



Template Method Statement to be used within a Great Crested Newt Development Licence Application

This template Method Statement is to be used to form part of your Licence Application for a European Protected Species Development Licence. It will be used to determine the impact of the application on the favourable conservation status of the species concerned (Regulation 53(9) (b) of the Conservation of Habitats and Species Regulations 2010). It must be prepared by a consultant ecologist or other suitably qualified person. You are strongly advised to refer to the **Great Crested Newt Mitigation Guidelines**¹. Please submit your Application and supporting Method Statement electronically to the contact details provided below.

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Method Statement Title:	Cross Lanes Hotel
Method Statement Version Number:	1
Method Statement Issue Date:	01/01/2017
Site Address:	The Cross Lanes Country Hotel, Bangor Rd, Marchwiel, Wrexham LL13 0TF

¹ Great Crested Newt Mitigation Guidelines (NEWT1) available from Natural England website

Background and Supporting Information

A Executive Summary.

It is understood that Cross Lanes Hotel, Wrexham will be renovated. Developments within the hotel grounds are to include the creation of a lake, demolition of some outbuildings and installation of a zip wire and giant swing.

Great crested newts (GCN) were found to be present in three ponds near the site. Further survey work indicated that a 'small' population of GCN was present with a peak count across all ponds surveyed of 7. At a few sites where complete censuses are available to compare with survey data, they indicate that surveys may reveal around 2% to 30% of the population (English Nature, 2001). Working with this rationale, a peak count of 7 GCN may mean a true population size of between 23 and 350 adults.

The development area will be fenced to allow newts to be captured and removed to an unaffected part of the site.

Development will then occur on the cleared area with GCN being allowed to retake access to the working area upon completion of construction work.

Ongoing monitoring of the GCN population on site will be undertaken along with improvement works to retained habitats, including ponds.

There will be a net gain in habitat quality as a result of the proposal.

B Introduction

B.1 Background to activity/development

The proposal is to retain the former hotel as accommodation, dining and living space and for use for indoor activities and general meeting rooms. There will be minor internal changes to the buildings to accommodate new activities.

The centre will operate with 13 groups with around 11 children in each. They will be accommodated in the existing hotel and new extension.

Externally, several changes are proposed, some of which will require planning consent.

These are briefly as follows:

- A building for high indoor activities; Climbing, Trapeze (Leap of Faith) and Crate Challenge
- A building for Archery and Caving.
- A building for a changing and a shower room block for children taking part in raft building.
- A Zip wire.
- A Giant swing.
- A High ropes course.
- A lake for canoeing and raft building

In addition, there are other external activities which involve little construction or development and are not considered to require planning consent:

- Night Line - a trail on which children wearing blind folds follow a rope around a course.
- Quest - a generally outdoor themed problem solving area.

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

Planning consent has yet to be granted for the scheme and as such the extent and timing of works are unknown. Broadly however construction works are proposed as at B1.

All ground works will need to be undertaken under licence. It is anticipated site works will commence in the Spring 2017 with a construction period of approximately 12 months. Ground works are likely to comprise the first phases of work with construction of buildings following.

Ongoing monitoring of the site during its operational phase will be covered under the licence.

B.3 Actions requiring licensing

Initial phases of work will be the installation of amphibian fences and pitfall and refuge traps to allow site clearance. GCN will be captured and moved to a receptor site within the boundary of site ownership. This will minimise the killing or injury of GCN.

Two ponds on the site, none of which have been recently recorded for GCN breeding will be improved through de-silting and the removal of some bankside vegetation.

Terrestrial works will be undertaken which may destroy existing resting places, in the areas of the site cleared of GCN, it is however envisaged that post development the site will be improved for GCN which will be able to fully retake access to the site.

Ground works will be completed and fencing removed to allow GCN back into the former working area at the end of the construction and beginning of the sites operational phase.

C Survey and site assessment

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

There are numerous records of Great Crested newt within 2km of the development site. All of the records are to the North of the B5130.

Pond 1 (To the North-east of the site ownership boundary), has records of a maximum count of 6 GCN in 2000.

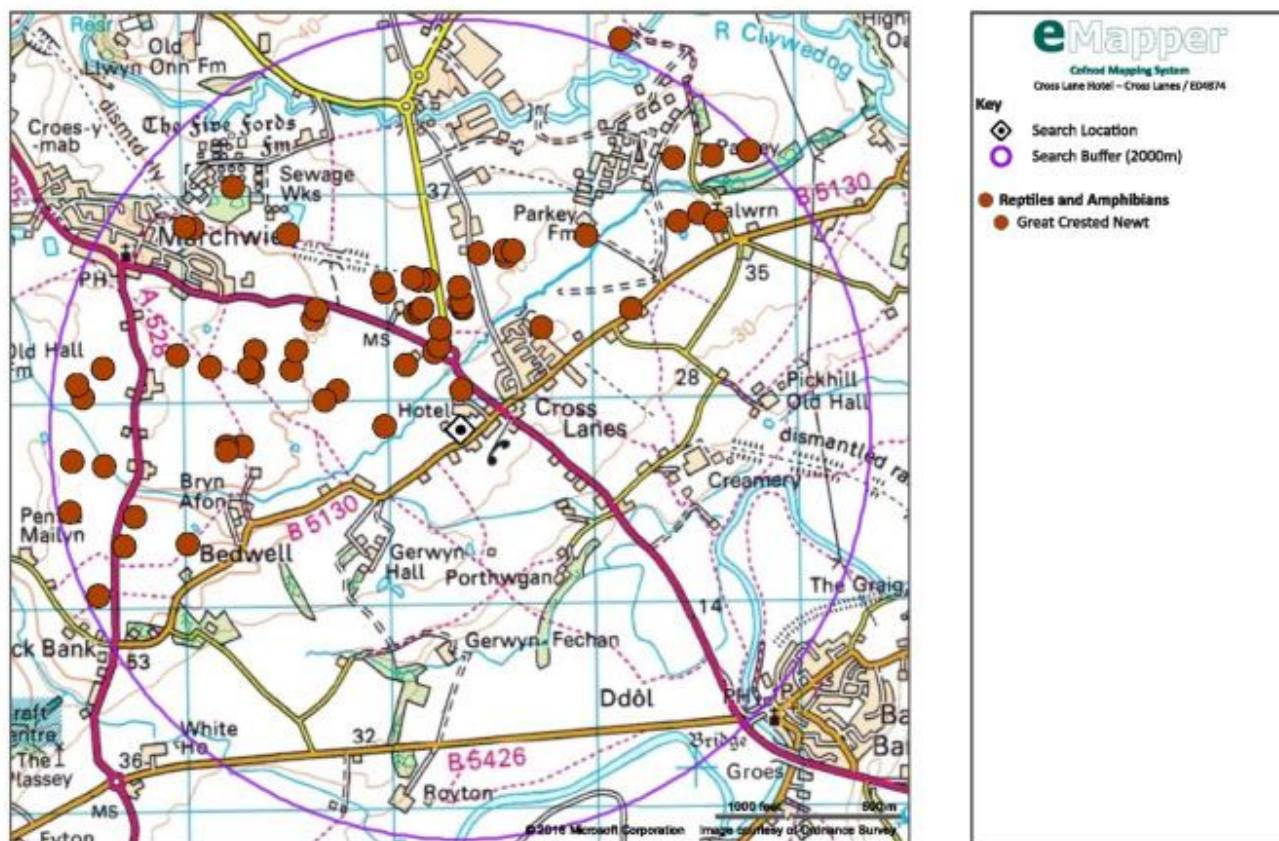


Figure 1- GCN records

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

The Johnstown Newt Site (SAC) is 6200m to the West of the development site.

