



OUTLINE PLANNING APPLICATION FOR B8 DEVELOPMENT ON LAND AT BRYN LANE, WREXHAM INDUSTRIAL ESTATE

**ON BEHALF OF KINGMOOR PARK PROPERTIES LIMITED
AND NORBERT DENTRESSANGLE LOGISTICS LIMITED**

**THE WELSH ASSEMBLY
LICENCE APPLICATION IN RESPECT OF
GREAT CRESTED NEWTS**

**DOCUMENT 1:
BACKGROUND AND SUPPORTING INFORMATION
[DRAFT]**

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**DRAFT METHOD STATEMENT IN RESPECT OF
GREAT CRESTED NEWTS**

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Appendix G1: Whitcher Wildlife Ltd Great Crested Newt Survey Report

MAPS AND PLANS

Drawing G3080.002	Site Location Plan
Drawing D3041.002A	Plot 3A Habitat Survey
Li 56 91_1253 B	Landscape Proposals

A EXECUTIVE SUMMARY

- A1 A planning application has been made for Plot 3A Wrexham Industrial Estate, Wrexham. The site is currently not developed and comprises agricultural fields with hedgerows. It is located within the allocated extent of Wrexham Industrial Estate at approximate central Ordnance Survey Grid Reference is SJ392508 (Drawing G3080.002). The site contains a single pond (Drawing D3041.002A) which supports a small great crested newt population, which is part of a wider metapopulation supported by offsite ponds across the Industrial Estate land and adjacent farmland.
- A2 The proposed development is for a 400,000sqft storage and distribution warehouse development and associated ecological mitigation area, including means of access. Site access is proposed off Bryn Lane in the west and an existing industrial estate road in the south. Proposals are illustrated in Drawing Li 56 91_1253 B.
- A3 Planning permission for the site was initially sought in 2008 for plots 3A and 3B, to the south of plot 3A. The layout for plot 3A in the 2008 application was very similar to the current proposed layout, although the 2008 proposals did not include the southern access road. The 2008 application for plot 3B, in the south, was granted at Planning Appeal, but the application for plot 3A in the north was refused. Ecological issues did not form part of the grounds for refusal. Refusal was related to the lack of a named user associated with the application.
- A4 A new application was submitted for plot 3A which included an increased footprint of 500,000sqft. Consultation from CCW (Matthew Ellis, 10 January 2012) confirmed that although CCW had no objection in principle to development at plot 3A, the application for the larger development was not satisfactory due to the location, design and extent of compensatory habitats. In addition, CCW considered the application did not include sufficient information to demonstrate the proposals would not be detrimental to the maintenance of favourable conservation status of the population of great crested newts at the site. CCW advised that the proposals would avoid those effects they included compensatory habitats as set out in the previous 2008 application and if the proposal included detailed amphibian mitigation and compensation measures during and post construction. Similar concerns were voiced by Wrexham County Borough Council (WCBC) Ecology Officer in an email dated 11th January.
- A5 Proposals for plot 3A have therefore been revised to reduce the footprint of the development to the original 2008 dimensions, providing similar extent of compensatory habitats as per CCW's advice. This method statement, in combination with Document 2: Delivery Information (TEP ref 3080.009), provides the additional details proposed for amphibian mitigation and compensation measures during and post construction.
- A6 A licence from the Welsh Government will be obtained once full planning consent for the proposals is obtained at the Reserved Matters stage. The site will be excluded and amphibians will be captured from the footprint of the development using standard techniques. New aquatic and terrestrial habitats will be provided around the footprint of the development, primarily to the north and east. The southern access road, which remains part of the current proposals, will use amphibian sensitive drainage along its entire length. Monitoring and management of the compensatory habitats will be implemented post development according to an approved plan.

B INTRODUCTION

B1 Background to activity/development

- B1.1 Wrexham Industrial Estate Plot 3A is on Bryn Lane, Wrexham Industrial Estate, Wrexham. The approximate central Ordnance Survey Grid Reference is SJ392508. The site location is illustrated in Drawing G3080.002.
- B1.2 A planning application was submitted to Wrexham County Borough Council in September 2008 for major B2/B8 development on both the northern and southern parts of WCBC UDP allocated employment site E3. The proposals, which were acceptable to CCW raised no ecology objections and were subject to a planning appeal following refusal of planning permission by WCBC. Outline planning permission was subsequently granted for development on the southern plot whilst permission was refused to the north. The Inspector's appeal decision clearly indicates that if a named user had been more closely associated with the development in the north, planning permission would have been forthcoming. As explained in the supporting planning statement submitted by HOW Planning, the southern site was intended to be occupied by Norbert Dentressangle (an existing logistics company on WIE who occupy existing premises to the south) however this land is now no longer available, having been secured by another user. Planning permission is therefore sought to accommodate Norbert Dentressangle on the northern section of the site.
- B1.3 This document has been prepared to support an outline planning application for B8 storage and distribution development on the northern land which has recently been revised in order to address initial comments received from CCW. This was submitted to WCBC in November 2011 and was a joint application made by Kingmoor Park Properties and the intended occupier, Norbert Dentressangle Limited (NDL). The proposals therefore represent an extension of NDL's existing storage and distribution operation. Internal connectivity is required between the existing and proposed development site in order to provide secure internal operations and goods handling. An internal connecting road which is therefore proposed in the scheme running north to south as illustrated in the submitted plans.
- B1.4 The layout (Drawing Li 56 91_1253 B) has been revised following consultation with CCW and WCBC to reduce the development footprint from 500,000sqft to the current proposed size.
- B1.5 Proposals for the site development include the construction of a 400,000sqft distribution and storage warehouse, car parking, site access and sustainable urban drainage systems (SUDS). Impacts of these proposals are discussed in section D of this document. The planning application includes the establishment of an ecological compensation area comprising two new ponds, species rich grassland and native hedgerows and tree planting, details for which are provided in Document 2: Delivery Information (TEP ref 3080.009).

