
Sheffield
S11 7TF

089 15 PL 01

scale 1 : 1 250

E10.2. HABITAT CREATION PLAN.



The Company Shop

Proposed new unit at
Wentworth Way
Wentworth Industrial Park
Tankersley

SITE LOCATION PL

089 15 PL

scale 1 1 2

May 20

32 Follwood Grove
Sheffield
S11 7TF
Tel 07939 878 226

APPENDIX I.

BACKGROUND GREAT CRESTED NEWT INFORMATION.

The great crested newt population has suffered a major decline in Britain over the last century. Numerous ponds have been lost, unmanaged ponds have become silted up and over-shaded, development has destroyed ponds and associated terrestrial habitat and caused fragmentation of populations. The loss of grassland, scrub and woodland has resulted in fewer opportunities for foraging, dispersal and hibernation.

The UK Biodiversity Plan (BAP) contains a great crested newt Species Action Plan (SAP) aimed at maintaining its existing range and population status, as well as increasing the number of populations through re-colonisation.

The great crested newt is listed on Schedule 5 of the Wildlife and Countryside Act 1981, recently modified by the Countryside and Rights of Way Act 2000.The great crested newt is therefore subject to the provisions of Schedule 9, which make it an offence to:

- Intentionally kill, injure or take a great crested newt.
- Possess or control any live or dead specimen or anything derived from a great crested newt.
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt.
- Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place, which it uses for that purpose.

The great crested newt is also listed on Annex II and Annex IV of The Conservation (Natural Habitats &c) Regulations 1994. Regulation 39 makes it an offence to:

- Deliberately capture or kill a great crested newt
- Deliberately disturb a great crested newt.
- Deliberately take or destroy the eggs of a great crested newt.
- Damage or destroy a breeding site or resting place of a great crested newt.

The legislation applies to all life stages of great crested newts.

The maximum fine on conviction of offences under Section 9 and Regulation 39 currently stands at £5,000. The CroW Act 2000 amendment also allows for a custodial sentence of up to six months instead of, or in addition to, a fine. In addition, items, which may constitute evidence of the commission of an offence, may be seized and detained.

In order to understand the potential effects of development it is essential to understand a little of the great crested newt ecology.

Great crested newts breed in ponds and other water bodies. They can begin to migrate to their breeding ponds as early as the first frost-free days in late January with the majority reaching their breeding ponds by mid March. Timing will be influenced by a number of factors, mainly evening temperatures above 5C and recent rain.

The peak egg-laying period is from mid-March to mid-May. The newts will lay their eggs individually, mainly on the leaves of submerged plants. The larva hatch after three weeks and then take another 2-3 months to complete larval development. Adult newts generally leave their breeding ponds from late May onwards.

Once the larvae have completed metamorphosis (the transition from aquatic larvae to land-adapted juveniles, called efts), they emerge from the pond. This emergence begins in late August and generally continues until late October. It takes 2-4 years to reach sexual maturity, during which time the newts will be land based.

Adults and immature newts spend the winter in places that afford protection from frost and flooding. This will generally be underground amongst tree roots, in mammal burrows, or under suitable refuges above ground like deadwood or rubble piles. Hibernation may last from October to February.

Whilst on land, outside the hibernation period, great crested newts will forage at night, taking a wide range of invertebrate prey.

From the above, it can be seen that great crested newts spend the majority of their time on land and only visit the ponds for breeding purposes. As a result, surveys need to be timed very carefully. Terrestrial surveys are very inaccurate and the only time that surveys can be truly thorough is in the narrow window of opportunity between March and September.

Great crested newts will travel large distances between ponds and terrestrial refuges. It is recommended that anywhere within 500m of a pond should be treated as potential great crested newt habitat and should be surveyed and evaluated.

An experienced surveyor must carry out the surveys and must be in possession of an appropriate Natural England great crested newt survey licence.

It is essential that great crested newt surveys are planned well in advance of any development and ideally before Planning Consent is sought. Surveys can only be carried out at the appropriate time of year and repeat surveys are essential. The guidelines suggest that between four and six surveys need to be carried out, three of these between mid-March and mid-June.

If great crested newts are to be effected by any development, a thorough assessment of the population is essential followed by the design of a comprehensive mitigation package. Only when this has been done can a licence application be submitted to Natural England for approval. It takes 30 working days for a licence application to be determined and the period of time that mitigation measures take can be measured in months. It is therefore essential to plan well in advance of development commencing.

APPENDIX II. GREAT CRESTED NEWT SURVEY RESULTS.

Wentworth Business Park.



Pond 1



Pond 2.



Pond 3.



Pond 4.



Pond 5.



HABITAT SUITABILITY INDEX SCORES.

HIS		Pond 1	Pond 2	Pond 3	Pond 4	Pond 5
SI_1	Location	1	1	1	1	1
SI_2	Pond Area	0.8	0.5	0.5	0.8	0.8
SI_3	Pond Drying	0.9	0.9	0.9	0.9	0.9
SI_4	Water Quality	1	1	0.67	1	0.33
SI_5	Shade	1	1	1	1	1
SI_6	Fowl	0.67	1	1	1	1
SI_7	Fish	1	1	1	1	1
SI_8	Ponds	0.8	0.8	0.8	0.8	0.8
SI_9	Terrestrial Habitat	1	1	1	1	1
SI_{10}	Macrophytes	1	0.7	1	1	0.3
Total score		0.91	0.87	0.87	0.95	0.75
Presence		Excellent	Excellent	Excellent	Excellent	Good

Great Crested Newt Survey Results.

