
Ecological Management and Monitoring Plan

Ash Road Ecological Mitigation Site

for

Ecological Land Management

3rd October 2016

SCALES Consultancy Ltd

Sarah Carver Amphibians Landscape Ecology Services

Balancing Ecology and Development

Client

Ecological Land Management Limited
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Table of Contents

- 1 Introduction**
- 2 Summary of Ecological habitats and Surveys and Evaluation of Impacts -
Mitigation & Enhancement Proposals**
- 3 Ecological Mitigation Site Management**
- 4 Monitoring**

Bibliography

Appendix A Great Crested Newt and Nesting Bird Mitigation Method Statement

Appendix B Wildlife Legislation

Appendix C Biosecurity Risk Assessment

Drawing Refer to Proposed Site Plan 04 Rev B

Figure 1 Receptor Site Management

1.0 INTRODUCTION

1.1 Terms of Reference

This Ecological Management and Monitoring Plan is prepared in accordance with Planning Permission ISY P 2015/0843 dated 26/02/2015 'Erection of industrial unit comprising two storey office and warehouse accommodation and single storey dust extraction building and associated car parking and storage area'.

Condition 7 states that.....

'No part of the development shall commence until a long term Ecological Management and Monitoring Plan in respect of the Habitat Areas shown on approved drawing no 04 Revision B has been submitted to and approved in writing by the Local Planning Authority. The Habitat Areas shall thereafter be retained in perpetuity as an ecological mitigation area and managed and monitored in strict accordance with the Ecological Management and Monitoring Plan as approved'.

1.2 Responsibility for Ecological Management and Monitoring

Funding will be undertaken by the site owner, ESL Group. The ownership of the eastern Mitigation Site land will be transferred to Holding Habitats Ltd, an established ecological management body, and management and monitoring will be the responsibility of Holding Habitats Limited.

The retained land to the west along Ash Road to the front of the development will be transferred by lease arrangement for a period of 25 years to Holding Habitats Limited and subject to renewal after that period.

Within 6 months of occupation of the new building, land transfer and lease arrangements will be finalised.

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Monitoring will be undertaken by SCALES Consultancy Limited for Holding Habitats Limited.

Management of the site is with arrangements for SCALES Consultancy to oversee the management and monitoring to ensure that the management and monitoring outlined in the management plan are enacted accordingly.

Details of monitoring and management in accordance with the management plan will be provided annually in the form of a report. In addition, GCN data will be uploaded to the Cofnod/ARC/WG online recording system.

Should Holding Habitats cease, land will be transferred to an appropriate land management organisation as detailed in their company constitution winding up procedures.

1.3 Site Description and Background

An extended phase 1 habitat survey was conducted by Clwydian Ecology in April 2015. The report made the following assertions and recommendations:

- *Based on the level of current information it would appear that approximately two thirds of the habitat will be lost.*
- *The damp ruts and the general habitat have the potential to support great crested newts and other amphibians. A suitable Reasonable Avoidance Scheme will be required and there may be licensing issues.*
- *The site may support the grizzled skipper butterfly and further survey work may be necessary.*
- *Any removal of any larger oak trees will require individual inspection with an endoscope initially. Activity surveys may be required if the features cannot be inspected to a satisfactory level.*
- *In respect of reptiles a suitable Reasonable Avoidance and Mitigation scheme is likely to be required.*
- *The single large hole near the northern boundary will need further inspection to check for badger activity. To enable this to take place some light scrub removal will be necessary around the immediate area (to be undertaken by hand).*
- *The development of the site should not significantly impact upon birds as long as some of the boundary/scrub features are retained. All nesting birds are protected by the Wildlife and Countryside Act (as amended) and no work should take place (particularly clearance of vegetation/trees) which may affect nesting birds between March and September inclusive.*

1.4 Development Description

The proposed development will comprise the construction and operation of an industrial unit comprising two storey office and warehouse accommodation and single storey dust extraction building and associated car parking and storage area'.