C.3 Objectives of the survey

- Ascertain the number of ponds within a 500m radius of the development boundary, which do not have significant barriers to newt dispersal.
- Undertake a Habitat Suitability Index (HSI) assessment on such ponds. The HSI assessment predicts the likelihood of GCN being present.
- Further to the HSI assessment, presence/ absence surveys for GCN will be undertaken.
- Where GCN are present, assess the population class size in accordance with Natural England guidelines.

C.4 Scaled plan/map of survey area

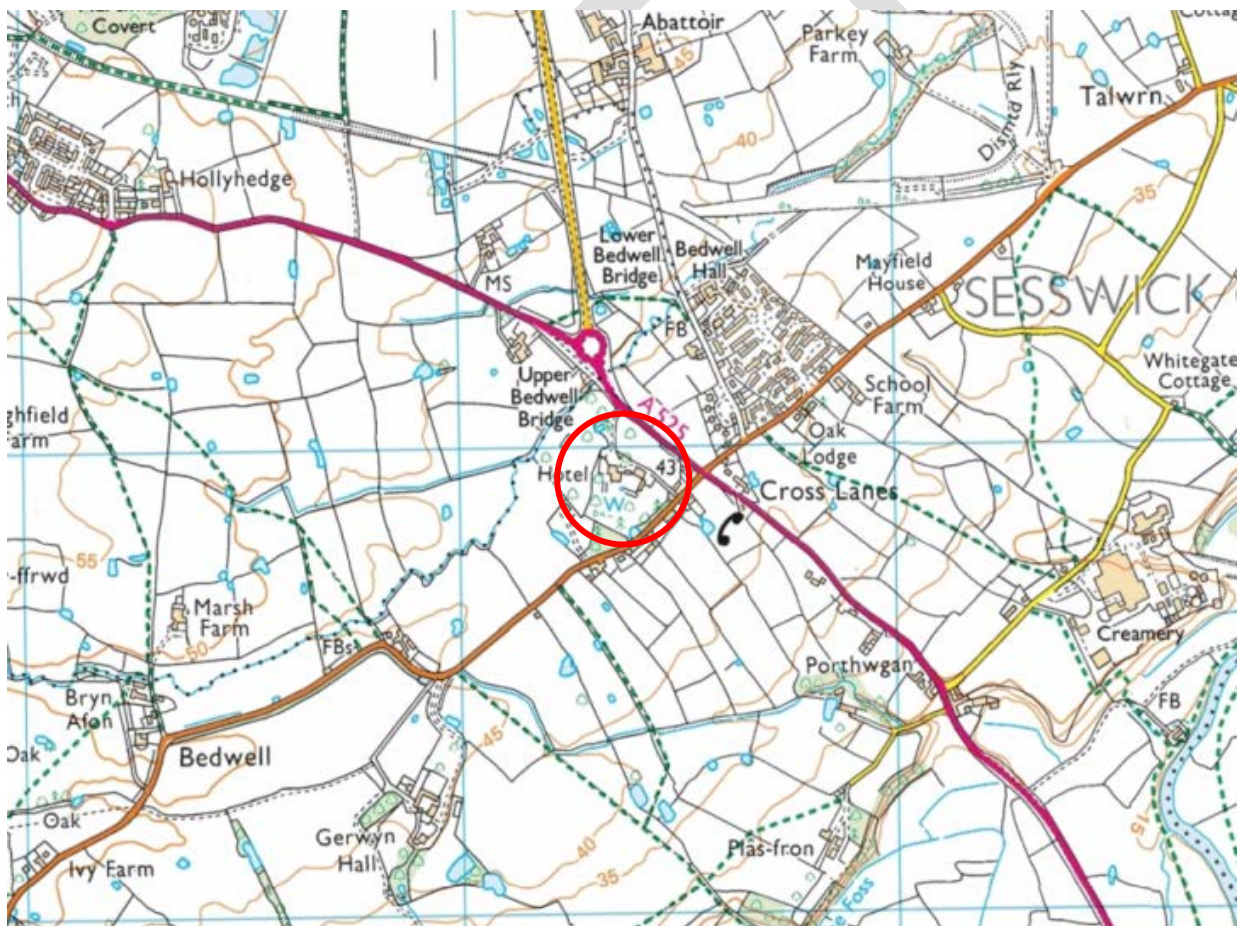
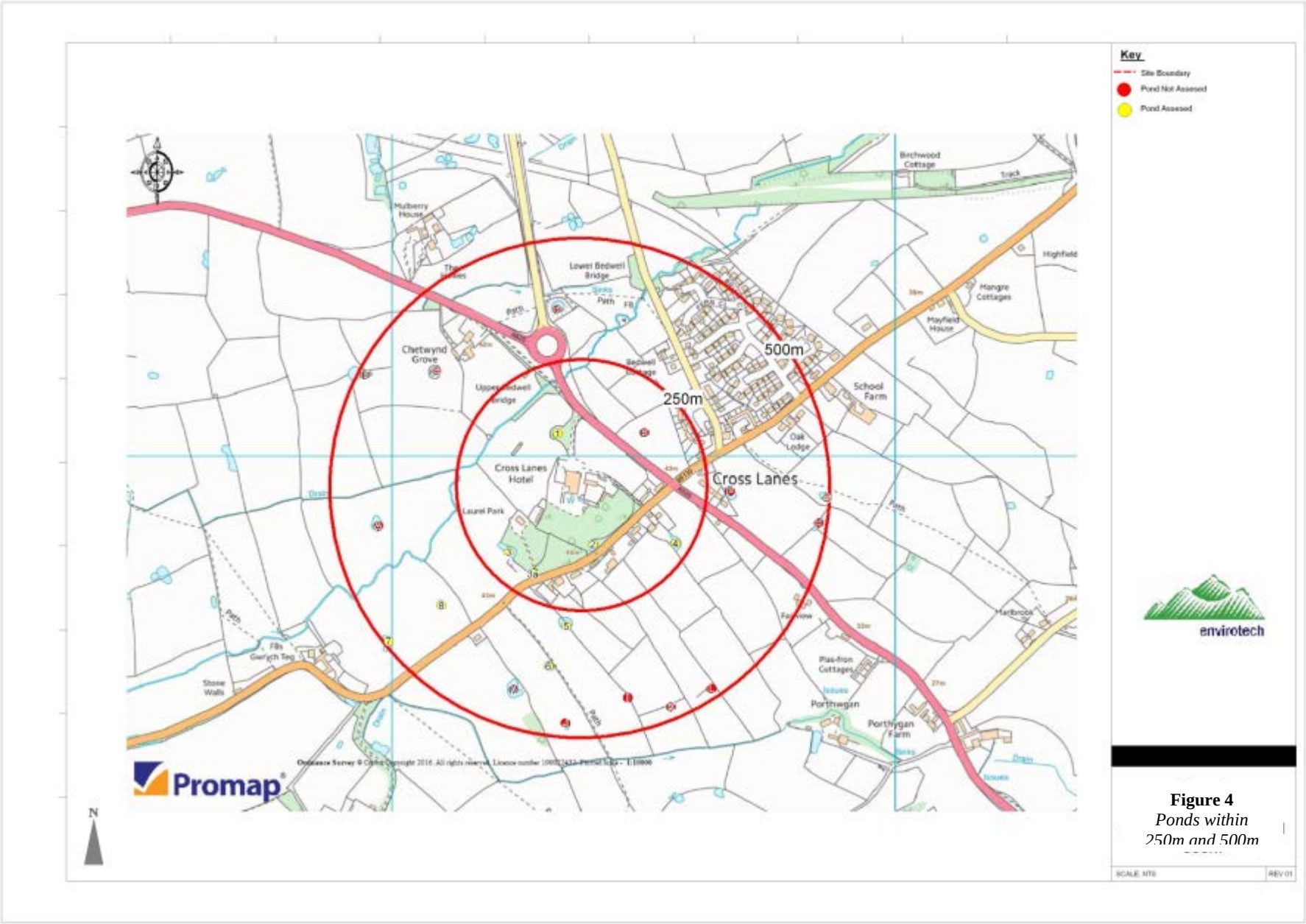


Figure 2 Ordnance Survey map of site location (circled in red)





C.5 Site/habitat description

Nine ponds were found within 500m the development site and not isolated from it by running water or major roads (Figure 3 and 4).

