2134

TACP

The development of Plot C4, Wrexham Industrial Estate, Wrexham

Application for a European Protected Species Licence

Method Statement – Wrexham Industrial Estate – Plot C4

Welsh Government

THE DEVELOPMENT OF PLOT C4, WREXHAM INDUSTRIAL ESTATE, WREXHAM

APPLICATION FOR A GREAT CRESTED NEWT EUROPEAN PROTECTED SPECIES LICENCE

METHOD STATEMENT - WREXHAM INDUSTRIAL ESTATE – PLOT C4

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Great Crested Newt - Licence Method Statement Wrexham Industrial Estate Plot C4

A Executive Summary

Summary of site location and context.

This Licence Application Method Statement details the proposed works to be undertaken at an area of land (Plot C4) within the Wrexham Industrial Estate. These works will enable the construction of the proposed new industrial unit and implementation of habitat mitigation and enhancement works to create suitable Great Crested Newt (GCN) habitat to maintain existing GCN populations in the area. This work will involve the creation of a new industrial unit and associated parking, pedestrian access on land at Abenbury Way, as part of the development. The mitigation works will also involve pond creation, hibernacula/refugia pile creation, erection of amphibian fencing, scrub planting and the creation of a Great Crested Newt underpass.

This Licence Application Method Statement is for the works which include site preparation, trapping, translocation, construction, mitigation, management and monitoring. Works are scheduled to be undertaken between July 2014 and March 2016.

The potential impacts of the works/proposed development upon GCN are predicted to be:

These impacts have been separated into effects on the development area and effects on the mitigation area.

Development area impacts:

- Loss of suitable GCN terrestrial habitat
- Disturbance of GCN within the terrestrial habitat throughout the site
- Severance/fragmentation of links to existing GCN habitat/ponds
- Injury/mortality of GCN within development area

Mitigation area impacts:

- Damage/disturbance to remaining GCN habitats
- Disturbance of GCN within the terrestrial habitat throughout the site
- Disturbance of GCN in adjacent habitats
- Injury/mortality of GCN within mitigation area

The potential for the development to cause severance of a low importance weak link to a cluster of ponds to the east has been confirmed. This impact has been addressed within the GCN Modelling undertaken by the Amphibian and Reptile Conservation Trust. The loss of this link only reduces the overall landscape value by 0.01%. (Amphibian and Reptile Conservation Trust, Site C4 Abenbury Way, February 2014).

The mitigation which will be undertaken in order to minimise these impacts include:

- Creation of ponds to provide suitable aquatic habitat for GCN
- Creation of terrestrial habitat (native species scrub vegetation, brash, log piles, hibernacula) to increase opportunities for foraging, refuge and hibernation.
- Exclusion and translocation of development area

- Exclusion and RAMs of mitigation area
- Supervision of works by a licensed ecologist

B Introduction

TACP have been commissioned to prepare an application for a licence to disturb GCN as part of the Great Crested Newt translocation works for the proposed new industrial unit identified as Plot C4 within the Wrexham Industrial Estate (as detailed below).

This document provides information on potential impacts that may occur on the GCN population within the proposed development site and the surrounding area. Within this method statement, the potential impacts will be assessed and mitigation measures provided to ensure there is no adverse impact upon the species/population and to minimise the risk to Great Crested Newts.

The majority of the Great Crested Newt (GCN) mitigation work will be undertaken prior to the construction phase of the scheme, which will include vegetation clearance and translocation using exclusion fencing, pitfall traps and artificial refugia as shown on the GCN Exclusion Fencing Layout and Access Plan -2134/002. The mitigation and enhancement works will involve pond creation to the north of the construction site as well as hibernacula and refugia creation utilising material from the site vegetation clearance.

The Phase 1 habitat survey carried out by J W Ecological Ltd in 2013, identified a number of habitats within the site that have the potential to support protected species including Great Crested Newts. These suitable habitats include semi-improved grassland, scrub and woodland. One pond is located approx. twenty metres from the north-western boundary of the site with foraging and refuge areas adjacent to the pond and the site boundary. (JW Ecological, 2013)

Survey work including GCN population modelling undertaken by the Amphibian and Reptile Conservation Trust, identified an area of densely clustered ponds to the east of the proposed development site. No ponds will be lost as part of the proposed development of the C4 plot, and therefore no major impacts are expected.