Details of the construction programme, including the proposed dates and sequence of works have not yet been finalised. The current outline construction programme given below is therefore subject to change and the ecological works programme relating to each phase will be adjusted accordingly in agreement with the Waste Planning Authority:

- Ecological Mitigation Pond Construction and enhancement features and Newt trapping - late Summer / Autumn 2016
- Building construction works – January 2017 / December 2017
- Landscaping 2017
- Ecological management and monitoring Spring 2017 onwards

1.5 Associated Reports and Drawings

The reports and drawings outlined below are relevant to this Ecological Mitigation and Monitoring Plan. The documents should be referenced to as provide details on the proposed development and surveys undertaken for the application (*these have all been submitted as part of the planning application to date):

- Proposed Site Plan (D2 Architects drawing 04 Rev B),*
- Clwydian Ecology Ecological Assessment for land off Ash Road South Wrexham Industrial Estate 24 April 2015, *
- Planning Permission Decision Notice 26/02/16

- Clwydian Ecology Butterfly Survey Report 12th October 2015.*
- SCALES Consultancy Ltd EPS Great Crested Newt Licence application NRW
- SCALES Consultancy Ltd Bat and Badger Survey Report August 2016
- SCALES Consultancy Ltd Receptor Site Management 3/10/16

1.6 Scope and purpose of the Ecological and Monitoring Plan

This scheme includes:

- Species specific **mitigation to mitigate** impacts of the development;
- **Precautionary** and outline **ecological mitigation measures** and ecological supervision of installation of site habitat measures (subject to NRW EPS licence);
- **Enhancement**, specifically for birds, amphibians and butterflies;
- Details on how the retained habitats provide for the **benefit** of wildlife;
- **Management and monitoring** of created and existing habitats and enhancement features.

1.7 Biosecurity Measures

The measures and procedures outlined in Appendix C Biosecurity Risk Assessment will be followed.

2 SUMMARY OF ECOLOGICAL HABITATS AND SURVEYS AND EVALUATION OF IMPACTS - MITIGATION AND ENHANCEMENT PROPOSALS

2.1 Habitats

The Clwydian Ecology Ecological Assessment for land off Ash Road South Wrexham Industrial Estate 24 April 2015 states that.....

'The site is a mixture of unimproved grassland with scrub, there are several trees dotted around. There are no ponds on the site although there are some damp sections and some vehicle ruts which were presumably left from when the site was initially cleared.

The 1:25:000 Ordnance Survey map for the site shows a large pond on the far side of the road (south-west of the site) but this area appears to be scrub with young trees.

The following habitats were recorded on the site.

Habitat types

- 1. Scrub with scattered trees*
- 2. Ruderal/unimproved grassland*

Scrub with scattered trees

*The scrub is scattered across the site with denser areas towards the back (northern boundary) of the land. Species include hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, willow *Salix* sp dog rose *Rosa canina*. In the central area there are three oak *Quercus robur* trees with associated deadwood, cracks and splits etc, also a Scots pine *Pinus sylvestris* and other young willows.*

Ruderal/unimproved grassland

*The grassland areas are generally species rich with a variety of plants normally only found in areas of unimproved or abandoned habitat. Species include common knapweed *Centaurea nigra*, birds foot trefoil *Lotus corniculatus*, cowslip *Primula veris*, ribwort plantain *Plantago lanceolata*, creeping cinquefoil *Potilla reptans*, teasel *Dipsacus fullonum*, wild strawberry *Fragaria vesca*, ox eye daisy *Leucanthemum vulgare*, primrose *Primula vulgaris* and unidentified orchid species which are just starting to emerge. The damp ruts support small stands of common reed *Typha latifolia* and sedges *Carex* sp'.*

In addition to the findings, Clwydian Ecology Butterfly Survey Report 12th October 2015 states that...

'A grizzled skipper survey was carried out on the 12th June 2015, the weather conditions were dry, sunny and warm with no wind - 21°C, ideal conditions for butterflies.