Pond 1 is within the North of the site boundary and is encompassed by a small parcel of woodland. The hotel grounds including access track and amenity grassland extend to the South and East, Poor semi-improved grassland extends to the West. The pond was found to have good water quality but was lacking any substantial macrophytic vegetation or suitable vegetation for egg laying.

Pond 2 is also within the site boundary to the South and in proximity to woodland on site. Kiln Lane runs to the South of this pond. Covered entirely with duck weed the pond was extremely shallow and water was turbid.

Pond 3 is c.71m to the South west of the site, within a garden and bound to the West by a dense hedgerow. Similarly to Pond 2, Pond 3 was entirely covered by duck weed and <20cm in depth. Pond 3a was found adjacent to pond 3 and has been recently created and does not appear on OS mapping, with near vertical sides and entirely covered by duck weed.

Pond 4 is c. 90m to the East of the nearest point of the site boundary. Bound to its South west by an intact hedgerow, tall grassland extends to its East. This pond is entirely covered by duck weed and also has a good cover of macrophytic vegetation.

Pond 5 is c.150m to the South of the nearest point of the site boundary. A hedgerow runs through the centre of this pond and there is a good covering of macrophytic vegetation suitable for newts to egg lay.

Pond 6 is c.238m to the South of the site on the boundary of a semi-improved grassland field. It is isolated from the site by the B5130 Kiln Lane but this was not judged to be a significant barrier to the dispersal of newts. There is limited macrophytic vegetation in the pond.

Pond 7 is c.383m to the South west of the nearest point on the site boundary. The largest of the surveyed ponds, it is in the centre of a pasture field and is poached by cattle. The centre of the pond is vegetated by reed mace and Canada geese are known to nest on it.

Pond 8 is c. 262m to the South west of the nearest point of the site boundary. Entirely encompassed by pasture field and vegetated with a matt of marshy vegetation there is very little open water within Pond 8.

Several ponds were located within 500m of the site which were excluded from assessment (Figure 4).

Pond A, B, C and D are on the opposite site of a stream/ brook to the development area. Strong flow of water was noted in it.

Pond E, F G and H are on the opposite side of the A525 which is a busy road with vertical kerb stones to its edge.

Pond I, J are not apparent on the ground.

Pond K and L were considered too remote from the development area and access to them was not sought. They do not appear on Google earth imagery and may not occur on the ground.

Pond M was considered too remote from the development area and access to it was not sought.

Given the number of ponds which were assessed in proximity to the site, it is considered reasonable that the population size class assessment for the site (small) is robust.

C.6 Field survey(s).

In order to demonstrate presence or likely absence of GCN, a minimum of three techniques including egg searching, bottle trapping, torch survey and netting must be used on each of four pond survey visits. These visits should be undertaken between mid-March until mid-June. Two of these visits must be undertaken between mid-April and mid-May.

Where GCN are found to be present, an additional two survey visits are required to estimate the population size class, meaning six survey visits in total. Three of these visits must be undertaken between mid-April and mid-May (peak breeding activity) to enable a robust population size class estimate. Natural England has a simple system for categorising GCN population size classes from survey data where the largest count by any single method is taken as follows: 1-10 'small'; 11-100 'medium'; and 100+ 'large'.

Population size class assessment surveys must be undertaken by torch surveys or bottle trapping or both.

Bottle trapping is potentially dangerous to GCN and adequate care must be taken in the setting up, taking down and deployment of these traps.

C.7 Survey Results.

Full survey results with environmental variable, survey dates and times are appended. A table summarising peak GCN counts in each pond is shown Table 1.

Pond	Peak Count GCN
1	2
2	0
3 and 3a	0
4	0
5	7
6	0
7	4
8	0

Table 1- *Survey results for GCN*

Habitat Suitability Scores for each pond are shown on Table 2.

Access to all of these ponds was possible and HSI scores were calculated in relation to their suitability for use by great crested newts (Table 2).

Pond ref	Pond 1	Pond 2	Pond 3	Pond 3a	Pond 4	Pond 5	Pond 6	Pond 7	Pond 8
SI1 - Location	1	1	1	1	1	1	1	1	1
SI2 - Pond area	0.7	0.4	0.8	0.2	0.4	0.4	1	1	0.2
SI3 - Pond drying	1	0.1	0.5	0.9	1	0.9	0.5	0.01	0.5
SI4 - Water quality	0.67	0.33	0.33	0.67	0.67	0.67	0.33	0.33	0.67
SI4 - Shade	0.2	0.5	0.2	1	1	1	0.2	0.8	1
SI6 - Fowl	0.67	0.67	0.67	1	0.67	1	0.67	0.67	1
SI7 - Fish	1	1	1	1	1	1	1	1	1
SI8 - Ponds	1	1	1	1	1	1	1	1	1
SI9 - Terrestrial habitat	0.67	0.67	0.33	0.33	0.67	0.33	0.01	0.01	0.01
SI10 – Macrophyte cover	0.35	0.5	0.35	0.4	0.7	0.7	0.55	1	0.8
HSI	0.66	0.52	0.54	0.66	0.78	0.75	0.41	0.33	0.47

Table 2 – Categorisation of HSI scores

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

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

GCN presence was established on the first visit to Pond 5 through identification of one male and one female adult great crested newts whilst torch surveying. GCN eggs were later identified in Pond 5. Adult great crested newts were also identified in subsequent visits via torching and or bottle trapping in Pond 1 and Pond 7.

Pond 2 and Pond 3 could not be surveyed further than to calculate their HSI values and egg search. This was due to a complete covering of duck weed making torching unsuitable, low water levels making bottle trapping and netting unsafe and unsuitable. Egg searching did not result in any great crested newt eggs being identified.

GCN were not recorded in Ponds 3a, 4, 6 or 8. Egg laying was recorded in Pond 8 although this was not identified as great crested newt.

Smooth newts were recorded in Ponds 1, 7 and 8. Palmate newts were recorded in Pond 1 and common frog (*Rana temporaria*) were recorded in Pond 8.

A maximum count of 7 adult GCN was recorded on the 5th May 2016 in Pond 5.

This comprised of 4 male and 3 females respectively. Therefore the population size class can be determined to be 'small'.

D Impact assessment – potential impact of proposed works in absence of mitigation/compensation. See Great Crested Newt Mitigation Guidelines (section 6.2)

D.1 Short-term impacts: disturbance

There is likely to be a disturbance to GCN during the construction phase from ground works at any time of year. During the active season for GCN they may become trapped or killed by ground works above ground. This may be from traffic and materials movement, vegetation clearance and falling into open trenches and holes. During the inactive season, hibernation sites may be disturbed, particularly in the wooded areas of the site. There will be no site works at night and as such the disturbance to breeding ponds is unlikely to occur. Impacts on GCN are likely to be the killing or injury of small numbers of individuals. Habitat fragmentation during construction is unlikely to be high with the linear boundary features remaining open and unaffected by the proposal.

D.2 Long-term impacts: site modification

It is unlikely there would be long term impacts from site modification as a result of the proposal. Site works should bring about a net gain in habitat value, even in the absence of specific mitigation.

Ponds on the site will be unaffected by the proposed works and are outside the construction area. Hydrological functionality of the ponds will be unaffected. The existing ponds will not be used for activities at the centre.

There is the potential for the importation of non-native species to the site via equipment use although equipment is usually retained on site as a result of the need for adequate safety controls. The site will be subject to CCTV coverage and due to the presence of children on site, all visitors must be signed in. The potential for the importation of fish to the site is therefore negligible.

D.3 Long-term impacts: site loss

There will be a net gain in habitat value at the site even in the absence of mitigation. There is unlikely therefore to be any site loss.