The mitigation and enhancement works specified within this document will be undertaken prior to the trapping and translocation of GCN, and prior to the construction works.

B1 <u>Background</u>

The site is located on the north-western side of Abenbury Way, to the north-west of the existing Wrexham Industrial Estate area, in between Abenbury Way and Erlas Lane, as shown in the Ecological Mitigation Plan – 2134/001 Rev D.

The development plot comprises of a variety of habitats including semi-improved grassland, broad-leaved semi-natural woodland along the northern and southern site boundaries, dense/continuous scrub extending across the southern area of the site, and a watercourse located within the woodland to the south of the site.

Previous ground investigation works have been carried out in 2014 in order to identify the location of services along the eastern edge of the development plot. This work was carried out under Reasonable Avoidance Measures (RAMs) following hand searches of the site, and under the supervision of a suitably licenced and experienced ecologist as agreed with Matthew Ellis of Natural Resources Wales (NRW). No amphibians or GCN were found during the hand search of the site.

B2 Proposed Works on site to be covered by the Licence

Planning :

The proposed works are in reference to Planning Reference: ABE P/2014/0195 – Land at Abenbury Way, Wrexham Industrial Estate, Wrexham, LL13 9UZ. Outline Application for Industrial Unit and associated vehicular and pedestrian access

This GCN licence application relates to site preparation, trapping, translocation, construction and mitigation work, in relation to the development of Plot C4. Details are also given relating to the future management and monitoring requirements however these will not be covered by this licence. The proposed works to be included within this licence are as follows:

- Installation of amphibian exclusion fencing around the development area/one-way fencing surrounding the mitigation area
- Creation of four new ponds as suitable aquatic habitat
- Creation of suitable terrestrial habitat features including hibernacula and refugia (see Section E2.1 for further detail and Ecological Mitigation Plan 2134/001 Rev D)
- Trapping and translocation of GCN
- Vegetation clearance
- Earthworks
- Installation of a GCN underpass
- Maintenance of amphibian exclusion fencing around the development area/one-way fencing surrounding the mitigation area

The licence would cover all site works and areas including the mitigation areas to the northern end of the plot. A full trapping exercise will be undertaken within the exclusion area shown in Annex 1: GCN Exclusion Fencing Layout and Access Plan -2134/002 with alternating pitfall traps and artificial refugia (carpet tiles) located at 5m intervals along the boundary fence and drift fencing compartments over a minimum of 30 trapping visits during suitable weather conditions. Trapping will be completed by 10am each day or earlier depending on weather conditions. Any GCN or other amphibians caught during this exercise will be translocated to similar habitat within the mitigation area as shown on Annex 2: Ecological Mitigation Plan, 2134/001 Rev D. Trapping will continue until 5 consecutive clear visits have been achieved and agreement obtained from NRW that the trapping effort is sufficient. Following this, destructive searches will be undertaken by hand within the exclusion area before construction begins. Exclusion fencing will remain in place to prevent amphibians returning to the area prior to and during construction.

Once all of the separate compartment areas within the exclusion fencing are cleared, this will enable works, including vegetation clearance, to proceed within a newt-free area, and to progress under the supervision of a suitably qualified licenced ecologist.

The area proposed for creation of new aquatic habitat will require one-way fencing to be installed for a minimum period of two weeks prior to the start of habitat creation works to allow amphibians to leave the area before excavation works begin. The area will be hand searched prior to works, which will be carried out under the supervision of a suitable licenced and experienced ecologist.

C Site Assessment Information

C1 Existing information on GCN at the Site

GCN surveys have been undertaken previously in 2009, in relation to a separate scheme in the vicinity of the Wrexham Industrial Estate, located to the north east and east of the proposed site. These surveys identified the presence of a small population of GCN, with several ponds showing presence of GCN, with a peak count of 7, occurring over a period of six survey visits.