B2 Full details of proposed works on site that are to be covered by a licence

- B2.1 The development works will involve the loss of a pond which supports a small population of great crested newts (although the pond has not been confirmed to be a breeding pond), improved grassland, scattered trees, species poor hedgerow and a dry ditch.
- B2.2 Mitigation for the loss of these habitats will be created as part of the proposed development. New landscaping, including new tree and hedgerow planting and the creation of a number of ponds will also be implemented as part of the proposals.
- B2.3 A licence will be obtained to cover the exclusion of the site with standard amphibian exclusion fencing, trapping and translocation of amphibians from the site to the receptor area, construction of new habitats and enhancement of existing habitats.

C SURVEY AND SITE ASSESSMENT

C1 Pre-existing information on great crested newts at the survey site

- C1.1 Information regarding historical records for great crested newts at plot 3A Wrexham Industrial Estate was gathered from the ecological survey (2010) carried out by the Whitcher Wildlife Ltd and Cofnod contained within Appendix G1 of this report.

C2 Status of species

- C2.1 Great crested newts and their breeding sites and places of shelter receive full statutory protection under the Wildlife and Countryside Act 1981 as amended and the Conservation of Species and Habitats Regulations 2010. This makes it an offence to kill (or injure) any great crested newt or damage or disturb any breeding site or place of shelter.

C3 Objectives of the survey

- C3.1 Pond survey was undertaken by Whitcher Wildlife Ltd to reconfirm the presence of great crested newts that were identified during surveys undertaken historically and to ascertain the current abundance and distribution of great crested newts across the Wrexham Industrial Estate area.
- C3.2 Habitat survey was undertaken by TEP to identify features of ecological value and to determine specific habitat features of value for great crested newts and other amphibians.

C4 Scaled plan / map of the survey area

- C4.1 Drawing G3080.002 identifies the site location, landscape context and survey area.

- C4.2 Drawing D3041.002A illustrates the habitats present on the site.
- C4.3 Drawing Li 56 91_1253 B presents a scaled plan of the site and landscape proposals, including ecological mitigation measures.

C5 Site / habitat description

Aquatic habitat

- C5.1 A single water body containing standing water, is located in the centre of the site (Pond M). The pond is positioned at a mid way point along an internal hedgerow, approximately 10m from the hedgerow (Drawing D3041.002A). It is a fairly large pond situated within a field of heavily grazed pasture; improved grassland. The surrounding edges of the ponds are heavily vegetated although with only a few different species for the majority of the perimeter. The boundaries are dominated mainly by greater reed mace (*Typha latifolia*), with denser vegetation and an increase in species richness to the western edge. To the eastern side is more open water with a margin of marsh grass.
- C5.2 A number of other ponds are located offsite. Further descriptions of the waterbodies, including photographic records, are presented in Appendix G1

Terrestrial habitat

- C5.3 The habitats present in the site are illustrated in Drawing D3041.002A. The site consists of three adjoining agricultural fields, which are used for grazing pasture. The fields have been heavily grazed and cultivated. The majority of the site is therefore comprised of improved grassland, which is dominated by perennial rye grass (*Lolium perenne*), with white clover (*Trifolium repens*) and dandelion (*Taraxacum officinale*) also present.
- C5.4 The southwest corner of the site is formed by semi-improved grassland which possesses a diverse sward. Semi-improved grassland also extends along north part of the west boundary, 5m either side of a fence line which acts as the field boundary. This grassland area is in transition phase, consisting of mainly creeping thistle (*Cirsium arvense*), perennial rye grass, Timothy (*Phleum pratense*) and creeping buttercup (*Ranunculus repens*).
- C5.5 Small patches of marshy grassland were observed within semi-improved grassland in the south west corner of the site. These areas were dominated by hard rush (*Juncus inflexus*) and soft rush (*Juncus effusus*).
- C5.6 Stretches of continuous dense scrub surround the semi-improved grassland in the south west corner. This scrub is dominated by hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*) with frequent patches of bramble (*Rubus fruticosus* agg.).
- C5.7 Hedgerows run around the boundaries of the agricultural fields, including along the site boundaries and along two internal field boundaries. The hedgerows separate the area into three distinct fields. All of the hedgerows are species poor and most are defunct (no longer stock proof). The hedgerows are comprised mainly of hawthorn and blackthorn with occasional rose and field maple (*Acer campestre*) sections. They contain English oak trees (*Quercus robur*) at various points throughout the entire site; the number increasing along the east and south perimeters.