The results of this survey are based upon a single visit towards the end of the main flight season. It is possible that the butterfly is present but emergence was earlier in the year or

weather conditions such as heavy rain may have had an impact. No grizzled skipper butterflies were observed during the walkover survey’.

The site habitats to be directly affected by the development are the scrub and unimproved grassland, though approximately 4000m² will be retained as the mitigation area.

2.3 Great crested newt

The layout of the development also maximises the retention of as much habitat as possible and this is clearly identified on drawing 04 Rev B. The mitigation site is a retained 4000m² portion of the whole occupied development site. The unimproved grassland and scrub provides primary quality terrestrial habitat for GCN. The site has reasonable habitat connectivity to the north and east.

No ponds will be directly affected by the development.

Enhancement for amphibians include the designation of a **4000m² mitigation site** comprising unimproved grassland and scrub, **creation of 2 hibernacula and a new pond** of approximate dimension 10mx20m with a maximum depth of 2.5m. The pond will be allowed to colonise with aquatic species naturally and artificial egg laying substrate will be inserted during the first newt breeding season. **Management** of the habitats specifically for GCN will aim to sustain the population at favourable conservation status on the Industrial Estate as a whole.

Restoration of grassland will be carried out where necessary. Soils generated during the GCN fence installation works and destructive searches following trapping will be used to restore damaged grassland areas where ruts are apparent.

The purpose of this is to enable future management such as mowing to be carried out safely.

The **development** site will be subject to exclusion fencing and 30 days pitfall trapping subject to NRW EPS licence by the licenced ecologist to exclude GCN. It is proposed that 100 traps per hectare are utilised in addition to tiles to facilitate maximum capture.

Prior to and during construction of the pond or scrub and grassland cutting to facilitate trapping, the **Reasonable Avoidance Measures Method Statement** specified in Appendix A will be followed.

The retained and created habitats will be enhanced through regular management to ensure their floristic diversity and required structure is maintained. The proposed management and monitoring of these habitats are set out in more detail in sections 4 and 5 of this report.

2.4 Grizzled Skipper Butterfly

The unimproved grassland has the potential to support grizzled skipper butterfly given its suitability and proximity of nearby colonies. Grizzled skipper is classified as a high priority species in Wales.

The Grizzled Skipper is on the list of Locally Important/Endangered Species (Wrexham County Borough 2003). In addition it is a UK BAP species.

The Grizzled Skipper is identified as ‘Locally Threatened’ on the Provisional List of Locally Important/Endangered Species (Wrexham BAP). Butterfly Conservation (a charitable non-governmental organisation) has produced a National Action Plan for Wales (Joy & Bourn 1998¹). This plan identifies the Grizzled Skipper as a high priority species important in Wales. There are around

Joy, J. & Bourn, N. (1998). *National Action Plan for Wales*. Butterfly Conservation, Wareham.

Brereton, T.M., Bourn, N.A.D., Warren, M.S. (1998). *Species Action Plan – Grizzled Skipper Pyrgus malvae*. Butterfly Conservation, Wareham.

10-15 known colonies in Wales (Asher *et. al.* 2001²) and approximately three in Clwyd (Brereton *et. al.* 1998³), one of which is on the Industrial Estate.

The Grizzled Skipper is frequently found on post-industrial brownfield sites where one of the main habitat requirements is known to be supply of food-plants including spring nectar plants and patches of bare ground. The larval host-plants include *Agrimonia eupatoria* (Agrimony) and *Potentilla reptans* (Creeping Cinquefoil). Both plants have been recorded within the proposed ecological mitigation site.

Whilst principally the mitigation site will be managed for great crested newt, management to promote conditions suitable for grizzled skipper will also be a priority.

2.5 Bats

- Trees within the development were found to have between low and no bat roosting potential during the survey of 9th August 2016. See report SCALES Consultancy Ltd Bat and Badger Survey Report August 2016. No mitigation is deemed necessary.