Surveys have identified Great Crested Newt presence within a pond 20m north-west of the site boundary.

These surveys provide information on the local GCN population and therefore that related to the site as a similar population number may be expected on the site, due to the similarity in terrestrial habitat and the small distance between the site boundary and an identified GCN pond.

C2 Statutory sites notified for the species within 10km

GCN are widespread throughout the local area, due to the availability of suitable terrestrial habitat.

Within 10km of the site boundary, there are ten sites identified as Sites of Special Scientific Interest (SSSI) and two sites as Special Areas of Conservation (SAC). Two sites (1 SAC and 1 SSSI) are designated for GCN.

The SAC sites are:

- Johnstown Newt Sites
- River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid

The SSSI sites are listed below:

- Stryt Las and Hafod
- Marford Quarry
- Vicarage Moss
- Sontley Marsh
- Gatewen Marsh
- Llay Bog
- Chwarel Singret
- Old Pulford brook meadows
- Cloy Brook pastures
- Afon Dyfrdwy (River Dee)

The designated sites for GCN and distance from the proposed works are detailed below:

- Johnstown Newt Sites SAC – 7km
- Stryt Las and Hafod SSSI- 7km

C2.1 LEGISLATION AND ECOLOGY

Legislation

The Great Crested Newt is protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of The Conservation of Habitats and Species Regulations 2010 (as amended). Therefore the GCN is considered as a European Protected species and subject to high level protection.

The legislation makes it an offence to:

- Intentionally kill, injure, take or sell GCN
- Damage, destroy, obstruct access to any structure or place used for shelter or protection
- Intentionally disturb them while occupying a structure or place of shelter

GCN are also subject to Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Schedule 9 makes it an offence to:

- Intentionally kill, injure or take a GCN
- Possess or control any live or dead specimen or anything derived for a GCN
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a GCN
- Intentionally or recklessly disturb a GCN while it is occupying a structure or place

GCN are also a UK Biodiversity Action Plan (BAP) Priority Species and are listed as a Species of Principal Importance for Conservation of Biological Diversity in Wales under Section 42 of Natural Environment and Rural Communities (NERC) Act 2006.

This legislation has great importance upon construction and mitigation work to ensure that there are no adverse impacts towards GCN that could result in a breach of the legislation.

D Impact Assessment in Absence of Mitigation

The proposed development works could results in a number of potential impacts on Great Crested newts in the absence of mitigation. These impacts have been separated into short term and long term effects.

D1 Short-term Impacts

Potential short term pre-development impacts include:

- Injury/mortality of individual animals due to construction works
- disturbance to individuals and populations within the construction area
- disturbance to individuals and populations adjacent to the construction area
- temporary loss of terrestrial habitats due to construction works
- temporary isolation of terrestrial habitats due to construction works

As part of the development (construction phase), there may also be an increase in activity/noise levels and artificial light levels.

D2 Disturbance

Short Term Impacts:

Breeding Habitat

No ponds will be directly disturbed during the proposed works. The closest confirmed GCN pond is approximately 20m from the north western boundary, on the opposite side of Erlas Lane from the development. This pond is in poor condition with high turbidity levels and a lack of aquatic vegetation. The works will not impede into this area and best practice during the works will ensure minimal indirect effects, therefore this is considered to have no impact.

Due to the implementation of one way fencing around the mitigation area, links between this pond and possible breeding areas to the south of the development may be temporarily affected by these works. As such this is considered to be a minor impact.

Foraging/Hibernation Habitat:

Core habitats within 50m and intermediate habitats within 50-250m of a confirmed GCN breeding pond may be affected on a short term basis through barrier creation and disturbance associated with pond and refugia/hibernacula creation within the mitigation area. This is considered to be a minor impact.

Vegetation clearance of both the construction and mitigation areas have the potential to directly and indirectly impact GCN within terrestrial habitats including potential injury and mortality of GCN and is therefore considered to be a major impact.