D.4 Long-term impacts: fragmentation and isolation

There will be no additional barriers to the dispersal of GCN across the site and local area as a result of the proposal.

D.5 Post-development interference impacts

There may be additional pressure on the ponds on site by their unauthorised access or use by centre visitors.

There may be an increase in use of the wooded areas of the site by their unauthorised access or use by centre visitors.

There is the potential for the importation of non-native/ invasive species as a result of equipment movement onto and off the site.

D.6 Predicted scale of impact

Impacts on GCN at the site level are likely to be low to neutral. Extensive habitat improvement works are proposed as part of the existing scheme, none of the ponds on site form part of the proposed development.

The population within 2km is unlikely to be impacted by the proposal as there will be no significant barriers to dispersal created as part of the scheme. Ponds on site are to be retained, unaltered.

The population within 10km is highly unlikely to be impacted by the proposal as there is no functional link between the site and designated SAC for GCN which is over 6km from the development site.

Loss	Gain	Neutral
2457m ² of land will be lost to development comprising amenity grassland and formal landscaped areas. This will become new buildings, hard surfaced paths and activity areas	3722m ² of land will be improved. This will include new marginal planting to a lake, new hedgerow planting, gapping up hedgerows and low mounds with scrub planting. These improvements will occur on amenity grassland and areas of tall ruderal vegetation	1576m ² of new aquatic habitat will be created in the form of a new lake. This will occur on an area of short mown compacted amenity grassland. This work is considered to be neutral in impact.
The proposal will deliver a net improvement on 1265m ² of land		

Table 3- Habitat Losses and Gains

Delivery Information - Mitigation, compensation and monitoring

Description of how the impacts will be addressed in order to ensure no detriment to the maintenance of the population at a favourable conservation status.

E Works to be undertaken

Please identify which works will be undertaken or supervised by a licensed ecologist

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

In the majority of cases, a mitigation licence is required to install TAF, as the fencing acts as a barrier to movements of great crested newts in their terrestrial phase. If the TAF obstructs access to places used for shelter or protection, this would be deemed an offence without an appropriate licence. Fencing is usually used in conjunction with pitfall traps in order to clear a site of GCN. The following trapping effort is expected with respect to the three population classes:

1. Small population – 30 days
2. Medium population – 60 days
3. Large population – 90 days

Exclusion and trapping of newts will be required from the development area. A small population of great crested newts has been recorded on site and in surrounding ponds. A minimum of 30 days trapping must therefore be undertaken. A minimum of three capture free consecutive days must occur at the end of this period before the site can be declared newt free.

Trapping and exclusion exercises may only be undertaken during the active season from February until the end of October. It is unacceptable to capture newts once they have begun to hibernate; typically this occurs as temperatures tend towards zero before the first frosts.

Pitfall traps and carpet tile refuges will be used at minimum 2m centres, wider spacing to be used further from ponds. Fence specification as per CCW guidelines Figure 5a, b and c.

The fence line is to be strimmed with arising's removed at least 48hrs before fence installation. Fence installation will try to avoid rooting areas of trees which may require micro-fence realignment from the areas shown on Figure 6 as well as hand digging.

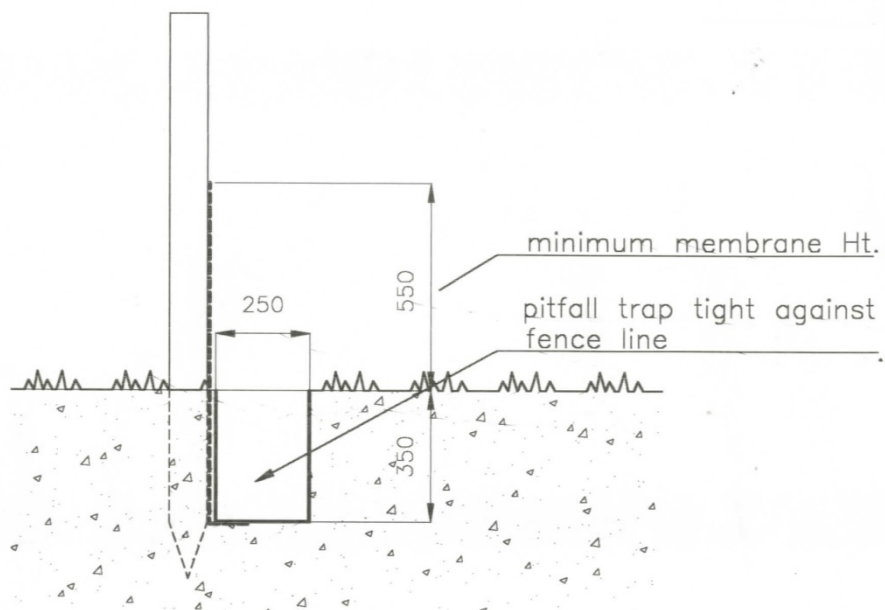
Fence lines will be checked daily during the trapping and construction activity period. Repairs to the fence to be effected within 24hrs.

An ACO grid or heavy rubber mat gate will be installed at the site access to allow free movement of vehicles into and out of the newt free area.

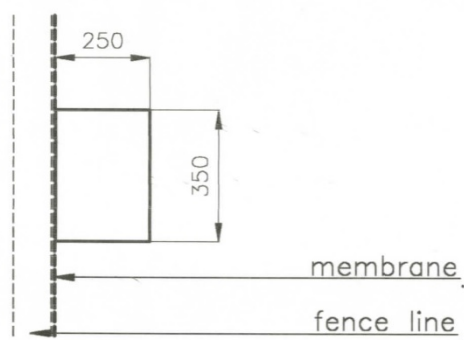
Fence installation to be overseen by ecologist.

GCN capture to be undertaken by ecologist with GCN released at the Southern side of the site within a woodland area. Number and species of amphibians caught to be recorded daily.