2.6 Badger

- The holes identified by Clwydian Ecology (Clwydian Ecology Ecological Assessment for land off Ash Road South Wrexham Industrial Estate 24 April 2015) were confirmed to be fox/rabbit activity. No evidence of badger was identified in the survey of 9th August 2016 and therefore no mitigation is deemed necessary. See report SCALES Consultancy Ltd Bat and Badger Survey Report August 2016. No mitigation is deemed necessary.

2.7 Birds

The site contains bird nesting habitat within the scrub and unimproved grassland.

The **reasonable avoidance method statement** provided in Appendix A will ensure that there are no impacts on nesting birds. Bird boxes will be erected as biodiversity gain.

Joy, J. & Bourn, N. (1998). *National Action Plan for Wales*. Butterfly Conservation, Wareham.

Brereton, T.M., Bourn, N.A.D., Warren, M.S. (1998). *Species Action Plan – Grizzled Skipper Pyrqus malvae*. Butterfly Conservation, Wareham.

3 ECOLOGICAL MITIGATION SITE MANAGEMENT – 25 YEARS

4.1 Ash Road Mitigation Site

The Drawing 'Ash Road Ecological Management Plan' dated August 2016 should be referred to for the specific layout and details of the habitats to be created, managed and monitored. Figure 1 Receptor Site Management provides an indicative layout of the proposed features. The management is predominantly prescribed to promote habitat for great crested newt although of secondary principal importance is grizzled skipper butterfly and thirdly nesting birds. A brief outline on management proposed for each habitat type are provided below:

An as-built GIS **Mitigation site habitat layout map** will be produced once the habitats are created and included in the first annual report.

Figure 1 Receptor Site Management map provides an indicative layout of the site and management zones.

Pond

Aims

To maintain aquatic habitat suitable to support breeding great crested newt with diverse aquatic and emergent vegetation communities including plant material available that is suitable for newt egg-laying substrates.

- Invasive marginal and aquatic vegetation will be periodically cleared in Autumn/winter by hand/hand tools when aquatic vegetation reaches a trigger point of 60%. All vegetation material should be checked for newts and left near the pond for at least 24 hours before composting. Undertake periodic clearance of excessive marginal vegetation in autumn/ winter by hand digging. Reduction of excessive floating and submerged plants can be done using a long-handled rake.
- *Azolla filiculoides* (Water-fern) and/or *Crassula helmsii* (New Zealand Pigmyweed) will not be tolerated and will be managed appropriately if it colonises the site. A biological form of control is available for *Azolla* - the North American weevil *Stenopelmus rufinasus* and will be employed along with consideration of other controls. *Crassula* will be treated by a combination of hand removal and approved herbicide treatment. NRW will be consulted for advice/licencing.
- Fish will not be tolerated in the pond. If fish colonise, they will be netted out sensitively following drain down of 60-70% of the water.
- Should there be excessive algal blooms in the first few years within the new pond some will be removed leaving some filamentous algae as cover for invertebrates. If required, an early spring application of barley straw at 1 bale per hectare will be undertaken.
- Litter will be cleared in October

Performance indicators

A count of 20 GCN in the pond during one torch count session is considered desirable.

Scrub

Aims

To maintain areas of dense scrub for hibernating/ foraging newts and breeding birds.

Prescriptions

- A visual assessment of the scrub broadly within zone 3 is proposed in order to determine any management requirements such as pruning and thinning to prevent encroachment into the grassland.
- Coppice/clear approximately 15% of the scrub in any one year on a 10 year cycle. This scrub may be cleared using hand-tools. The work should not be undertaken in cold weather to avoid disturbing hibernating newts. Cut logs can be stacked in the woodland to provide refuges for newts.
- The bird nest boxes will be cleaned out annually in late Autumn (late October – November) to reduce parasite infestations.
- Litter will be cleared in October

Grassland

Aims

To create and maintain a diverse structure and species composition suitable for both great crested newt and grizzled skipper butterfly.

