

Method Statement Title:	Great Crested Newt Method Statement
Method Statement Version Number:	V.2 Draft for Client Comment
Method Statement Issue Date:	22.06.18. amended 15/08/18 (Mick Smith)
Site Address:	Bryn Land, Knolton
Planning Reference:	P/2018/0229

The following information provides confirmation of the mitigation and compensation measures proposed for the development. It has been completed using the NRW Method Statement template for ease of reading and at the end of the document, includes mitigation and compensation methods for birds, bats and trees.

Background and Supporting Information

A Executive Summary

An Ecological Assessment comprising a desktop study, Phase 1 Habitat assessment and preliminary protected species survey was undertaken at the proposed development site in April 2016 by Mick Smith, Director, Wildbanks Conservation Ltd. This Method Statement should be read in conjunction with this document

Possible constraints to the development and further surveys needed were identified during the initial Ecological Assessment in the form of the possible presence of protected species. Further surveys included a great crested newt presence/absence survey undertaken on 7 ponds within 250m of the development site.

Great crested newts (GCN) are present on and surrounding the development site. Of the 7 ponds surveyed, 5 ponds (1,3,5,6a & 6b) supported GCN with ponds 3,5,6a & 6b confirmed as breeding ponds. The largest count on one night was 25 individuals in pond 5. Results indicate that the ponds surrounding the development site support a medium breeding population of GCN. No ponds will be directly impacted by the proposed development, however, moderate foraging and hibernation habitat exists throughout the development site and as such the development should not proceed without a European Protected Species licence being sought with respect to great crested newts.

No statutorily or non-statutory designated sites will be impacted upon as a result of the proposed development.

A Method Statement and detailed mitigation measures follows which includes the construction of a newt fence around the development area and a trapping exercise to ensure no great crested newts are present within the development area prior to works. Compensation measures include the creation of a secure receptor area that will be managed for the benefit on great crested newts in the long term.

B Introduction

B.1 Background to activity/development

The development comprises the construction of an agricultural workers dwelling on an improved grassland field. The proposed dwelling benefits from an existing access track, with a short extension required.

B.2 Full details of proposed works on site that are to be covered by the licence

Construction of single detached dwelling and associated landscaped garden, driveway and parking area.

B.3 Actions requiring licensing

The development site could provide terrestrial shelter to GCN so to prevent harm to GCN during works, it is considered necessary to undertake a period of capture and translocation using pitfall traps enclosed by newt fencing. No breeding sites will be disturbed or destroyed.

C Survey and site assessment

C.1 Existing information on great crested newts at the survey site.

Cofnod provided 2 records of GCN within 1km of the site dated 2005 at SJ381394 and 2008 at SJ385390, both appear to relate to Trench Farm, a site known to the Project Ecologist. No records for previous surveys on the site.

C.2 Statutory sites notified for the species (SSSIs or SACs) within 10km

None.

C.3 Objectives of the survey

To determine presence/absence of all sub-populations of great crested newts likely to be affected, an estimate of population size and their usage of site (e.g. breeding, hibernation, and foraging).

C.4 Scaled plan/map of survey area

Attached.

C.5 Site/habitat description

The development site comprises improved grassland, of moderate value to GCN, bound by hedgerows of good value to GCN for commuting, foraging and sheltering. Piles of rubble, large stone and crushed road planings are present providing excellent hibernation and refuge opportunities. There is a network of 7 ponds within 250m of the development site (2 ponds 300m+ distance were inaccessible for presence/absence surveys). Habitat Suitability Indexes were completed for each:

Factor	Pond 1	Pond 2	Pond 3	Pond 4	Pond 5	Pond 6a	Pond 6b	Pond 7
HSI Score	0.61 Average	0.44 Poor	0.67 Average	0.87 Excellent	0.69 Average	0.64 Average	0.60 Average	0.63 Average
Proximity to development	5m NW	130m SW	250m S	300m SW	100m NE	220m N	190m N	330m N
Connectivity to proposed development	No barriers to dispersal	No significant barriers to dispersal	No barriers to dispersal	No significant barriers to dispersal	No barriers to dispersal	No barriers to dispersal	No barriers to dispersal	No significant barriers to dispersal

C.6 Field survey(s).