- C5.8 A linear semi-natural woodland runs parallel to the southern boundary, which is dominated with English oak and ash (*Fraxinus excelsior*). Ground flora includes bramble and ivy (*Hedera helix*). A brook runs through the woodland from west to east.
- C5.9 The south section of the west boundary is formed by broad-leaved plantation. Within this area the semi-mature trees are positioned in a fairly uniform manner, lying parallel with the species poor hedgerow. Trees within this area are dominated by mainly English oak.
- C5.10 A pathway runs through the woodland, on either side of which are tall ruderal herbs dominated by bramble, spear thistle (*Cirsium vulgare*) and nettle (*Urtica dioica*). This looks to be an unmanaged area. A patch of tall ruderal herbs was also observed within the semi-improved grassland in the south west corner of the site.
- C5.11 A ditch is associated with the most westerly of the internal hedgerows. At the time of survey it was dry and looked to have been so for a considerable amount of time. The vegetation on either side of the banks was overgrown.
- C5.12 Another ditch extends from the south east corner of the site (connecting with the brook which runs through the woodland). The ditch flows from north to south. The banks were scrubbed and shaded with bramble and hawthorn. The ditch had a small amount of flowing water, south to north; water depth was less than 30cm at the time of survey.

Wildlife Corridors

- C5.13 The site is surrounded by roads to the north and west with open countryside to the south and east. The hedgerows within and along the boundaries of the site and the semi-natural woodland on the west boundary of the site provide linkage from the site to the wider locality.

C6 Field surveys

Survey methods

- C6.1 A survey for great crested newts was undertaken in 2010 by Whitcher Wildlife Consultants. Survey included six visits to all ponds on and around the Bryn Lane site during the period mid-March to mid-June 2010. Full details of survey methods are presented in Appendix G1.

Personnel

- C6.2 Surveys were undertaken by Derek Whitcher (licence number OTH:SA:236:2008).

C7 Survey results

- C7.1 The results are detailed in Report 091225/June 2010 in Appendix G1.
- C7.2 The on-site pond (Pond M) was found to support a peak count of 8 adult great crested newts (GCN) during survey in 2010. No breeding of GCN was confirmed within Pond M; with no eggs or larvae discovered.

- C7.3 Pond habitat quality for the onsite pond was assessed on a recent visit to site and was considered to be optimal.
- C7.4 There are no other ponds within a 250m radius of the on-site pond. Of the numerous offsite ponds found further afield, Pond P is the closest pond known to contain great crested newts, being located approximately 255m to the south of pond M and 80m to the south of the site boundary. Pond P showed a peak GCN count of 6 adults during the 2010 survey.

C8 Interpretation of survey results

- C8.1 The onsite pond (Pond M) supports a small population of GCN, but no breeding was confirmed. However, as only one pond of the sixteen ponds included in the survey that showed presence of GCN, a precautionary approach is to be taken for this assessment.
- C8.2 Pond M lies more than 250m from another pond. According to current mitigation guidelines (English Nature 2001), pond M is considered to be an isolated population and the population of GCN utilising plot 3A would therefore be interpreted to be of small size.
- C8.3 In total, fourteen ponds (including the onsite pond) within land associated with Wrexham Industrial Estate were found to support small numbers of great crested newts and two ponds were found to support medium size populations. Overall, the wider metapopulation was confirmed to be of medium size.

D IMPACT ASSESSMENT IN ABSENCE OF MITIGATION

D1 Short-term impacts: disturbance

- D1.1 Disturbance to a small population of GCN will result from site clearance and construction activities. Although no evidence was identified from survey to suggest that the onsite pond supports breeding, it is assumed that disturbance of GCN will affect adults and juveniles. If GCN were present at the time of construction or were allowed to access the site during construction, the construction works would also likely result in the killing or injury of individuals.

D2 Long-term impacts: site modification

- D2.1 The development proposals include significant landscaping to the north and east of the development footprint to provide screening from the wider countryside. This landscaping will result in the long-term addition of 3.4ha linear native broad-leaved woodland, which would be seen as a beneficial impact for nearby GCN populations and a range of other species that occur in the area.
- D2.2 The development proposals will likely result in the modification of small areas of improved grazed pasture into amenity grassland, associated with car parking and verges, which functionally is not considered to be a significant impact in respect of GCN. Improved pasture will also be modified into above-ground SUDS basins/swales as part of the development proposals, which will offer greater

structural and species diversity than the current improved grassland. This would result in a beneficial effect.

- D2.3 Modification of habitats within the site of is considered to be a medium impact.

D3 Long-term impacts: site loss

- D3.1 The proposed development will directly affect the onsite pond, requiring its complete removal. The pond measures approximately 780m². Destruction of a non-breeding pond used by great crested newts would be a medium impact, but adopting a precautionous approach and assuming that the pond does support breeding, the loss of the pond is a high impact.
- D3.2 Development will also result in direct affects on the terrestrial habitat surrounding it, consisting of approximately 7ha improved grassland which has value as foraging habitat but has limited value in terms of sheltering potential and 525m hedgerows, which are likely to be high value for local amphibian populations for foraging, shelter and dispersal.
- D3.3 Adopting a precautionous approach and assuming pond M to be a breeding pond, loss of habitats is considered to be a high impact.