fig 11a



section



plan

pitfall trap

Countryside Council for Wales
Cyngor Cefn Gwlad Cymru

Figure 5a Fence design

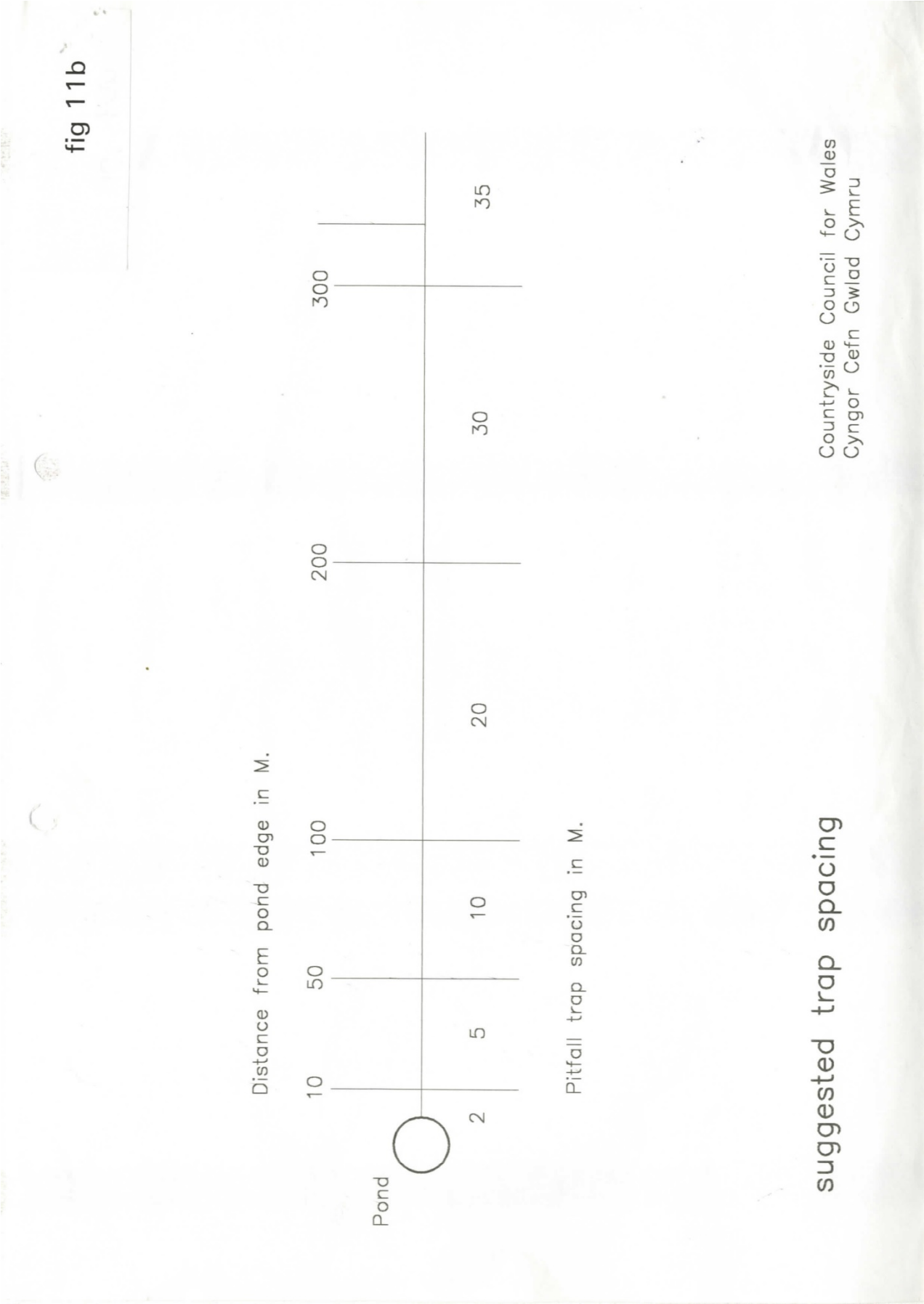


Figure 5b Pitfall trap spacing

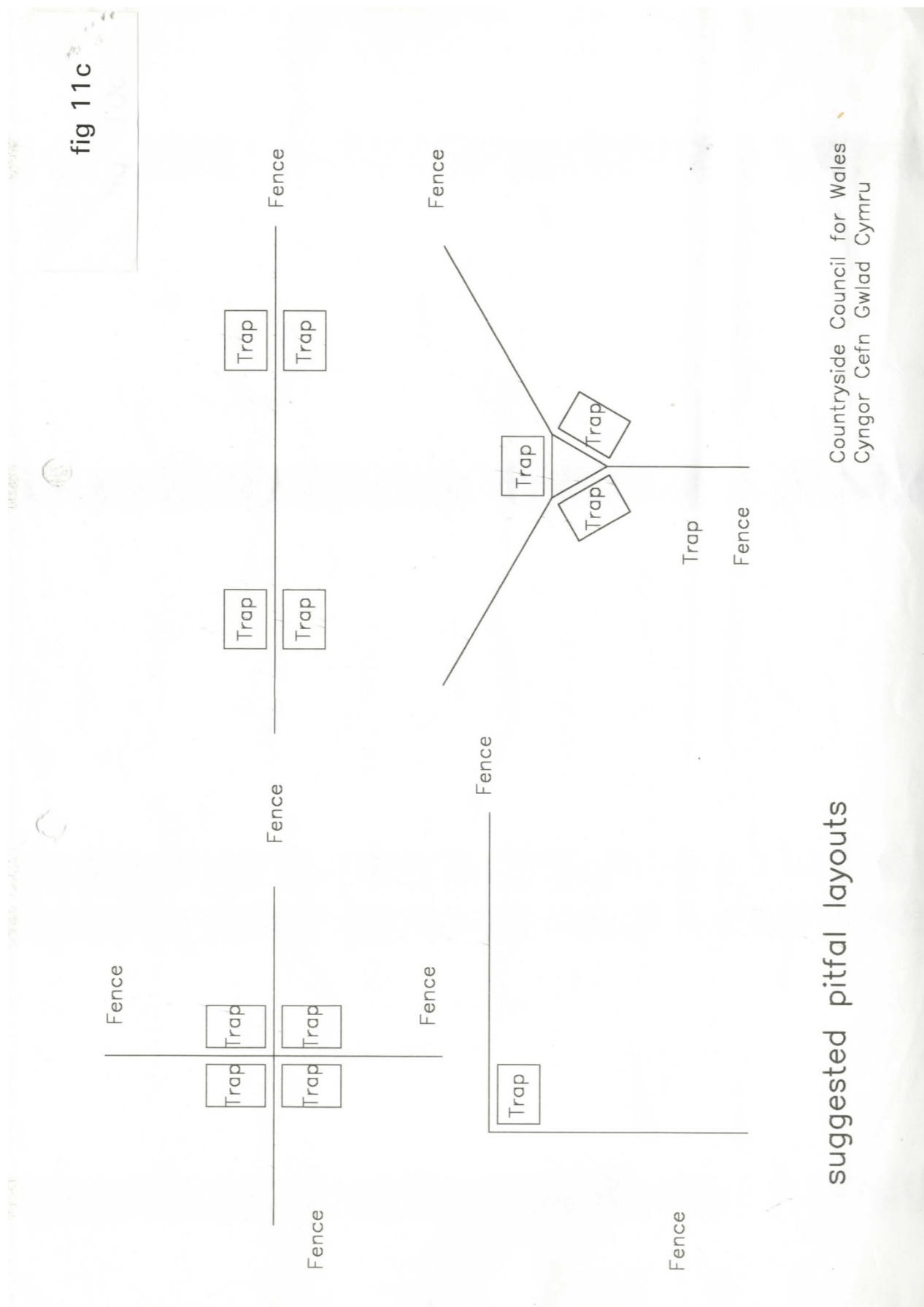


Figure 5c Pitfall trap layout

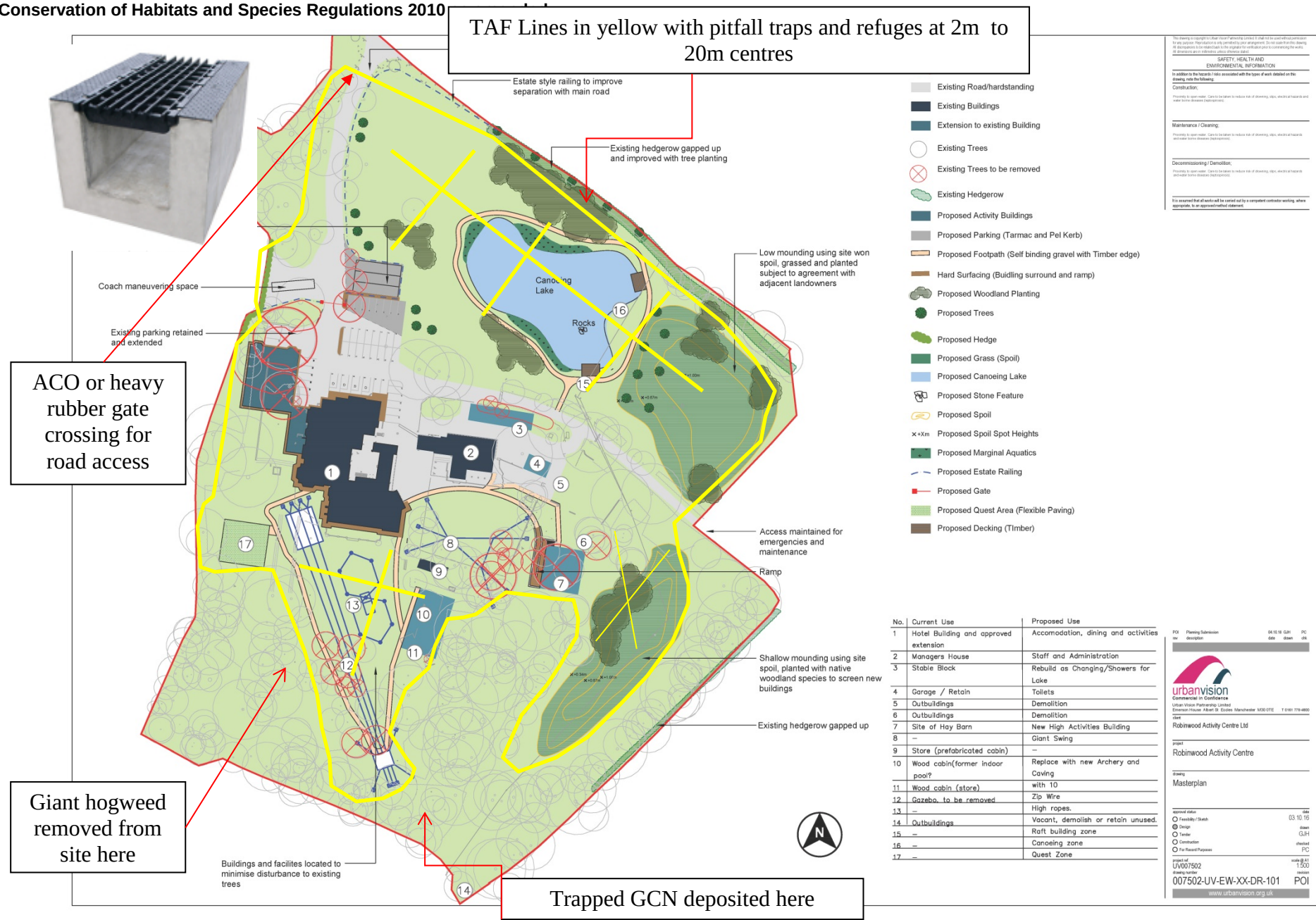


Figure 6 -Proposed TAF

E.2 Great Crested Newt habitat

E.2.1 Receptor site modification, enhancement or creation.

Cut wood from felled trees will be buried within the spoil heaps from lake creation to provide enhanced hibernation sites for amphibians.

Additional tree and scrub planting is proposed around and on the spoil heaps providing root structures which will facilitate ingress and egress by amphibians.

The pond to the south and North-west of the site will be partly de-silted over the winter period to allow for open water to develop. Regressing the pond to an earlier successional stage will be more favoured by amphibians, particularly GCN.

The existing grounds are already frequently disturbed through use of the hotel. Guidance structures such as fences and signs will be used to concentrate activity around built structures rather than the wider site. The ponds will be fenced to prevent access.

Interpretation boards will be provided at the waters edge detailing the habitats and species present.

Site staff will act as wardens. All site staff being briefed on the presence of GCN as well as their protected status and value of the site.

Any aquatic plants being brought into the site for landscaping will be of native provenance and from nurseries known to be free of invasive species.

A dedicated GCN receptor area will be created to the West of the site by fencing of an area of 7800m² with post and rail fencing. Vegetation within this area will not be managed and allowed to grow dense.

E.2.2 Temporary loss of breeding sites, resting places

Site works are to occur within a GCN free area following trapping for minimum 30 days. In the unlikely event GCN are found during works within the fenced area, a licenced ecologist will be asked to attend site and remove the newt/s to the receptor area.

Improvements to two of the ponds on site will be required to enhance the site post development. Both ponds will need to be partly de-silted which will have to occur over the winter period when GCN are dormant and likely to be absent.

An access route to the ponds will be trimmed with arisings removed prior to the dormancy period for GCN. A tracked excavator will approach the ponds, along the previously trimmed area. Silt will be deposited into a dumper which will deposit excavated materials within the newt free area. The excavator and dumper will track into and out of the site on the same route minimising ground disturbance. It is not possible to fence and trap out the ponds to be cleared or fence line to be installed for the GCN mitigation area due to the rooting zones of adjacent trees and the significant damage which will be caused to the root plates.