Surveys were conducted by Wildbanks Conservation directors and ecologists Mick Smith and Clare Smith (licence numbers 2016-23932-CLS-CLS-1 and CLS-00394). All ponds were subject to bottle

trapping, torch surveys (2x1,000,000 candle power (clulite torches) and egg searches as per the survey methodology stated in the GCN mitigation guidelines. Ponds 4 and 7 are located on land not owned by the applicant and access was denied. All other ponds were surveyed with no limitations. Weather conditions were suitable on all survey occasions (Table below). No non-native species identified.

	PM- Air Temp °C	AM - Air Temp °C	Water Temp °C	Wind (Beaufort scale)	Rain
11/5/16	16	12	14	2	1
16/5/16	12	12	14	3	1
18/5/16	9	9	9	2	0
19/5/16	12	12	13	4	0
25/5/16	14	14	15	1	1
29/5/16	12	15	14	0	0
1/6/16	12	11	12	1	0
2/6/16	17	15	15	0	0
8/6/16	18	16	16	0	0
9/6/16	18	17	16	0	4

C.7 Survey Results

Pond Number	GCN count per visit - bottle trapping (unless followed by T – Torching) NB// (J-Juvenile)						Max count	Breeding (eggs present) Y/N
	1	2	3	4	5	6		
1	1♀ (J)	0	1♂ (J)	1♂	0	0	1	No
2	0	0	0	0	NA	NA	0	No
3	4♂ 2♀	4♂ 1♀ 2♂ (T)	3♀	2♂ 1♀	1♂ 1♀ 1♀ (T)	1♂ 1♀	6	Yes
4	Access denied – third party land							
5	20♂ 5♀ 2♂ (T) 5♀ (T)	17♂ 6♀	3♀	2♂ 1♀	3♂ 3♀ 1♀ (T)	4♂ 10♀ 1♀ (T)	25	Yes
6a	1♀ (T)	1♂ (T) 1♀ (T)	1♂ 2♀	0	0	2♀	3	Yes
6b	1♂ 1♀	0	1♂	0	1♂ 1♀ 1♀ (T)	1♂	2	Yes
7	Access denied – third party land							
8	0	0	0	0	NA	NA	0	No

C.8 Interpretation/evaluation of survey results (Great crested newt Mitigation Guidelines section 5.8)

In consideration of the results (max count across ponds on one night being 28) and with reasonable certainty that GCN will interchange between the ponds, a size class estimate of a medium population of GCN is present within ponds within 250m of the development site. In the absence of barriers, it is probable that GCN will use the development site for foraging and resting, and use boundary hedgerows for foraging, resting and hibernating. No limitations were encountered during the survey of the ponds and therefore the results for each pond are considered to be as accurate as possible (acknowledging surveys may only reveal 2-30% of the actual population).

D Impact assessment

The proposed development has the potential to cause harm to individuals, and disturb and destroy places GCN may use for shelter, foraging and resting. No ponds or land within 50m of breeding ponds will be affected by the proposed development. The closest breeding pond to the site is pond 5, at a distance of 82m at its nearest point. See attached Figure A.1. Two juvenile GCN were found within Pond 1, immediately adjacent to the development site. No evidence that this was a breeding pond was found, i.e no adult GCN or eggs.

D.1 Short-term impacts: disturbance

The proposed development has the potential to restrict access to feeding and sheltering habitats during construction. Dispersal corridors will not be affected since hedgerows will remain intact. Site clearance, including removing the piles of hardcore materials, and topsoil stripping will degrade habitats to a point where they will become unusable to GCN, and potentially, kill or injure GCN. During construction, storage of building materials can create habitats for GCN, which when moved, can cause further harm if they are being used by GCN. This is considered to be a low scale of impact.

D.2 Long-term impacts: site modification

The development site currently supports improved grassland of moderate value to GCN. This will be modified into building, hardstanding and amenity grassland/landscaped garden, the latter of which will provide moderate opportunities for GCN. No breeding sites will be affected. No high value sheltering/foraging habitats such as hedgerows will be affected. A low scale of impact is predicted.