D4 Long-term impacts: fragmentation and isolation

- D4.1 Development of the site will not result in fragmentation or isolation, as it lies peripheral to the GCN population supported across the industrial estate land. However, the proposed access road which is to serve the site from the southeast corner from the existing industrial estate road in the south has the potential (if its design were to represent a barrier to amphibian dispersal) to fragment GCN populations lying to the west of the road (particularly those supported in ponds P and U) from remaining populations located in the east.
- D4.2 This fragmentation is considered to be a low impact, as it does not affect immediate habitats, nor does it affect or result in a single pond population becoming isolated.

D5 Post-development interference impacts

- D5.1 The habitats remaining within the site will not be publicly accessible, so risk of post-development inference impacts, such as introduction of invasive or undesirable species, is very low.
- D5.2 The most significant long term post-development interference risk might result from entrapment of animals attempting to disperse between east and west populations within gully pots, should they be incorporated into the southern access road.

D6 Predicted scale of impact

- D6.1 In the absence of mitigation there will be loss of (assumed) breeding, foraging and sheltering habitat for a small GCN population, in addition to distant fragmentation impacts affecting a medium sized metapopulation. The overall scale of the impact is high.

E LAND OWNERSHIP – MITIGATION SITE(S)

E1 Mitigation site ownership

- E1.1 An ecological mitigation area will be created in the north, east and west of the development footprint, within the site boundary for plot 3A, which will contain the compensatory habitats (retained, enhanced and created). The mitigation site therefore lies within the same site ownership as the current landowner and will be in the same ownership, when the site is transferred, as the future occupier.

F REFERENCES AND FURTHER READING

COUNTRYSIDE COUNCIL FOR WALES (2000) Great Crested Newt Guidance Note Number 7. CCW, Bangor

FLINTSHIRE COUNTY COUNCIL UNITARY DEVELOPMENT PLAN (draft deposit 2003) Ensuring a sustainable future for Flintshire

FROGLIFE (2002) Great Crested Newt Conservation Handbook. Froglife, The Herpetological Conservation Trust and English Nature

GENT, T. & BRAY, R. (eds) (1994) Conservation and management of great crested newts: proceedings of a symposium held on 11 January 1994 at Kew Gardens, Richmond, Surrey English Nature Science Report No.20

HERPETOFAUNA GROUPS OF BRITAIN AND IRELAND (1998) Evaluating local mitigation/translocation programmes: Maintaining Best Practice and lawful standards. HGBI advisory notes for Amphibian and Reptile Groups (ARGs). HGBI, c/o Froglife, Halesworth. Unpubl.

FLINTSHIRE BIODIVERSITY ACTION PLAN (2001) Creating Space for Wildlife

APPENDIX G1
Whitcher Wildlife Ltd Great Crested Newt Survey Report

**Whitcher Wildlife Ltd.
Wildlife Consultants.**



BRYN LANE, WREXHAM.

GREAT CRESTED NEWT SURVEY.

Ref No:- 091225/June 2010.

Date: 9th June 2010

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1. INTRODUCTION.

1.1. Derek A Whitcher Ltd carried out four great crested newt surveys on the ponds on and around the above site in 2005 and an additional two surveys in May 2008.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out a further six surveys of all ponds on and around the site to update the survey results in preparation for a European Protected Species licence application.

1.3. These surveys were carried out between mid March and mid June 2010 and this report outlines the findings of those surveys 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.

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.

3. SURVEY RESULTS.

3.1. Pond Descriptions.

3.1.1. Pond A. This is a small concrete lined pond within an area of tended grass. There is a small section of the pond that lies outside the concrete. The pond has abundant vegetation within the water.



3.1.2. Pond B. This is a small shallow, overshadowed pond within a small clump of trees adjacent to the access road. The pond contains some submerged vegetation.



3.1.3. Pond C. This is a large pond and adjoining ditch that lies underneath the security cabin at the entrance to the TDG site. The pond contains patchy areas of marginal vegetation.



3.1.4. Pond D. This is a man made pond located in front of an office block. The pond contains a very dense margin of reeds around three sides.



3.1.5. Pond E. This is a large and deep pond with a dense reed margin around the pond and abundant flag iris and water lilies growing in the pond.



3.1.6. Pond F. This is a large and deep pond with a thin margin of reeds around the edge. There is a known population of fish in this pond.



3.1.7. Pond H. This is a concrete lined tank with a bed of silt on the bottom. There are some reeds growing in the water and abundant blanket weed in the water.



3.1.8. Pond I. This pond is located in adjacent grassland immediately outside the north eastern corner of the site. No open water was observed as grass was growing throughout the entire pond.