Long Term Impacts:

Breeding Habitat

No ponds will be lost as part of the proposed works. As stated above the closest confirmed GCN pond is c20m from the north western boundary and is in poor condition. Although the proposed development will not result in the severance of a population, it could create a barrier to dispersal to existing populations to the west and suitable habitat features to the south resulting in a minor impact on GCN populations.

Foraging/Hibernation Habitat

The proposed site contains core and intermediate terrestrial habitat associated with a confirmed GCN breeding pond, which will be lost as part of the development resulting in a minor to moderate impact.

D3 Long term Impacts – Site modification

In the absence of mitigation it is considered that the proposed development could have a minor to medium level impact due to habitat modification within and adjacent to the proposed development plot. These impacts would result from the increased level of human activity and management and the associated increases in noise and light spill reducing the extent to which GCN would utilise remaining habitats on site and in the immediate area.

D4 Long term Impacts – Site Loss

No aquatic habitats are to be lost as a result of the proposed works however due to the loss of terrestrial habitat, it is considered that a low level of impact would be anticipated on GCN

populations within 50m of the proposed site. There would be a minor level of impact upon populations within 50-250m from the site, with no impacts predicted beyond this distance.

The Great Crested Newt Mitigation Guidelines (English Nature, 2001) state that 'Pond loss is often seen as the most damaging impact on great crested newt populations, but the loss of terrestrial habitat can also have serious consequences'. The majority of the suitable foraging and hibernation terrestrial habitat on site will be replaced by built land resulting in the loss of approximately 8820m^2 of habitat including semi-improved grassland, woodland and scrub. It is assessed that there would be a medium level of impact on terrestrial habitat within the immediate range and a minor impact upon the intermediate and distant terrestrial GCN habitat and dispersal corridors/links to other ponds/GCN populations.

D5 Long term Impacts – Fragmentation and Isolation

In the absence of mitigation measures, it is considered that the loss of suitable terrestrial habitat and the severance of dispersal corridors will have a minor level impact upon GCN populations within the wider area. Fragmentation effects will include the loss/severance of a low importance weak link to a cluster of ponds to the east, which crosses through the middle of the C4 plot as identified by the Amphibian and Reptile Conservation Trust (Amphibian and Reptile Conservation Trust, Site C4 Abenbury Way, February 2014).

The confirmed GCN pond located 20m north-west of the site may be impacted by fragmentation due to the new development. This is assessed as a medium level impact.

D6 Post development interference impacts

There is potential for GCN to attempt to re-inhabit the development area and features such as drainage, car parks/vehicular access areas, resulting in trapping of GCN and possible injury and mortality increase. With the absence of mitigation, it is considered there would be a medium impact level of post development interference.

There will also be on-going disturbance effects on the remaining terrestrial habitat areas through increased human activity, lighting and noise resulting from the operation of the development. This will be a particular issue as the development is to be in operation 24 hours increasing the potential for such disturbance to occur.

D7 Predicted Scale of Impact

In the absence of mitigation measures, it is considered that there will be a medium level of impact on the GCN population at site level and a low level of impact to the local population within 50-250 m of the proposed works. It is also considered that due to the isolated nature of the site, there will only be a minor impact within 2km, with no significant impacts identified on a wider county, regional and country level.

E Works to be undertaken or supervised by a licensed ecologist

E1 Great Crested Newt capture and exclusion

GCN exclusion fencing will be erected around the area proposed for development works, to the north of Abenbury Way. The fencing layout plan is shown in Annex 1: GCN Exclusion Fencing Layout and Access Plan -2134/002. Fencing will be erected around the perimeter of the site, with drift fencing erected within this area in order to split the proposed development site in to compartments, therefore improving the capture rates and ensuring

GCN removal from the site. A minimum of 30 trapping visits using pitfall traps and artificial refugia situated every 5m, under suitable weather conditions will then be undertaken. Capture will be continue following completion of these 30 trapping visits until 5 consecutive clear trapping visits have been reached with no GCN found. Following this and with agreement from NRW destructive searches will be undertaken prior to the start of construction.