D.3 Long-term impacts: site loss

It is considered that land loss comprises the footprint of the dwelling and associated hardstanding. The loss of grazed improved grassland is directly comparable to the creation of amenity grassland and garden and therefore very little loss in potential habitat for GCN is anticipated in this regard. The creation of garden may actually create opportunities for GCN. The amount of suitable land lost due to the footprint of the building and hardstanding ('built land') totals 286m² (Figure D) and at site level, a medium scale of impact is predicted for the land 50-250m from ponds supporting GCN. Since this is a small area and unique in the wider area, it is highly unlikely to impact on sub populations at 2km, 10km, local, regional, and national level.

D.4 Long-term impacts: fragmentation and isolation

No ponds will be lost and good commuting habitats such as hedgerows will remain intact. No barriers to movement will be created. The creation of a hardstanding and garden/amenity areas will not inhibit the movement of GCN and the small footprint of the building will not cause fragmentation or isolation of the site, surrounding habitat or ponds. A low scale of impact is considered in this regard.

D.5 Post-development interference impacts

The aco drain proposed between the driveway and road could cause entrapment of individuals if an amphibian friendly product is not installed. The management of lawns may cause killing and injury of GCN due to blades on mowers with a predicted scale of impact of low for land 50-250m from breeding ponds. The introduction of fish or invasive plants to nearby ponds is highly unlikely since the applicant intends on maintaining his current management regime.

D.6 Predicted scale of impact

In the absence of mitigation, there is potential for GCN to be harmed during construction. Temporary ground excavations to construct foundations and top soil stripping, for example, will likely result in a relatively low impact at site level given the habitats present. No impacts are considered likely on species status at 2km, 10km, local, county, regional and country levels.

Delivery Information - Mitigation, compensation and monitoring

Since impacts cannot be ruled out completely, mitigation focuses on the prevention of harm to individuals, and compensation comprises the replacement of GCN friendly habitat to compensate for the loss of 286m² to 'built land'. The Mitigation Area will total in excess of 1,300m². The main aim of the mitigation is to ensure no detriment to the maintenance of the population at a favourable conservation status.

E Works to be undertaken

Pre-construction, the site will be trapped out using temporary amphibian fencing and pitfall trapping. Installation of fencing and pitfall traps will be supervised by a NRW licensed ecologist and subsequent trapping and translocation will be completed under supervision by a NRW licensed ecologist .

E.1 Great Crested Newt capture and exclusion (if applicable).

To co-incide with autumn migration from ponds, the site will be subject to a period of exclusion and capture using pitfall trapping over a minimum period of 30 nights, extended where necessary, see Figure E.1. Exclusion fencing and pitfall trap design will follow that depicted in Figure 4 of the GCN mitigation guidelines. A weather data logger will be installed on the fencing at the entrance to the site with data downloaded and recorded to demonstrate appropriate trapping conditions. Traps will be installed at a minimum density of 80 per ha. Exclusion fencing will be placed inside the boundary hedgerows around the perimeter of the site, with a line of internal drift fencing bisecting the site. Drift fencing is to be removed upon completion of the trapping period. Perimeter fencing to remain in place until construction period ends in order to exclude GCN from the site. Removal of drift and perimeter fencing will be undertaken in the presence of a suitably licensed worker. GCN captured will be translocated to the receptor area around pond 3. Figure E.2. some 250m to the south of the development site and has a breeding population of GCN within it. Maximum count for adult GCN in 2016 was 6.

Exclusion fencing will be inspected at weekly intervals for damage. Vegetation will be kept to a minimum height of 150mm adjacent to all sides of the exclusion fencing throughout the build up to its removal

E.2 Great Crested Newt habitat

E.2.1 Receptor site modification, enhancement or creation.

A receptor site will be created around pond 3 (Figure E.2). The receptor site area currently consists of good foraging habitat for GCN surrounding pond 3. The area will be enhanced by the planting of hedgerows running east to west and north (Figure E.2). In the receptor area, one hibernacula will be created using material from the rubble piles that currently exist

on site. The hibernacula will be designed as per the design depicted in Figure 3 of the GCN mitigation guidelines. Pond 3 is currently shaded along its northern and eastern banks, some clearance of scrub will take place to allow more light into the pond. The removal of the scrub will take place out side of the bird breeding season or if this is not possible a suitably qualified ecologist will check to ensure no bird nests are within 5m of the clearance zone.