- The neutral unimproved grassland in the mitigation area will be mown periodically – probably once a year in June or July in hot weather conditions to maintain an open tussocky sward height and structure and floristic diversity. A rotational cutting regime will be employed within the zones 1 and 2. Approximately 50% of the retained mitigation grassland zones 1 and 2 will be cut once a year with the remaining 50% cut the following year. Grassland within approximately 5 m of the pond will remain largely uncut with the exception of facilitating great crested newt monitoring. The cutting blade should be set at a height of more than 5 cm. The grass cuttings should be left in-situ and then raked off after 24 hours. Grass heaps can be created within the scrub area and near to the ponds. The heap should be constructed over a base of criss-crossed coarse material such as branches or logs.
- 50% of zones 1 and 2 will be maintained at a shorter sward with some areas of sward height cut to 5cm during the flight period of the grizzled skipper. 10% of the grassland will be cut in February with arisings removed. Sporadic occasional bare patches will be created. A detailed cutting regime will be agreed in January following mitigation site construction.
- Liaison with North Wales Wildlife Trust/Butterfly Conservation will ensure that management prescriptions are appropriately tailored to promote habitat for Grizzled Skipper and sustain the population in the long term.
- Two rubble walls will be created to the south of the mitigation site and seeded with a mix containing Barren strawberry, Cinquefoil, agrimony and Birdsfoot trefoil.
- Green corridors will be maintained throughout the periphery of the site boundaries to maintain and promote habitat connectivity.
- Litter will be cleared in October

Performance indicators

A count of 10 Grizzled Skipper butterflies over 3 timed count sessions in a year is considered desirable but this figure will be refined and agreed following the mitigation site construction.

4 MONITORING

The table below provides an overview of the ecological works that will be undertaken prior to, during and post construction of the Warehouse Facility at Ash Road for a period of 5 years. This is a working document and will be reviewed in line with the construction timetable. The dates provided below as the most accurate at the time of writing.

The management plan will be reviewed after 5 years and thereafter every 5 years for a period of 25 years and a table will be produced for each of the next 5 years.

4.1 Habitats

The success of the ecological mitigation and enhancement works will be monitored following construction. This will be led by a monitoring programme which will include measurable objectives, which set the trigger thresholds for remedial management action should any of the implemented measures fail. To ensure successful establishment of the pond and management of the scrub and grassland the details set out briefly in Section 4 will be followed.

Visual assessments will be undertaken to ensure appropriate landscaping establishment. Appropriate management will be implemented to maintain a varied habitat (refer to Section 4 Post Construction Management).

4.2 Species

- The extent and type of aquatic species in the pond including non-native invasive species will be monitored annually by visual inspection.
- The presence of great crested newts and other amphibian species and fish will be monitored annually by undertaking 3 visits to the pond during the newt survey season. Torch count methodology is proposed to assess the presence and indicate population levels.
- Grizzled Skipper butterfly will be monitored by 3 annual timed counts during May of each year.
- Extent of scrub encroachment and proportion of grassland present will be monitored annually.

4.3 Meeting and Reporting

An annual meeting will be convened to review management and monitoring undertaken at the site each year. Attendees will include EPS, the managing and monitoring body and NRW. In addition to annual review of the monitoring and management work undertaken the efficacy of the management plan will be reviewed. Management prescriptions will be adapted accordingly. The current management plan will be fully reviewed after every fifth year. If required an updated management plan will be implemented the year following the review. The reviews will take into account all required revisions and assess the findings of the monitoring programme.

A short 'Monitoring and Management Report' detailing the results of the monitoring described above and management carried out will be submitted to Wrexham Borough Council and Natural Resources Wales by the end of each year, with the first report being provided by the end of 2017. For clarity, year 1 is 2017 and year 5 is 2021. The mitigation, management and enhancement measures are outlined for summary in the table below. As the construction timetable is yet to be finalised this is subject to change and will be updated following confirmation of the build programme.

Cofnod methodology will be employed for monitoring/surveillance with GCN/pond data uploaded annually. 3 GCN Torch counts in the pond along with H.S.I score and an aquatic plant species and distribution survey will be undertaken.