3.1.9. Pond J. This pond was originally completely full of reedmace but in winter 2008 a large area of open water was generated by cleaning out a lot of the reedmace. There is now a reedmace margin around the edge, an area of reedmace in the centre with blanket weed and emergent vegetation in the pond.



3.1.10. Pond K. This is a large pond with a margin of reeds and is surrounded by trees. This pond is known to contain fish.



3.1.11. Pond L. This is a large fishing pond and was not included within the survey.

3.1.12. Pond M. Pond M is a large pond located in a grazing field. The pond contains dense reedmace in one half with open water in the other with a margin of marsh grass.



3.1.13. Pond P. This is a large pond within a grazing field that was previously shallow and over shaded by dense willow. The pond was improved during winter 2008 by reducing the willow scrub and creating open water. The pond contains submerged vegetation throughout.



3.1.14. Pond R. This is a large pond within a grazing field. The pond contains dense areas of vegetation with abundant trees around one end of the pond.



3.1.15. Pond V. This is a large pond with a margin of flag iris with water lilies growing in the water. This pond is located in front of the TDG offices.



3.1.16. Pond X. This is an overgrown ditch at the entrance to a waste disposal site. The ditch contains very slow flowing water with abundant submerged vegetation and rubbish.



3.1.17. Pond 1. This is a concrete and metal ring that retains water. There is a small clump of reeds in the centre and approximately 150mm of water. This is an additional pond identified during this survey.



3.1.18. Pond 2. This is a concrete and metal ring that retains water. There is a small clump of reeds in the centre and approximately 150mm of water. This is an additional pond identified during this survey.



3.1.19. Pond 3. This is a small shallow pond with a margin of sedges and sedges growing in the water. This is an additional pond identified during this survey.



3.1.20. Pond 4. This is an open topped, blocked manhole full of silt with some grass growing in the water.



3.1.21. Pond 5. This is a blocked manhole which has created a puddle on an area of concrete. There is grass growing at the edge of the puddle.



3.1.22. Pond 6. This is an open, disused manhole with reeds growing in the water.



3.1.23. Pond 7. This is a large area of shallow water with a soil bund surrounding. There is grass and small trees growing with some areas of sedges and reeds.



3.1.24. Pond 8. This is a manhole covered with a slatted lid. The water in this manhole is approximately 2m deep with no vegetation.



3.2. Great Crested Newt Survey Results.

The pond reference numbers used in this report are the same that were used in the original report for continuity. The tables below provide the survey results for each of the ponds surveyed where MGCN = male great crested newt, FGCN = female great crested newt, MS = male smooth newt and FS = female smooth newt.

Pond A

Survey Date		24 th to 25 th March	7 th to 8 th April.	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Steven	Steven	Derek	Steven	Steven	James
		Steve	Derek	Steve	Alex	Lee	Lee
Bottle Traps	Traps	5	5	5	5	5	5
	Results	1 MGCN	0	1 MS 1 FS	1 FS	0	0
Torch Search		0	0	0	0	1 FS	1 MS
Egg Search		None	None	None	None	None	None

Pond B

Survey Date		24 th to 25 th March	7 th to 8 th April.	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Steven	Steven	Derek	Steven	Steven	James
		Steve	Derek	Steve	Alex	Lee	Lee
Bottle Traps	Traps	15	15	15	15	15	15
	Results	4 MS	1 MS	1 FGCN 1 FS	0	3 MGCN, 1 FGCN, 2 MS & 3 FS.	0
Torch Search		1 toad.	1 FS	0	0	0	1 MS
Egg Search		None	None	None	None	None	None

Pond C.

Survey Date		24 th to 25 th March	7 th to 8 th April.	14 th to 15 th April	21 st to 22 nd April	27 th to 28 th April	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6 °C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Steven	Steven	Jenny	Jenny	James	James
		Steve	Derek	Steven	Lee	Alex	Lee
Bottle Traps	Traps	40	40	40	40	40	40
	Results	5 MS, 2 FS & 1 MGCN	1 MS & 2 FS	2 FS 8 MS	5 MS 3 FS	7 MGCN, 1 FGCN 13 MS & 6FS.	1 MS
Torch Search		Toads.	2 MGCN, 1 FGCN, 8 MS, 11 FS & toads.	0	3 MS 5 FS	0	0
Egg Search		None	None	None	None	None	None

Pond D

Survey Date		24 th to 25 th March	7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	27 th to 28 th April	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Steven	Jenny	Jenny	Jenny	James	James
		Steve	James	Steven	Lee	Alex	Lee
Bottle Traps	Traps	20	40	40	40	40	40
	Results	0	0	0	0	0	0
Torch Search		0	0	0	0	0	0
Egg Search		None	None	None	None	None	None

Pond E

Survey Date		24 th to 25 th March	7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	27 th to 28 th April	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Jenny	Jenny	Jenny	Jenny	James	James
		James	James	Steven	Lee	Alex	Lee
Bottle Traps	Traps						
	Results						
Torch Search		0	0	Fish	Fish	0	0
Egg Search		None	None	None	None	None	None