Additional pond improvement works will take place at ponds 1, 6a and 6b. these ponds are heavily shaded from hawthorn and blackthorn scrub. 30% of all scrub will be removed in year 1, with an additional 20% removed in year 2. Trees will be cut to ground level during December and the stumps treated with a herbicide suitable for use by a watercourse.

In addition three hedgerows will be planted linking ponds 3, 4, 1 and 5 with existing hedgerows and the wider area. Consisting of a wide staggered line of trees planted at 6 trees per m. The hedgerows will have stock fence installed on either side of it at a width of 2m. The aim of this hedgerow is to provide a wide permanent linear route between ponds which is currently missing from the site. The approximate area of linking habitat that this will create will be 1,300m². Some gaps within the hedge of no more than 4m will be left to allow farm machinery to pass through. These are shown on Figure E.2

Species to be planted will consist of the following

- 40% hawthorn *Crataegus monogyna*
- 30% hazel *Corylus avellane*
- 15% holly *Ilex aquifolium*
- 5% guelder rose *Viburnum opulus*
- 5% field maple *Acerr campestra*
- 5% blackthorn *Prunus spinose*

Trees will be planted between November and March and be of bare rooted and a minimum of 40-60cm in height. They will be planted within Tubex guards and staked accordingly.

E.2.2 Temporary loss of breeding sites, resting places

No breeding sites will be lost and resting places will be replaced pre-construction by the creation of the receptor area.

E.2.3 Destruction of existing breeding sites, resting places

No destruction of breeding sites will take place. Resting places will be subject to a period of exclusion and pitfall trapping. The internal drift fencing will be removed upon completion of

the trapping period and the perimeter exclusion fencing will remain in place until construction ceases.

E.2.4 Scaled maps/plans

Figure E.1 and E.2

E.3 Mechanisms for ensuring delivery of mitigation and compensation measures

E.3.1 Measures to ensure compliance with this method statement.

An external auditor will be employed to ensure compliance with this method statement. The NRW Compliance Audit Template will be used. Key performance indicators are identified; proper installation and undertaking of the exclusion and trapping process, the creation of a secure receptor area around pond 1 and final audit upon completion of construction and removal of all exclusion fencing.

E.3.2 Ensure that sufficient land has been acquired for compensation purposes

Mitigation Area is more than the land lost to 'built land'. 'Built Land' will account for 280m² and the Mitigation Area will account for 1,300m² Furthermore, the provision of 650m of linking hedgerow will have a greater benefit to GCN populations and other wildlife including bat species than the creation of a single Ecological Mitigation Site.

E.3.3 Ensure that designs of subsequent development are newt friendly

Amphibian friendly aco drain to be installed at driveway/road junction.

E.3.4 Provide sufficient resources

A licensed ecologist will be appointed to work on an on-call basis as required throughout construction. The ecologist or their appointed persons will undertake the capture and exclusion and supervise works as necessary. All observations will be recorded and submitted to NRW in the derogation licence return. This will ensure effective site management and associated wardening and monitoring where relevant.

E.4 Mitigation contingencies

TBC.

E.5 Biosecurity risk assessment

No non-native species are present on site. However, a suitable disinfectant such as FAM30 will be used on footwear before and after each visit to site to prevent the risk of spreading disease.

F Post-development site safeguard

F.1 Habitat/site management and maintenance

The applicant will be responsible for managing and maintaining the receptor area. A 5 year Management Plan will be created to inform the developer/landowner of their responsibilities to the Ecological Mitigation Area and provide concise instructions of what needs to be done, when and how. This will include but may not be limited to like for like replacement of any trees that die within that time and the cutting of grass or perennial weeds around the base of the new trees that may smother them. The fences will also be maintained in good order so that damage from livestock is prevented.

F.2 Population monitoring

Monitoring of Ponds 1, 2, 3, 5, 6a, 6b and 8 will be undertaken in Year 1 post development. Monitoring will take place using Wales GCN Monitoring Scheme and consist of presence/absence surveys.