Upon completion of the capture period, the inner drift fencing will be removed, in order to allow access for works. However the perimeter exclusion fencing will be retained throughout the pre and during construction periods to prevent GCN from returning to the cleared site area and will only be removed with agreement from NRW.

Capture Methods

Pitfall traps and artificial refugia will be installed along the inside of the exclusion and compartment drift fencing. The pitfall traps will be installed at 5m intervals, with artificial refugia placed between these, in order that there is a trap/refugia present every 2.5m. The density of pitfalls traps and artificial refugia will maximise the capture of GCN. The pitfall traps will be installed at ground level with a mammal ladder present within each trap and a flotation device in order to protect newts and any other amphibians/species that may become trapped, should the pitfall trap be flooded due to high rainfall levels.

The exclusion fencing will be inspected on a daily basis and any repairs will be made within 24 hours. A record of the fence inspection and the repair work to fix the damage will be kept by the licence holder or their appointed representative in order to ensure that the newt fencing is being properly maintained.

Pitfall traps will be left open overnight and checked, along with the artificial refugia, the following morning by no later than 10am. Captures during trapping will be recorded, with notes made regarding location (compartment and trap/refugia number) and species, sex and size.

After the traps have been checked during the morning, the lids will be closed during the day and the traps will be re-opened in the afternoon ready for the night time capture.

Any GCN or other animals that may be captured will be moved to the mitigation site, outside of the bounds of the exclusion fencing as shown on Annexes 1 and 2. These will be translocated using suitable containers (with lids and air-holes).

Pitfall traps will be open every night unless there is an indication of poor weather conditions or the overnight temperatures fall below zero degrees. Checks will be completed earlier during period of hot, dry weather.

Once capture of GCN has been completed, daily inspections of the perimeter exclusion fencing will continue and again repairs made within 24 hours, with full records and logs kept.

E2 Great Crested Newt Habitat

E2.1 Receptor site modification, enhancement or creation

The mitigation and enhancement proposals for the development involve the creation of terrestrial and aquatic habitats suitable for GCN including the creation of the following approximate areas:

- 3125m^2 of species rich grassland
- 1618m^2 of scrub planting belts
- 370m^2 of pond area across 4 ponds
- 196m^2 of hibernacula/refugia (soil/clean rubble)

All these features will provide suitable foraging and hibernation habitat within the mitigation area, and in close proximity to potential terrestrial and aquatic habitats to the north of the site boundary.

Aquatic Habitats

Within the proposed mitigation area to the north of the site, four new ponds will be created at an approximate surface area of 100m^2 each. Ponds will have a depth of approximately 1m and have sloping/stepped sides with shallow margins. The sloping sides will provide suitable access/egress for amphibians including GCN.

The creation of the four ponds introduces a new link and opportunity to the existing population within the Wrexham Industrial Estate area, as well as strengthening the link to the ponds to the east of the proposed development (shown in Appendix 3 of the ARC Modelling Report, Feb 2014).

Terrestrial Habitats

The scrub planting will be located along the boundaries of the proposed area of hard standing to allow connectivity and provide wildlife corridors around the site.

Species rich grassland will be created within the mitigation area in order to increase floral diversity, as well as between the two areas of car parking to allow for retention of trees and allow for wildlife areas within the completed site.

Soil mixed with clean rubble will be used to create refugia and hibernacula within the mitigation area to the northern end of the site particularly around the edges of the newly created ponds.

E2.2 Temporary loss of breeding sites, resting places

There will be no temporary losses associated with the construction works either directly or indirectly.

It is considered that due to the nature of the mitigation works, a precautionary approach using one way fencing and destructive searches will be adopted with working procedures which minimise the risk of causing an offence to GCN while negating the need for a full exclusion and translocation exercise to be undertaken. Mitigation and enhancement works would be carried out under Reasonable Avoidance Measures as detailed below. This will

constitute a temporary loss of habitat, but only for the duration of the mitigation works plus the two weeks prior once the fencing has been installed.