Please note this is a working document and will change in line with the construction timetable								
Year / Month	Pre-construction		Construction Period	Year 1	Year 2	Year 3	Year 4	Year 5
	August – October 2016	November - December 2016	January – December 2017	2017	2018	2019	2020	2021
Species / Task								
Amphibians	Great crested newt fence & Trap installation 30 Days newt trapping	Creation of Pond and hibernacula		3 GCN Torch Counts in pond	3 GCN Torch Counts in pond	3 GCN Torch Counts in pond	3 GCN Torch Counts in pond	3 GCN Torch Counts in pond
Grizzled Skipper		Repair Ruts and translocate grassland turves		3 - 1 hour timed counts May	3 - 1 hour timed counts May	3 - 1 hour timed counts May	3 - 1 hour timed counts May	3 - 1 hour timed counts May
Birds	Scrub and grassland cutting/clearance under ecologist supervision			Installation bird boxes	Annual check of boxes	Annual check of boxes	Annual check of boxes	Annual check of boxes
Birds/Great crested newts	Grassland Mowing within the development area Vegetation clearance under ecologist supervision							
Annual Mowing of Grassland				Mow 10% February Mow 50% and remove cuttings June- July	Mow 10% February Mow 50% and remove cuttings June- July	Mow 10% February Mow 50% and remove cuttings June- July	Mow 10% February Mow 50% and remove cuttings June- July	Mow 10% February Mow 50% and remove cuttings June- July
Remove Litter				Remove Litter October	Remove Litter October	Remove Litter October	Remove Litter October	Remove Litter October
Pond Management						Aquatic and marginal vegetation control	Aquatic and marginal vegetation control	Aquatic and marginal vegetation control
Scrub Coppice					Coppice Scrub			

Ground works		Construction contractor				
Scrub and Grassland and Pond Monitoring			Visual assessment for scrub encroachment and grassland and pond vegetation and management needs.			
Reporting			Report LPA Upload GCN data Cofnod	Report LPA Upload GCN data Cofnod	Report LPA Upload GCN data Cofnod	Report LPA Upload GCN data Cofnod

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Clwydian Ecology Ecological Assessment for land off Ash Road South Wrexham Industrial Estate 24 April 2015,*

Clwydian Ecology Butterfly Survey Report 12th October 2015.

SCALES Consultancy EPS Great Crested Newt Licence application NRW.

APPENDIX A – GREAT CRESTED NEWT AND NESTING BIRD MITIGATION METHOD STATEMENT

Purpose

As a precautionary approach it is considered that a reasonable avoidance measures scheme should be followed to ensure that there would be no impact on potential great crested newts or nesting birds using the development site during the construction of the mitigation pond and the vegetation management for installation of the newt exclusion fence. The procedures will be followed to significantly reduce the risk of causing an offence under current statutory legislation.

The statement as described below broadly follows the approach of an ecologist searching habitats by hand and visually examining all areas prior to management to facilitate newt exclusion fence installation and trapping, damage or their destruction i.e. a destructive search.

Site Description

The site habitats to be directly affected by the development are of ecological value, providing optimum habitat to support great crested newts and nesting birds.

METHOD STATEMENT

Habitat Management

The vegetation management will only be undertaken during the active growing period August-September – October but outside the bird nesting season to avoid the disturbance of any potential hibernating reptiles and nesting birds.

All the vegetation requiring removal within the working area will be cut down to a height of 5cm. This will be undertaken approximately 1 week prior to the commencement of ground works. The vegetation will be cut with trimmers, brush cutters and chainsaws and all vegetation will be chipped and or moved outside the working area.