F.3 Post-development mitigation contingencies

If results are unfavourable, management regimes will be reviewed in consultation with the project ecologist, landowner and NRW as required. If necessary, further compensation will be provided in the form of further management of pond 1.

F.4 Mechanism for ensuring delivery of post-development works

As appropriate.

G Timetable of works – Optimal, but may change due to when planning is secured. Exact timings will be included within any EPS license once planning permission has been given

Activity	Year			
	0 pre-construction 2018	0 during construction 2018/2019	1 post-construction 2020	2 post-construction 2021
Creation of receptor area – area currently fenced. Carry out 30% reduction in canopy cover of Pond 3	Autumn			
Installation of newt exclusion fencing	Autumn			
Capture and translocation	Autumn			
Planting of all hedgerows and installation of fencing	Winter			
Maintenance of hedge plants	Winter	Winter	Winter	Winter
Clearance of scrub. Pond 1, 6a, 6b	Winter		winter	
External audit	Ongoing			
Removal of internal drift fencing	Autumn			
Construction of dwelling		September 18 – April 19		
Removal of perimeter exclusion fencing		April 2019		
External audit		May 2019		
Management of receptor area (mowing)		September 2019	May and September 2020	May and September 2021
Monitoring survey (presence/absence)			May 2020	

H Land Ownership – Mitigation Site/Compensation Site

H.1 Mitigation Site/Compensation Site Ownership

The Site is within the ownership of the applicant.

H.2 Mitigation Site/Compensation Ownership post construction

The site will remain within the ownership of the applicant.

Other Biodiversity:

Birds: Vegetation removal will not take place within the bird nesting season (March to August inclusive, unless the vegetation is first checked by an experienced ecologist. If no nests are found, vegetation can be removed immediately. If nests are found, a suitable buffer zone will be implemented and vegetation will be left in place until young have fledged.

Installation of bird boxes suitable for tit species, flycatchers and wrens within the development to positively enhance the area for nature.

1. Four Schwegler bird boxes with a range of entrance hole diameters/openings.

Reason: to avoid impacts on nesting birds, under the Wildlife and Countryside Act 1981 (as amended).

Bats: A European Protected species licence is not required with regards to bats as the small roost identified on site is not to be modified or lost. However, the following precautionary methods should be installed to minimise any disturbance to the roost.

Installation of a 6m x 2m fence, consisting of 3 mesh site fence panels covered in a fine debris/dust barrier material. The fence is to be located 2m to the East of the roost and is to be in place 4 weeks prior to any works taking place and remain until all works have been completed. Any alteration to its location will be approved by a suitably experienced ecologist.

Any clearance or creation of the access track should be carried between October and March when bats are hibernating and should not be in the roost in building B1 as it is unsuitable for hibernating bats.

Installation of a variety of permanent bat boxes within the new house and on mature trees within the site boundary.

1. Two integral bat boxes such as Schweglar 'bat tube' or Ibstock enclosed bat box C
2. Two Schwegler Bat Box 1FD
3. Two Schwegler Bat Box 1FF

Reason: to protect bats and their habitats as per the Wildlife and Countryside Act 1981 (as amended) and the Habitats Regulations 2010 (as amended) and in the long-term, maintain the conservation status of the species concerned.

Trees: Trees are to be protected as per the Tree Condition Report Arboricultural Impact Assessment, Arboricultural Method Statement and Tree Protection Plan created by Forester and Arborist Services Ltd produced 02.12.2016 and updated 17.03.2018. The British Standard BS 5837 Trees in relation to design, demolition and construction - Recommendations was reviewed and updated in April 2012 and is the benchmark document for how to successfully take account of and retain suitable trees in proximity to development. Trees must be recognised as an integral part of the design and site planning process. Trees make a significant contribution to the wider environment and are important to the ecological and amenity value of an area. Suitable protection of trees and their root system that are to be retained on a development site is essential to the future health of a tree.

The part of the tree most susceptible to damage is the root system because it cannot be seen and there is limited understanding of the root function and its importance to the health of the tree by developers and builders. Roots have 3 main functions: - Absorption of water, oxygen and nutrients; storage of tree 'food' in the form of starch and structural support. All roots are therefore deemed extremely important.

Reason: to protect tree roots and canopy to secure the long-term future of trees.