Pond F

Survey Date		24 th to 25 th March	7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	27 th to 28 th April	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Jenny	Jenny	Jenny	Jenny	James	James
		James	James	Steven	Lee	Alex	Lee
Bottle Traps	Traps						
	Results						
Torch Search		0	Fish	0	0	Fish	0
Egg Search		None	None	None	None	None	None

Pond H

Survey Date		24 th to 25 th March	7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	27 th to 28 th April	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Jenny	Jenny	Jenny	Jenny	James	James
		James	James	Steven	Lee	Alex	Lee
Bottle Traps	Traps	20	20	20	20	20	20
	Results	3 MS 3 FS 1 MGCN	0	7 MS 2 FS 1 MGCN	5 FS 3 MS	12 MS 7 FS	2MS
Torch Search		1 MS	1 MGCN 2 FS	2 MS	0	1 MS, 1 MGCN	0
Egg Search		None	None	None	None	None	None

Pond I

Survey Date		24 th to 25 th March	7 th to 8 th April.	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Steven	Steven	Derek	Steven	Steven	Steven
		Steve	Derek	Steve	Alex	Lee	Thomas
Bottle Traps	Traps	20	20	20	20	20	20
	Results	0	1 FGCN	1 MGCN	1 MS, 1 FGCN & 1 MGCN	1 MGCN, 3 FGCN, 1 MS & 8 FS	0
Torch Search		0	0	0	0	0	0
Egg Search		None	None	None	None	None.	None

Pond J

Survey Date		24 th to 25 th March	7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	27 th to 28 th April	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Jenny	Jenny	Jenny	Jenny	James	James
		James	James	Steven	Lee	Alex	Lee
Bottle Traps	Traps	60	60	60	60	60	60
	Results	2 MS 3 FS 1 MGCN	1 FGCN 2 MGCN 7 MS 5 FS	21 MGCN 7 FGCN 8 MS 3 FS	2 FGCN 1 MGCN 4 FS 1 MS	8 MGCN, 2 FGCN 4 FS 4 MS	3 FGCN 7 MS 5 FS
Torch Search		0	3 MS	3 FS	0	2 MGCN & 1 MS	0
Egg Search		None	None	None	None	None	None

Pond K.

Survey Date		24 th to 25 th March	7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	27 th to 28 th April	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Jenny	Jenny	Jenny	Jenny	James	James
		James	James	Steven	Lee	Alex	Lee
Bottle Traps	Traps	40	40	40	40	40	40
	Results	0	3 MS	4 MS 1 FS	5 MS 1 FS	4 MS	3 MS 2 FS
Torch Search		0	0	0	0	0	0
Egg Search		None	None	None	None	None	None

Pond M

Survey Date		24 th to 25 th March	7 th to 8 th April.	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Steven	Steven	Derek	Steven	Steven	Steven
		Steve	Derek	Steve	Alex	Lee	Thomas
Bottle Traps	Traps	40	40	40	40	40	40
	Results	3 MS	1 FG CN & 1 FS	1 FG CN 4 MS 1 FS	2 MS & 1 FS	8 MGCN, 1 MS & 4 FS.	2 FG CN, 2 MS.
Torch Search		0	0	0	0	0	0
Egg Search		None	None	None	None	None	None

Pond P

Survey Date		24 th to 25 th March	7 th to 8 th April.	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Steven	Steven	Derek	Steven	Steven	Steven
		Steve	Derek	Steve	Alex	Lee	Thomas
Bottle Traps	Traps	40	40	40	40	40	40
	Results	3 MS, 3 FS, 1 MGCN, 2 FGCN & 1 toad.	3 MS & 2 FS	4 FGCN 4 FS	2 FGCN	4 MGCN, 2 FGCN, 2 MS & 1FS.	1 MGCN 1 FGCN, 1 MS.
Torch Search		0	1 MGCN, 2 FGCN & 2 FS	2 FS	0	0	0
Egg Search		None	None	None	None	None	None

Pond R

Survey Date		24 th to 25 th March	7 th to 8 th April.	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Steven	Steven	Derek	Steven	Steven	Steven
		Steve	Derek	Steve	Alex	Lee	Thomas
Bottle Traps	Traps	40	40	40	40	40	40
	Results	7 MGCN & 1 FS	9 MGCN, 11 FGCN & 2 FS.	6 FGCN 3 MGCN 2 FS	1 FGCN	13 MGCN & 9 FGCN.	2MGCN, 1 FGCN. 1 MS, 2 FS.
Torch Search		Frog spawn.	0	0	0	0	0
Egg Search		None	None	None	None	None	None.