One way fencing will be installed for a minimum period of two weeks to allow GCN to leave the area while preventing their return. Prior to commencement of mitigation works, hand searches will be undertaken by licensed ecologists to further ensure that no GCN are present. A licensed ecologist will provide advice to works staff throughout the works, including supervising the creation of the ponds, earth banks (using arisings from the pond excavations) and hibernacula and refugia. Any arisings from these excavations that are not used to create hibernacula and refugia, will be situated in a suitable identified location within the development area (as shown in Annex 1: GCN Exclusion Fencing Layout and Access Plan, 2134/002.) providing these are compacted to ensure they are unsuitable habitat for amphibians and reptiles, and therefore compliant with the legislation. The area proposed for storage of excess soil within the development plot will be searched by licensed ecologists prior to movement of soil to further ensure that no GCN are present and works will be undertaken under relative avoidance measures (RAMS), including licensed ecologists providing sign off for the compaction of stored arisings. This has been agreed with NRW and a licensed ecologist will provide advice to works staff on this issue when necessary.

Vehicular access will be restricted within the mitigation area, in order to reduce the potential impacts on and disturbance to the retained habitats.

E2.3 Destruction of existing breeding, resting places

There will be no destruction of existing breeding habitat, as there is no aquatic habitat present within the development site or mitigation area, although the proposed works are being undertaken within approximately 20m of an identified GCN pond.

The proposed development may impact upon potential resting places, as removal of grassland, woodland and scrub will occur as part of the vegetation clearance works.

There will be no permanent loss of habitats within the mitigation area.

E2.4 Scaled Maps/Plans

The exclusion and one way fencing plans are detailed within Annex 1: GCN Exclusion Fencing Layout and Access Plan, 2134/002.

The proposed development and mitigation measures are shown in Annex 2: Ecological Mitigation Plan, 2134/001 Rev D.

The pond arrangement plan detailing the contours and layout of the ponds and earth mounds are shown in Annex 3: Pond General Arrangement, 2134/ SK003.

The site location plan showing the location of the Abenbury Way site in relation to the wider area is shown in Annex 4: Site Location Plan, 2134/004.

E3 Measures for ensuring delivery of mitigation and compensation areas

E3.1 Measures to ensure compliance with this method statement

All of the mitigation and enhancement works and the construction works will be completed in agreement with and under supervision of suitable qualified and licenced ecologists. A

daily log will be maintained and records kept of the works undertaken, searches made and animals captured and translocated. Photo logs will also be kept where appropriate.

All fencing checks throughout the capture exercise and mitigation works and the construction works will also be recorded within a fencing log. Daily checks will also continue while no works are being undertaken on site between the capture exercise and construction works and recorded within a fencing log. This will include an audit trail for daily checks and a record of all repairs made. These checks will be undertaken by the licencee or their appointed representative.

The exclusion and translocation exercise to be undertaken across the development area will be undertaken by suitable qualified and licenced ecologists and full records kept of all animals captured and translocated.

E3.2 Ensure that sufficient land has been acquired for compensation purposes

An area at the northern end of the site has been set aside for the purpose of mitigation, alongside the area of grassland and retained trees to the southern end of the site, between the car park and the building. In total approximately 1716m^2 of land will be provided for terrestrial and aquatic habitat mitigation.

E3.3 Ensure that designs of development/subsequent development are newt friendly

The following design features have been proposed to ensure that the development will be newt friendly and to ensure protection measures have been considered for amphibians post development:

- Installation of a Great Crested Newt underpass (shown in Annex 2: Ecological Mitigation Plan) allowing newts/amphibians to disperse safely from the western boundary to the grassland on the eastern side, therefore reducing the fragmentation and isolation impacts
- Suitable features surrounding drainage areas to ensure no newts are accidentally captured and to allow safe passage for newts within the development site.
- Use of amphibian friendly drainage design
- Careful design of lighting to minimise light spill into adjacent areas where newts may be present.
- Use of suitable landscape planting to further minimise light and noise disturbance and provide additional cover for GCN

E3.4 Provision of sufficient resources for effective site management

The “Landowner” will provide information regarding funding and resources for site management, wardening and further monitoring measures where applicable.