J References

Great Crested Newt Mitigation Guidelines, English Nature 2001.

K Annexes

K.1 Ecological Appraisal, Wildbanks Conservation, June 2016 (as amended September 2016)

K.2 Raw survey data; see Ecological Appraisal

Figure E.1

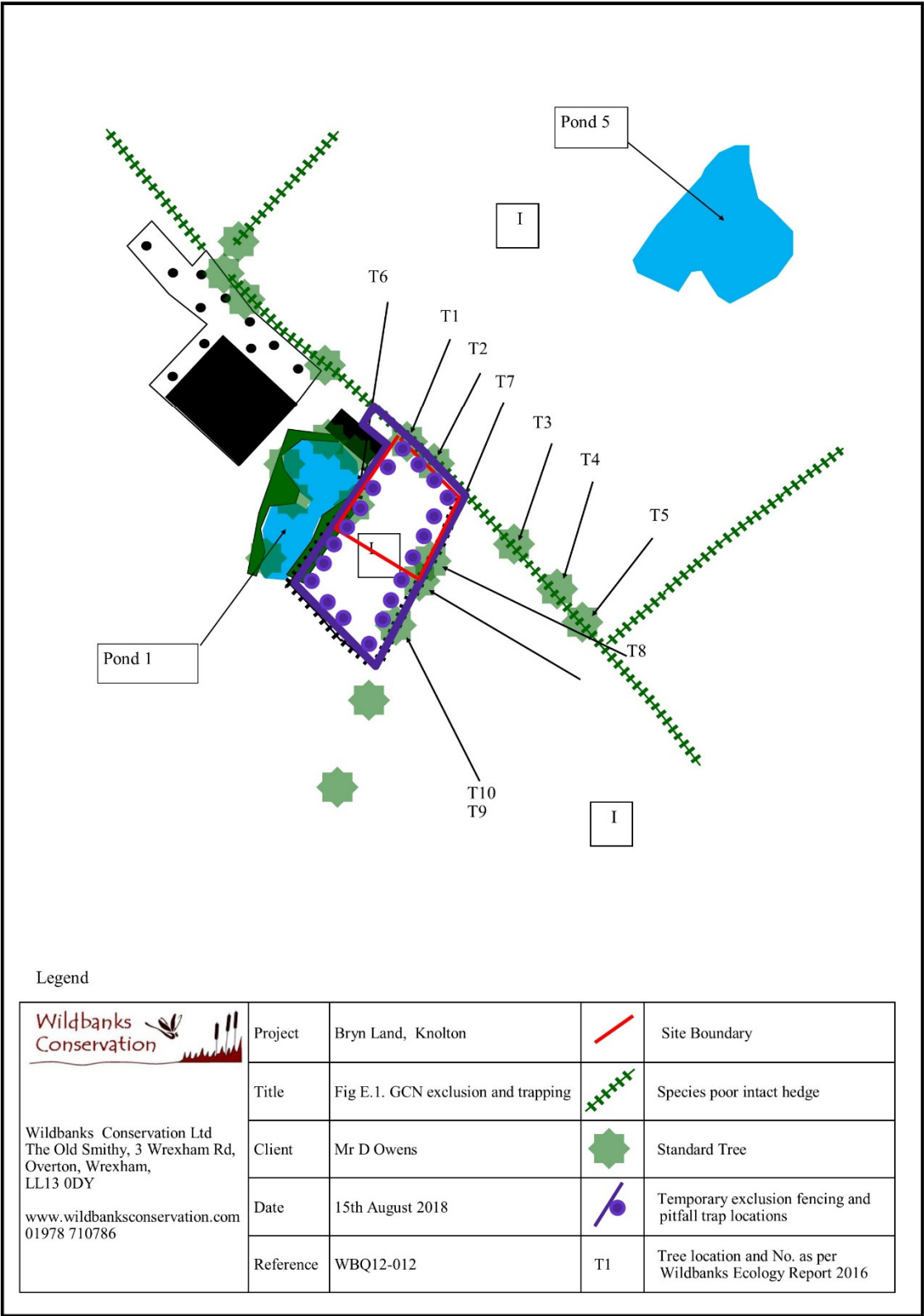


Figure E.2