Reasonable Avoidance Measures Procedures

1. Prior to the commencement of any works, staff and contractors will be informed of the potential presence of great crested newts and birds and the associated legislation. Staff will be informed that they will need to cease work immediately and consult the appointed Ecologist in the event that the presence of a great crested newt or nesting bird in the 'working' area is suspected.
2. A preliminary search for the presence of amphibians and nesting bird activity will be undertaken by an ecologist prior to the access of any plant or machinery. The proposed route of access will be examined for features which have the potential to support newts – rubble, debris, log piles, wood brash piles, tussocky grassland, tree stumps and any refugia sites for example. All such features will be closely searched by hand prior to the access of machinery and heavy plant. The ecologist will be present to undertake hand searches and supervision on each day that site clearance is undertaken. Any refugia such as bricks or wood for example will be lifted, examined and removed from working areas.
3. Prior to the commencement of fence newt installation/site clearance operations/pond construction, the location of the proposed work will be searched by hand for the presence of newts.

4. In the event that excavations are to be left exposed overnight or for a long period of time then a stick or plank (whichever is appropriate) will be placed in the excavation to aid the escape of any animal falling in and becoming trapped.
5. The Ecologist will be present at the commencement of the works and must be contacted in the event of any potential wildlife issues.
6. Common species of reptile will be moved to safe havens on site unaffected by development activities.

The above measures will be undertaken immediately prior to commencement of any works and the mowing 1 week prior to the commencement of the works.

APPENDIX B - LEGISLATION & POLICY

Great Crested Newt Legislation

Great Crested Newts are protected under section 9 and listed on schedule 5 of the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000 (CRoW Act) which further extends their protection). They are also classed as European Protected Species listed on Annexes II and IV of the European Union Directive on Natural Habitats and Wild Fauna and Flora (Council Directive 92/43/EEC). This is implemented in the UK by The Conservation of Habitats and Species Regulations 2010 (as amended). They are on Schedule 2 of the Habitats Regulations which provide full protection under Regulation 40(1). The legislation is relevant to all life stages of the Great Crested Newt including eggs, larvae, juveniles and adults.

Under this aforementioned legislation it is an offence to intentionally or recklessly:-

- Kill, injure or take an individual of such a species;
- Possess any part of such species either alive or dead;
- Damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- Disturb such a species whilst using any place of shelter or protection;
- Sell or attempt to sell any such species.

In order to undertake surveys for Great Crested Newt, a surveyor must hold an appropriate licence issued by Natural England, The Countryside Council for Wales or Scottish Natural Heritage accordingly.

The Great Crested Newt is a UK Biodiversity Action Plan species for which objectives and targets to protect and restore newt habitats and create new sites through habitat management and re-creation are set. Section 41 in England and Section 42 in Wales of the Natural Environment and Rural Communities Act 2006 (NERC Act) provide lists of habitats and species of principal importance for the conservation of biological diversity. The Great Crested Newt is included on these lists.

The 2010 Habitats Regulations PART 5 Licences states that

Regulation 53 – Subject to the provisions of the regulation a licensing body may grant a licence for the purpose as specified in paragraph 2 (e)

2(e)

‘preserving public health and safety or other reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment’.

Subsection (9) The relevant licensing body must not grant a licence under this regulation until they are satisfied –

- a) That there is no satisfactory alternative; and
- b) That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

Birds

All species of bird are protected under Section 1 of the Wildlife and Countryside Act 1981. The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CRoW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and

Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive), making it an offence to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young while it is nesting;

Badgers

Badgers and their setts are protected under the Protection of Badgers Act 1992. It is a criminal offence to kill, injure, take, possess or cruelly ill-treat badgers or to interfere with a badger sett. Interference with a sett would include blocking tunnels or damaging the sett. Work within 30m may require a licence.

General Legislation

The two principal pieces of legislation in the UK protecting wild species are Part 1 of the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010. In addition to this, some animals are protected under their own legislation, e.g. The Protection of Badgers Act 1992.

Two other pieces of legislation, the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006, have also strengthened the protection of wildlife by amending the Wildlife and Countryside Act.