E4 Mitigation Contingencies

In the event that GCN are disturbed outside of the works area, works will stop and a licenced ecologist and NRW will be consulted on further measures to be undertaken.

E5 Biosecurity Risk Assessment

Information regarding biosecurity has been included within the Risk Assessment Table provided within Annex 7.

All required biosecurity measures will be undertaken in order to ensure that the risk of spreading Invasive Non-native Species (INNS) is minimised and that all staff working on site are aware for the potential for spreading disease which may affect terrestrial and aquatic habitats.

E6 Ecological compliance audit performance indicators

A number of performance indicators are required as part of an assessment of ecological compliance. These are listed below:

- A copy of the GCN licence documents available on site
- A licenced ecologist overseeing site works at the required level
- Site works supervised by ecologists (those listed as accredited agents or assistants only)
- Necessary site management and/or monitoring plans have been produced and implemented correctly
- All avoidance measures are being applied as required
- All necessary licence permits are completed as necessary
- Any changes required to the licence methodology are addressed appropriately including stopping of works and consultation with NRW/WG
- Confirmation that all site staff have been inducted
- Confirmation that all site staff have received the necessary tool box talks
- All exclusion and one way fencing checks and repairs undertaken and recorded within the fencing log
- Habitat creation works implemented correctly

These performance indicators will be used to assess the overall performance of the project while the audit will ensure that the mitigation meets the minimum required standards and legal requirements. Regular checks of the works areas, as part of the ecological audit, will be undertaken as per the agreed frequency (dependent on site activities).

An ecological compliance audit has been drafted included in Annex 8.

F Post Development site safeguard

F1 Habitat/Site management and maintenance

The Welsh Government/respective future owners of the site will be responsible for the ongoing land management, maintenance and wardening including running costs and monitoring. Suitably qualified personnel (facilitated by organisations experienced within this field),will ensure the maintenance of the existing mitigation area over a long term period. If this changes then NRW will be notified as soon as possible.

F2 Population Monitoring

Post development monitoring of the terrestrial and aquatic habitat will be undertaken by suitably qualified and experienced ecologists for a minimum of 21 years post construction. This monitoring will provide important data of local GCN population size.

The following monitoring is proposed, in accordance with the Great Crested Newt Mitigation Guidelines.

- Annual condition assessment of new aquatic and terrestrial habitats to be undertaken in May/June each year with the results used to inform the need for management actions such as pond clearance, mowing regimes and replacement planting
- Population class assessments requiring six survey visits between mid-March and mid-June with at least three between mid-April to mid-May) using a minimum of three different survey techniques. This would be conducted in Years 1, 3, 5, 8, 11, 14, 17 and 21 post construction (unless otherwise agreed with NRW) at which point the management plans should be reviewed.

F3 Post-development mitigation contingencies

Where the monitoring detailed above identifies that any measure is not successful, only partially successful or where impacts are greater than predicted, additional measures will be put in place in consultation with NRW and other relevant bodies and specialists. These measures will also be subject to ecological monitoring and the results used to determine and ensure success (or detail further measures required if necessary).

F4 Mechanism for ensuring delivery of post-development works

Post development management of the mitigation area and habitats surrounding the development site will be undertaken over a long term period of a minimum of 21 years. It is currently anticipated that the management of the mitigation area will be managed by suitably qualified personnel (facilitated by organisations experienced within this field). This will be undertaken in accordance with the management plans to be produced for the site.

G Timetable of works

Activity	Timing	Notes
Commencement of installation of exclusion/one-way fencing	August/September 2014	Following granting of GCN Licence
Commencement of mitigation works on site	September 2014	Following installation of one way fencing and 2 week period to allow amphibian and GCN dispersal. To be completed prior to the hibernation period
Commencement of Trapping/Translocation of GCN	September/October 2014	30 day period under suitable weather conditions
Vegetation clearance of development area	November 2014/2015	

Start of construction works on site	March 2015	
Completion of construction works	March 2016	Fencing to be removed following agreement from NRW

Construction works are programmed for completion in March 2016, which will be followed by a post development 21 year monitoring, management and maintenance period, undertaken by the relevant organisations as stated in Section F.