Fencing for the dedicated mitigation area will be partly in and partly out of the newt free area. Post holes to be installed outside the newt free area will be dug in by hand following a visual search of the ground for GCN by an ecologist within the active season for GCN.

E.2.3 Destruction of existing breeding sites, resting places

The construction site will be trapped free of GCN. Buildings to be removed will be demolished mechanically with a hand search being undertaken at ground level for final removal of materials which are in contact with the ground. This will be over seen by an ecologist.

E.2.4 Scaled maps/plans

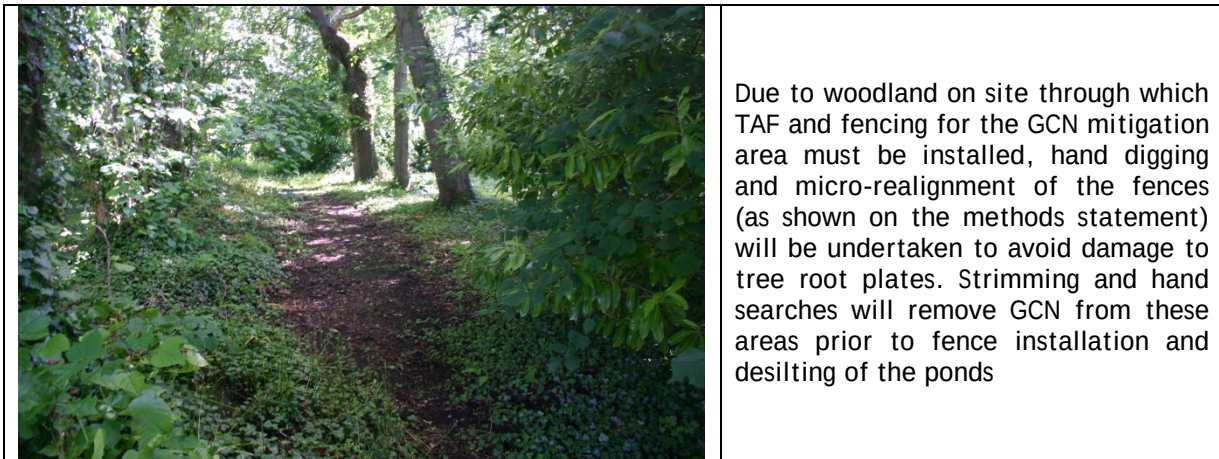


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	Pond 1 at North-west side of site to have saplings removed from waters edge to allow more light into the pond. Partial de-silt also proposed to increase water depth
	Pond 2 is to have sapling removed from its edge and be partially de-silted to increase water depth.
	A new lake is to be created on amenity grassland to the front of the Hotel which currently has a very low value to GCN
	A ropes course and zipline are to be created on amenity grassland to the rear of the hotel which has a very low value to GCN

	The South side of the rear gardens transition from amenity grassland to woodland with tall ruderals present which have moderate value to GCN, this are will be impacted with the creation of new paths.
	Giant hogweed occurs on the site boundary and will be removed as part of site works.
	Tall ruderal vegetation to the South-east will be trapped clear of GCN and receive spoil from lake creation. It will be replanted and logs buried within it to improve its GCN hibernation potential



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

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

- All works will be undertaken under a NRW licence and with planning consent.
- A compliance Audit will be undertaken at least 3 times per year during the construction period by an appropriately qualified third party.
- A log of actions will be kept.
- A toolbox talk for all site staff will be delivered as part of their site induction.
- A copy of the licence will be available on site.
- Details of the compliance audit process, including timings of compliance visits, responsibilities, safeguards and measures of compliance will be available on site.

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

No offsite compensation is required.

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

Gully pots are not present on site and will not be installed.

Additional car parking areas are to use permeable surfaces to preserve hydrology of adjacent existing ponds.

E.3.4 Provide sufficient resources

The site will be operated by the applicant. Sufficient resources are available to implement the scheme.