Pond V

Survey Date		24 th to 25 th March	7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Jenny	Jenny	Jenny	Jenny	Steven	Steven
		James	James	Steven	Lee	Lee	Thomas
Bottle Traps	Traps	10					
	Results	1 FGCN					
Torch Search		0	0	1 MGCN	0	0.	0
Egg Search		None	None	None	None	None	None

Pond X

Survey Date		24 th to 25 th March	7 th to 8 th April.	14 th to 15 th April	21 st to 22 nd April
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.
Surveyors		Steven	Steven	Jenny	Jenny
		Steve	Derek	Steven	Lee
Bottle Traps	Traps				
	Results				
Torch Search		0	4 MS, 2 FS and toads.	1 MS	1 FS
Egg Search		None	None	None	None

Pond 1

Survey Date		24 th to 25 th March	7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Jenny	Jenny	Jenny	Jenny	Steven	James
		James	James	Steven	Lee	Lee	Lee
Bottle Traps	Traps						
	Results						
Torch Search		2 MGCN 3 FGCN 9 MS 19 FS	1 MGCN 1 FGCN 7 FS 15 MS	2 FGCN 1 MGCN 5 MS 5 FS	5 MS 8 FS	5 MS & 5 FS.	0
Egg Search		None	None	Yes	Yes	None	None

Pond 2

Survey Date		24 th to 25 th March	7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Jenny	Jenny	Jenny	Jenny	Steven	James
		James	James	Steven	Lee	Lee	Lee
Bottle Traps	Traps						
	Results						
Torch Search		0	0	0	0	0	0
Egg Search		None	None	None	None	None	None

Pond 3

Survey Date		24 th to 25 th March	7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather		Wet, raining, 9°C	Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors		Jenny	Jenny	Jenny	Jenny	Steven	James
		James	James	Steven	Lee	Lee	Lee
Bottle Traps	Traps						
	Results						
Torch Search		0	1 FGCN 2 MGCN 5 MS 5FS	1 Frog Water level has dropped.	Dried up	Dried up	Dried up
Egg Search		None	None	None	None	None	None

Pond 4

Survey Date			7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather			Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors			Jenny	Jenny	Jenny	Steven	James
			James	Steven	Lee	Lee	Lee
Bottle Traps	Traps						
	Results						
Torch Search			1 MGCN 1 FGCN 3 FS 2 MS	1 MS	0	0.	0
Egg Search			None	None	None	None	None

Pond 5

Survey Date			7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather			Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors			Jenny	Jenny	Jenny	Steven	James
			James	Steven	Lee	Lee	Lee
Bottle Traps	Traps						
	Results						
Torch Search			2 FGCN 1 MGCN 2 FS 2 MS	Dried up completely	Dried up completely	Dried up.	Nothing
Egg Search			None	None	None	None	None

Pond 6

Survey Date			7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather			Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors			Jenny	Jenny	Jenny	Steven	James
			James	Steven	Lee	Lee	Lee
Bottle Traps	Traps						
	Results						
Torch Search			1 FS	2 FS	1 FS	0	0
Egg Search			None	None	None	None	None

Pond 7

Survey Date			7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather			Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors			Jenny	Jenny	Jenny	Steven	James
			James	Steven	Lee	Lee	Lee
Bottle Traps	Traps						
	Results						
Torch Search			2 FGCN 3 MGCN 28 FS 8 MS 1 Frog	2 MGCN 7 FS 4 MS Water level dropped	Nothing, Water level has dropped considerably.	Reduced water level. 1 MS & 1 FS.	0
Egg Search			Yes	Yes	Yes	None	None

Pond 8

Survey Date			7 th to 8 th April	14 th to 15 th April	21 st to 22 nd April	26 th to 27 th April.	2 nd to 3 rd June.
Weather			Dry, clear 4°C.	Fine, clear 6°C	Fine, 5°C.	Fine, 8°C.	Warm, 12°C.
Surveyors			Jenny	Jenny	Jenny	Steven	James
			James	Steven	Lee	Lee	Lee
Bottle Traps	Traps						
	Results						
Torch Search			1 FGCN 4 FS 1 MS 1 Frog	1 FGCN 1 MS 4 FS	1 FGCN 1 Frog	3 MS.	0
Egg Search			None	None	None	None	None

4. EVALUATION OF FINDINGS.

4.1. Ponds that had previously contained no great crested newts for a specific reason and where circumstances remained the same were omitted from this survey. The survey concentrated on the ponds on site where a population of great crested newts had previously been found and where the ponds were relevant to the proposed development on the site.

4.2. All ponds previously surveyed were given the same letter code that was previously used. Any new ponds found that have not previously been surveyed were denoted with a numeric number, 1 to 7. This group contains a series of man-made structures to the east of the main TDG site.

4.3. The survey results identified a small population of great crested newts in ponds A, B, C, H, I, M, P, V, 1, 3, 4, 5, 7 and 8 and a medium population in ponds J and R. No great crested newts were found in ponds D, E, F, K, X, 2, or 6.

4.4. This represents little change from the previous surveys and confirms there is an abundance of great crested newts across the entire site.

5. RECOMMENDATIONS.

This report makes no recommendations. The results of the survey are to be used to up-date the mitigation strategies for the developments on the site.

Derek Whitcher

09.06.2010.

Natural England Bat Survey Licence Number.	20091076
Natural England Great Crested Newt Survey Licence Number.	20090192
CCW Great Crested Newt Survey Licence Number.	OTH:SA:236:2008
Natural England Barn Owl Survey Licence Number	20094247

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 eft), 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.