POND 1 (Sowell)

Survey/Date	8th to 9th May	10th to 11th May	12th to 13th May	27th to 28th May	28th to 29th May	2nd/3rd June
Weather	Warm/Wet 11°C	Dry 10°C	Dry 9.5°C	Fine/Dry 13°C	Fine/Warm 14°C	Fine/Warm 15°C
Surveyors	Jenny/Steve R	Derek/Joe	Derek/Joe	Jenny/Steven	Jenny/Steven	Jenny/Ruth
Bottle traps	60 traps 6 M GCN 6 F GCN 1 F S	60 traps 2 F GCN 3 M S	60 traps 5 M GCN 2 F GCN 1 FS	60 traps 11 M GCN 4 F GCN *Tadpoles*	60 traps 1 M GCN 1 F GCN juv *Tadpoles*	60 traps 1 M GCN 6 F GCN 1 F S Tadpoles
Torch	Rained	1M GCN 1 F S	1M GCN 1F GCN 2 F S	3 M GCN 2 M S	1 M GCN 3 M S	2 M GCN 4 M S
Egg Search	Nil	Nil	Nil	Nil	Nil	Yes

POND 2 *(Sowell 2)*

Survey/Date	8th to 9th May	10th to 11th May	12th to 13th May	27th to 28th May	28th to 29th May	2nd/3rd June
Weather	Warm/Wet 11°C	Dry 10°C	Dry 9.5°C	Fine/Dry 13°C	Fine/Warm 14°C	Fine/Warm 15°C
Surveyors	Jenny/Steve R	Derek/Joe	Derek/Joe	Jenny/Steven	Jenny/Steven	Jenny/Ruth
Bottle traps	20 traps 1 F GCN	20 traps 1 Juv GCN	20 traps *Nil*	20 traps 6 F GCN 1 M GCN	20 traps 6 M GCN 7 F GCN	20 traps 4 M GCN 2 F GCN
Torch	Rained	1 F GCN	1 M GCN	1M GCN, 1F GCN	2 M GCN, 1F GCN	2 M GCN
Egg Search	Nil	Nil	Nil	Nil	Nil	Nil

POND 3 (Mercedes)

Survey/Date	8th to 9th May	10th to 11th May	12th to 13th May	27th to 28th May
Weather	Warm/Wet 11°C	Dry 10°C	Dry 9.5°C	Fine/Dry 13°C
Surveyors	Jenny/Steve R	Derek/Joe	Derek/Joe	Jenny/Steven
Bottle traps	20 traps Tadpoles and sticklebacks	20 traps 1 Toad Fish	20 traps Nil	20 traps Nil
Torch	Rained	Nil	Nil	Nil
Egg Search	Nil	Nil	Nil	Nil

POND 4 (Field)

Survey/Date	8th to 9th May	10th to 11th May	12th to 13th May	27th to 28th May	28th to 29th May	2nd/3rd June
Weather	Warm/Wet 11°C	Dry 10°C	Dry 9.5°C	Fine/Dry 13°C	Fine/Warm 14°C	Fine/Warm 15°C
Surveyors	Jenny/Steve R	Derek/Joe	Derek/Joe	Jenny/Steven	Jenny/Steven	Jenny/Ruth
Bottle traps	40 traps 3 M GCN 2 F GCN 1 F S Tadpoles	40 traps 2 F GCN Tadpoles	40 traps 1 M GCN 1 F GCN 2 MS 1FS Tadpoles	40 traps 4 M GCN 5 F GCN 3 M S 2 F S Tadpoles	40 traps 3 M GCN 1 F GCN 5 M S 2 F S Tadpoles	40 traps 1 M GCN 4 F GCN 5 M S 1 F S Tadpoles
Torch	Rained	Nil	1 M GCN, 2FS	3 FS	1 M GCN, 1MS, 1FS	2F GCN, 1MS.
Egg Search	Nil	Nil	Nil	Nil	Nil	Nil

POND 5

Survey/Date	8th to 9th May	10th to 11th May	12th to 13th May	27th to 28th May
Weather	Warm/Wet 11°C	Dry 10°C	Dry 9.5°C	Fine/Dry 13°C
Surveyors	Jenny/Steve R	Derek/Joe	Derek/Joe	Jenny/Steven
Bottle traps	20 traps Tadpoles	20 traps Tadpoles	20 traps Tadpoles	20 traps Tadpoles
Torch	Too Turbid to torch.	Too Turbid to torch.	Too Turbid to torch.	Too Turbid to torch.
Egg Search	Nil	Nil	Nil	Nil

Where, M GCN = male great crested newt, F GCN = female great crested newt, MS = male smooth newt and FS = female smooth newt and juv = juvenile.