E.4 Mitigation contingencies

In the event that GCN are found within the construction area and an ecologist can not attend such that there is an imminent risk of killing or injuring GCN, they/it may be removed by site personal to the receptor area. Details of handling procedures will be made available to site staff and will be included in a toolbox talk. The ecologist for the project must be informed immediately.

E.5 Biosecurity risk assessment

Cross Lanes Biosecurity Risk Assessment

The Conservation of Habitats and Species Regulations 2010 as amended

This document tabulates those species that have been identified as having the potential to be imported or transported during the construction phase of the project. The likely pathways and Operational mitigation have also been identified.

This document will be appended to the contractors Construction Method Statement for use on site.

Species	Potential contamination route	Likelihood of risk	Operational Procedure
Himalayan balsam	Spread of species via construction machinery/ movement of soil. Introduction of seeds via contaminated soil.	Low. Himalayan Balsam is not known to be present on site. Low. There are no requirements to import soil.	Ensure contractors know what Himalayan Balsam looks like. If any plants are identified these should be pulled up and left to dry before the seeds set (July/ August).
Japanese knotweed	Spread of species via construction machinery/ movement of soil. Introduction of seeds via contaminated soil.	Low. Japanese knotweed is not known to be present on site. Low. There are no requirements to import soil.	Ensure contractors know what Japanese knotweed looks like. If it is identified on site, refer to the Environment Agency's Japanese knotweed Code of Practice.
Giant hogweed	Spread of species via construction machinery/ movement of soil. Introduction of seeds via contaminated soil.	High. Known to occur on site boundary	Ensure contractors know what Giant Hogweed looks like. If it is identified on site during works, refer to the Environment Agency's Giant Hogweed Code of Practice. Hogweed to be identified, removed/ sprayed.
Kitrid Virus	Via plant and materials which has been in or near a contaminated site	Low. Contractors not likely to have worked in wetland areas prior to attending site	Ensure contractors know that all plant and machinery coming to site should be Checked, Dried and Cleaned.

The Conservation of Habitats and Species Regulations 2010 as amended

This document tabulates those species that have been identified as having the potential to be imported or transported during the operational phase of the project. The likely pathways and Operational mitigation have also been identified.

Activity/Task: Pond maintenance/ Monitoring at Cross Lanes

1. Assessment of presence	Are invasive species recorded at ponds subject to survey ?	Yes / No	Invasive Species have to date not been identified on site
2. If present , which species?	Species	Presence	Degree of Risk
	Fern, Water Azolla filiculoides	No?	High Risk
	Parrot's-feather Myriophyllum aquaticum	No?	High Risk
	Pennywort, Floating Hydrocotyle ranunculoides	No?	Medium Risk
	Stonecrop, Australian swamp Crassula helmsii	No?	Very High Risk
	Water hyacinth Eichornia crassipes	No?	Medium
	Water Primrose Ludwigia peplodes uruguayensis grandiflora)	No?	Medium

The Conservation of Habitats and Species Regulations 2010 as amended

	Waterweed, Canadian Elodea canadensis	No?	Medium
	Waterweed, Curly Lagarosiphon major	No?	Medium
	Waterweed, Nuttall's Elodea nuttallii	No?	Medium
	Waterweeds(other Elodea) Elodea spp	No?	Medium
	Least duckweed Lemna minuscule	No?	High
	Fish	No?	High
3. Surveys : Numbers of ponds and geographical extent	Total No of Ponds to be Surveyed Per annum	1 – 10	Low
		11-20	Medium
		21+	High
	Geographical Extent of all Surveys carried out per annum	0-1 Km2	Low
		1-10 Km2	Medium
		11+ Km2	High

Action:

- X Avoid entering ponds whenever possible.
- X Consider using survey techniques that constitute a lower bio-security risk (eg torching).
- X Use bottle traps on a site-specific basis.

The Conservation of Habitats and Species Regulations 2010 as amended

- X Consider using nets and other equipment on a site-specific basis where non-native species have been recorded.
- X Clean equipment, boots/waders and clothes after each survey. Where surveys entail surveys of two or more ponds, consider provision of duplicate equipment including boots/waders.
- X Check dry clean all equipment coming into or leaving site
- X Do not allow fish to be released into ponds on the site. If fish identified on site report to Ecological consultants for the site, consider removal.

Completed by:

Andrew Gardner

Date:

1 January 2017

Proposed Review Date: 1 January 2019

F Post-development site safeguard

F.1 Habitat/site management and maintenance

The site will remain in the ownership of the applicant in its operational phase. As such works such as the removal of fish, litter and debris from ponds, bio-security controls can be implemented as required.

Fencing to the ponds and dedicated mitigation area will be monitored at least monthly.

Each pond will be “labelled” with a stake and number so as to ensure each can be identified and cross referenced to the monitoring plan.

F.2 Population monitoring

Site staff will be trained in GCN survey techniques with a view to obtaining a NRW survey licence for GCN. Training to be provided by Ecological consultant and external training body. Surveys to be undertaken bi-annually for period of 25 years in ponds within site ownership. Records of amphibians to be uploaded/ sent to ARG/ COFNOD annually.

F.3 Post-development mitigation contingencies

The site will remain in the ownership of the applicant in its operational phase. As such works such as the removal of fish, litter and debris from ponds, bio-security controls can be implemented as required.

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

The site will remain in the ownership of the applicant in its operational phase. As such works will be undertaken by them in accordance with the issued NRW licence for development works.

G Timetable of works

Indicative timetable

Feb-April 2017- Fence installation and trapping of GCN

April- December 2017- Site works including ground and buildings

December 2017- to February 2018- Pond works.

March 2018- Site opening

April-June (Annually) monitoring of ponds

H Land Ownership – Mitigation Site/Compensation Site

H.1 Mitigation Site/Compensation Site Ownership

All land is within ownership of the applicant.

H.2 Mitigation Site/Compensation Ownership post construction

All land is within ownership of the applicant.

I References

Credits for source information.

J Annexes

J.2 Raw survey data.

The Conservation of Habitats and Species Regulations 2010 as amended

Pond reference (e.g. "Pond 1") - enter in box below:				Method:	Torch			Bottle-trap			Net			Egg search	Larvae
Pond 1					Torch power:			No. of traps used in pond:						eggs found?	larvae found? (any method)
No. of survey visits to this pond:		6			1,000,000			10							
Sex/life stage:				Male	Female	Imm.	Male	Female	Imm.	Male	Female	Imm.			
(1) Date:	Air temp	Veg cover	Turbidity												
21/04/2016	8	2	3	Adult totals:	0			0			0			no	
(2) Date:	Air temp	Veg cover	Turbidity												
29/04/2016	6	2	2	Adult totals:	0			0			0			no	
(3) Date:	Air temp	Veg cover	Turbidity												
05/05/2016	12	1	1	Adult totals:	0			0			0			no	
(4) Date:	Air temp	Veg cover	Turbidity					0	2						
19/05/2016	15	2	1	Adult totals:	0			2			0			no	
(5) Date:	Air temp	Veg cover	Turbidity		1	0									
26/05/2016	11	2	1	Adult totals:	0			0			0			no	
(6) Date:	Air temp	Veg cover	Turbidity					1	0						
09/06/2016	15	2	1	Adult totals:	0			1			0			no	
				Adult totals:											
Peak adult count for this pond in any one visit (by torch, trap or net):							2								