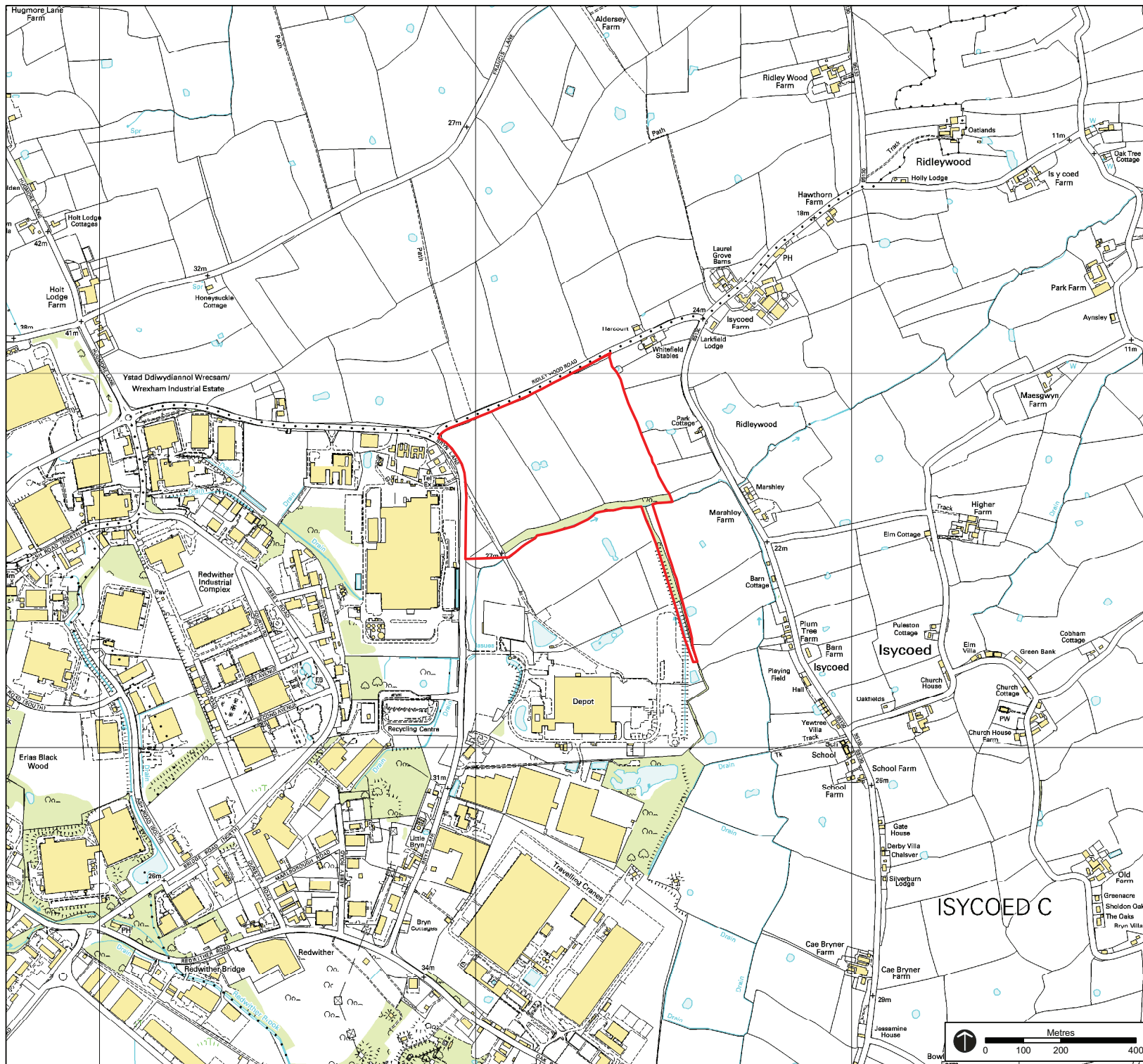
Great crested newts will travel large distances between ponds and terrestrial refuges. It is recommended that anywhere within 500m of a pond should be treated as potential great crested newt habitat and should be surveyed and evaluated.

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.

MAPS AND PLANS



Key

Application Site

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Project: **Land at Bryn Lane
Wrexham Industrial Estate**

Title: **Site Location Plan**

Drawing No: **Figure 1**

Date: 30-09-11	TEP Ref No: G3080.002
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Drawn: DH	Checked: CG	Approved: IJG
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Key

-  Improved grassland
-  Broad-leaved plantation
-  Semi-natural broad-leaved woodland
-  Continuous scrub woodland
-  Semi-improved neutral grassland
-  Marsh/marshy grassland
-  Standing water
-  Dry ditch
-  Species poor hedgerow
-  Gateway
-  Semi-mature tree
-  Semi-mature tree with bat potential
-  Tall ruderals
-  Fence
-  Target note

Species list
 Cm - Crataegus monogyna
 Fe - Fraxinus excelsior
 Qr - Quercus robur

Rev	Description	LG	TR	Drawn	Approved	Date
A	Addition of habitats					04/10/11



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Project

Plot 3 Bryn Lane, Wrexham Industrial Estate

Title

Phase 1 Habitat Survey

Dwg No

D3041.002A

Scale	NTS @ A3	Date
		23/08/11

Drawn	Checked	Approved
CZ	TR	TR



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