H Land Ownership – Mitigation Site

H1 Mitigation Site Ownership

The area of habitat for creation and modification are located on land owned by the Welsh Government. The Welsh Government/respective future owners of the site will be responsible for funding all work described in Section F. Mechanisms that will ensure delivery of post-development works and monitoring to ensure maintenance of the GCN population in the long-term have been described in Section F. Within 12 months of issue of the licence, the Welsh Government will identify the long term ownership of the site, and NRW will be notified.

H2 Mitigation Site Ownership post construction

The area of habitat for creation and modification are located on land owned by the Welsh Government. The Welsh Government/respective future owners of the site will be responsible for funding work described in Section F. Mechanisms that will ensure delivery of post-development works and monitoring to ensure maintenance of the GCN population in the long-term have been described in Section F.

H3 Project Liaison post development

Within 12 months of the issue of the licence, the Welsh Government will identify the long term ownership of the site, as well as including the identity of the personnel undertaking the management, maintenance and wardening of the site on a long term basis. The Welsh Government will inform NRW regarding the change of ownership.

Post development monitoring and management of the mitigation area and surrounding habitats will be undertaken on a long term basis. Suitably qualified personnel (facilitated by organisations experienced within this field), will undertake management of the mitigation area once development has been completed for a minimum of 21 years.

Suitably qualified and licenced ecologists will undertake monitoring of the mitigation area in accordance with the Great Crested Newt Mitigation Guidelines. The proposed monitoring measures are detailed in section F.2.

Following the completion of the mitigation site and post development monitoring visits, an annual report will be produced and provided to Natural Resources Wales (NRW) and Wrexham County Borough Council (WCBC). These reports will ensure ongoing communication and ensure that the proposed monitoring was undertaken in accordance with this method statement (See Section F2) and the Great Crested Newt Mitigation Guidelines.

It is proposed that annual reports will be provided to Natural Resources Wales and Wrexham County Borough Council, and quarterly liaison meetings would be conducted in order to ensure ongoing communication. Ecological Compliance Audit information will be provided to Natural Resources Wales and Welsh Government as a component of the reporting. A GIS layer identifying the location of the compensation/mitigation site will be sent to Wrexham County Borough Council, North Wales Environmental Information Service (Cofnod), and the Amphibian and Reptile Conservation Trust (ARC).

I References

Amec Earth and Environmental UK Ltd (2011) *Wrexham Industrial Estate Access Road, Southern Route Road Scheme, Method Statement for mitigation of impacts on Great Crested newts during main works contract*

English Nature (2001) *Great Crested newt mitigation guidelines*

Fletcher D.H., French G.C.A & Wilkinson J.W. (Amphibian and Reptile Conservation Trust) (2014) *Site C4 Abenbury Way, Wrexham – Comparative modelling of impacts on great crested newts to inform planning*

JW Ecological Ltd (2013) *Ecological Assessment – Plot C4 Abenbury Way, Wrexham Industrial Estate*

TACP Ltd (2014) *Wrexham Industrial Estate – Reasonable Avoidance Measures for Great Crested Newt Mitigation Work*

J Annexes

Annex 1: GCN Exclusion Fencing Layout and Access Plan -2134/002

Annex 2: Ecological Mitigation Plan, 2134/001 Rev D.

Annex 3: Pond General Arrangement, 2134/ SK003.

Annex 4: Site Location Plan, 2134/004

Annex 5: JW Ecological Ltd (2013) *Ecological Assessment – Plot C4 Abenbury Way, Wrexham Industrial Estate*

Annex 6: Fletcher D.H., French G.C.A & Wilkinson J.W. (Amphibian and Reptile Conservation Trust) (2014) *Site C4 Abenbury Way, Wrexham – Comparative modelling of impacts on great crested newts to inform planning*

Annex 7: Biosecurity Risk Assessment

Annex 8: Ecological Compliance Audit Form