Table 4 – GCN records Pond 1

The Conservation of Habitats and Species Regulations 2010 as amended

The Conservation of Habitats and Species Regulations 2010 as amended															
Pond reference (e.g. "Pond 1") - enter in box below:				Method:	Torch			Bottle-trap			Net			Egg search	Larvae
Pond 3a					Torch power:			No. of traps used in pond:						eggs found?	larvae found? (any method)
No. of survey visits to this pond:		6			1,000,000			8							
Sex/life stage:				Male	Female	Imm.	Male	Female	Imm.	Male	Female	Imm.			
(1) Date:	Air temp	Veg cover	Turbidity												
21/04/2016	8	4	0	Adult totals:	0			0			0			no	
(2) Date:	Air temp	Veg cover	Turbidity												
29/04/2016	6	4	0	Adult totals:	0			0			0			No	
(3) Date:	Air temp	Veg cover	Turbidity												
05/05/2016	12	4	0	Adult totals:	0			0			0			No	
(4) Date:	Air temp	Veg cover	Turbidity												
19/05/2016	15	4	0	Adult totals:	0			0			0			No	
(5) Date:	Air temp	Veg cover	Turbidity												
26/05/2016	11	4	0	Adult totals:	0			0			0			No	
(6) Date:	Air temp	Veg cover	Turbidity												
09/06/2016	15	4	0	Adult totals:	0			0			0			No	
Peak adult count for this pond in any one visit (by torch, trap or net):							0								

Table 5 – GCN records Pond 3a

The Conservation of Habitats and Species Regulations 2010 as amended

Peak adult count for this pond in any one visit (by torch, trap or net):				Method:	Torch			Bottle-trap			Net			Egg search	Larvae
Pond 4					Torch power:			No. of traps used in pond:						eggs found?	larvae found? (any method)
No. of survey visits to this pond:		6			1,000,000			6							
Sex/life stage:					Male	Female	Imm.	Male	Female	Imm.	Male	Female	Imm.		
(1) Date:	Air temp	Veg cover	Turbidity												
21/04/2016	8	4	1	Adult totals:	0			0			0			No	
(2) Date:		Veg cover	Turbidity												
29/04/2016	6	4	1	Adult totals:	0			0			0			No	
(3) Date:	Air temp	Veg cover	Turbidity												
05/05/2016	12	4	1	Adult totals:	0			0			0			No	
(4) Date:	Air temp	Veg cover	Turbidity												
19/05/2016	15	4	0	Adult totals:	0			0			0			No	
(5) Date:	Air temp	Veg cover	Turbidity												
26/05/2016	11	4	0	Adult totals:	0			0			0			No	
(6) Date:	Air temp	Veg cover	Turbidity												
09/06/2016	15	4	1	Adult totals:	0			0			0			No	
Peak adult count for this pond in any one visit (by torch, trap or net):								0							

Table 6 – GCN records Pond 4

The Conservation of Habitats and Species Regulations 2010 as amended

Pond reference (e.g. "Pond 1") - enter in box below:				Method:	Torch			Bottle-trap			Net			Egg search	Larvae
Pond 5					Torch power:			No. of traps used in pond:						eggs found?	larvae found? (any method)
No. of survey visits to this pond:		6			1,000,000			10							
Sex/life stage:					Male	Female	Imm.	Male	Female	Imm.	Male	Female	Imm.		
(1) Date:	Air temp	Veg cover	Turbidity		1	1								no	
21/04/2016	8	3	1	Adult totals:	2			0			0				
(2) Date:		Veg cover	Turbidity											no	
29/04/2016	6	3	1	Adult totals:	0			0			0				
(3) Date:	Air temp	Veg cover	Turbidity		4	1		4	3					no	
05/05/2016	12	3	1	Adult totals:	5			7			0				
(4) Date:	Air temp	Veg cover	Turbidity					0	2					no	
19/05/2016	15	3	1	Adult totals:	0			2			0				
(5) Date:	Air temp	Veg cover	Turbidity		0	1		0	3					yes	
26/05/2016	11	3	1	Adult totals:	1			3			0				
(6) Date:	Air temp	Veg cover	Turbidity					0	1					yes	
09/06/2016	15	3	1	Adult totals:	0			1			0				
Peak adult count for this pond in any one visit (by torch, trap or net):								7							

Table 7– GCN records Pond 5

The Conservation of Habitats and Species Regulations 2010 as amended

Pond reference (e.g. "Pond 1") - enter in box below:				Method:	Torch			Bottle-trap			Net			Egg search	Larvae
Pond 6					Torch power:			No. of traps used in pond:						eggs found?	larvae found? (any method)
No. of survey visits to this pond:		6			1,000,000			10							
Sex/life stage:					Male	Female	Imm.	Male	Female	Imm.	Male	Female	Imm.		
(1) Date:	Air temp	Veg cover	Turbidity												
21/04/2016	8	3	2	Adult totals:	0			0			0				
(2) Date:		Veg cover	Turbidity												
29/04/2016	6	3	2	Adult totals:	0			0			0				
(3) Date:	Air temp	Veg cover	Turbidity												
05/05/2016	12	3	3	Adult totals:	0			0			0				
(4) Date:	Air temp	Veg cover	Turbidity												
19/05/2016	15	2	3	Adult totals:	0			0			0				
(5) Date:	Air temp	Veg cover	Turbidity												
26/05/2016	11	2	2	Adult totals:	0			0			0				
(6) Date:	Air temp	Veg cover	Turbidity												
09/06/2016	15	2	2	Adult totals:	0			0			0				
Peak adult count for this pond in any one visit (by torch, trap or net):								0							

Table 8– GCN records Pond 6

The Conservation of Habitats and Species Regulations 2010 as amended

Pond reference (e.g. "Pond 1") - enter in box below:				Method:	Torch			Bottle-trap			Net			Egg search	Larvae
Pond 7					Torch power:			No. of traps used in pond:						eggs found?	larvae found? (any method)
No. of survey visits to this pond:		6			1,000,000			9							
Sex/life stage:					Male	Female	Imm.	Male	Female	Imm.	Male	Female	Imm.		
(1) Date:	Air temp	Veg cover	Turbidity												
21/04/2016	8	3	4	Adult totals:	0			0			0				
(2) Date:		Veg cover	Turbidity												
29/04/2016	6	3	4	Adult totals:	0			0			0				
(3) Date:	Air temp	Veg cover	Turbidity		4	0		0	3						
05/05/2016	12	4	3	Adult totals:	4			3			0				
(4) Date:	Air temp	Veg cover	Turbidity												
19/05/2016	15			Adult totals:	0			0			0				
(5) Date:	Air temp	Veg cover	Turbidity					1							
26/05/2016	11			Adult totals:	0			1			0				
(6) Date:	Air temp	Veg cover	Turbidity												
09/06/2016	15			Adult totals:	0			0			0				
Peak adult count for this pond in any one visit (by torch, trap or net):								4							

Table 9– GCN records Pond 7

The Conservation of Habitats and Species Regulations 2010 as amended

The Conservation of Habitats and Species Regulations 2016 as amended

Pond reference (e.g. "Pond 1") - enter in box below:				Method:	Torch			Bottle-trap			Net			Egg search	Larvae
Pond 8					Torch power:			No. of traps used in pond:						eggs found?	larvae found? (any method)
No. of survey visits to this pond:		6			1,000,000			5							
Sex/life stage:					Male	Female	Imm.	Male	Female	Imm.	Male	Female	Imm.		
(1) Date:	Air temp	Veg cover	Turbidity												
21/04/2016	8	3	1	Adult totals:	0			0			0				
(2) Date:		Veg cover	Turbidity												
29/04/2016	6	4	1	Adult totals:	0			0			0				
(3) Date:	Air temp	Veg cover	Turbidity												
05/05/2016	12	4	1	Adult totals:	0			0			0			no	no
(4) Date:	Air temp	Veg cover	Turbidity												
19/05/2016	15	4	1	Adult totals:	0			0			0			no	
(5) Date:	Air temp	Veg cover	Turbidity												
26/05/2016	11	4	1	Adult totals:	0			0			0			no	no
(6) Date:	Air temp	Veg cover	Turbidity												
09/06/2016	15	4	1	Adult totals:	0			0			0			no	
Peak adult count for this pond in any one visit (by torch, trap or net):								0							

Table 10– GCN records Pond 8