Wildlife and Countryside Act 1981

Part 1 is concerned with the protection of wildlife and the Act protects:

- all birds, their eggs and nests with special offences related to birds listed in Schedule 1;
- any wild animal listed in Schedule 5;
- any wild plant listed in Schedule 8

The Act also contains measures for preventing the establishment of non-native species which may be detrimental to native wildlife. It prohibits the release of animals and planting of plants listed in Schedule 9. There is a mechanism making the above offences legal through the granting of licences by the appropriate authorities. The Wildlife and Countryside act 1981 was amended by the Countryside and Rights of Way Act 2000 (CRoW Act).

Conservation of Habitats and Species Regulations 2010

The Habitats Regulations are the UK legislation implementing the European Habitats Directive. European Protected Species are listed on Schedules 2 and 4 of the Regulations.

The Regulations make it an offence to

- deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2;
- deliberately destroy or take their eggs from the wild;
- damage or destroy their breeding sites or resting places; and
- pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4.

These actions can be made lawful through the granting of licences by the appropriate authorities for purposes such as education, science, conservation, preserving public health and safety. The authority must be satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on the wild population of the species.

Countryside and Rights of Way Act 2000

Amendments to the Wildlife and Countryside Act 1981 have been made in the Countryside and Rights of Way (CROW) Act 2000 (in England and Wales).

The Act strengthens the legal protection for threatened species and brings the 1981 Act up to date. It has provided stronger powers for the police and wildlife inspectors and created a new offence of reckless disturbance of a protected species. It also enables the courts to impose heavier fines and prison sentences for wildlife offences.

Breaching protected species legislation can give rise to a criminal offence. The CROW Act increased the penalties for offences under the W&C Act in relation to protected species to a maximum fine of £5000 (per individual, per egg) and/or custodial sentence of up to six months.

Natural Environment and Rural Communities Act 2006

This act further amends the W&C Act to improve wildlife protection. It places a duty on the Local Planning Authority to ensure due regard for the conservation of biodiversity. The Natural Environment and Rural Communities Act 2006 (NERC Act 2006) provides a list of habitats and species of principal importance for the conservation of biological diversity in Wales (section 42).

Protection of Badgers Act 1992

Badgers and their setts are protected under the Protection of Badgers Act 1992. It is a criminal offence to kill, injure, take, possess or cruelly ill-treat badgers or to interfere with a badger sett. Interference with a sett would include blocking tunnels or damaging the sett. Work within 30m may require a licence.

Environment (Wales) Act 2016

The purpose of Part 1 of the Environment (Wales) Act 2016 is to promote sustainable management of natural resources.

Policy

National Planning Policy Framework

NPPF March 2012 section 11 'conserving and enhancing the natural environment' sets out current government policy on biodiversity and nature conservation and places a duty on planners to make material consideration to the effect of a development on biodiversity when considering planning applications. It maintains that the planning system should aim to minimise impacts to biodiversity and promote the preservation, restoration and re-creation of priority habitats and protection of priority species. The LPA should aim to conserve and enhance biodiversity.

APPENDIX C ASH ROAD SOUTH BIOSECURITY RISK ASSESSMENT

- Introduction**

During consultation regarding the GCN mitigation licence for this site, the Countryside Council for Wales (CCW) requested that a bio-security risk assessment be undertaken to minimise the risk of importing to the site invasive or non-native species.

This document tabulates those species that have been identified as having the potential to be imported during the construction phase of the project. The likely pathways and Operational mitigation have also been identified. An activity risk assessment has been conducted for Great Crested Newt monitoring following the completed mitigation.

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

- Invasive non-native species risk assessment**

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.	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.

Species	Potential contamination route	Likelihood of risk	Operational procedure
		Low. There are no requirements to import soil.	
Garden escapes (Crocasmia and Spanish Bluebell)	Spread of species via construction machinery/ movement of soil. Introduction of seeds via contaminated soil.	Low. Not known to be present on site. Low. There are no requirements to import soil.	Ensure contractor know what Crocasmia and Spanish Bluebell look like. Construction vehicles to keep to established paths and park on hardstanding.
Invasive non-native aquatic plant species (Water Fern, Parrot's-feather, Floating Pennywort, Canadian Waterweed, Curly Waterweed, Nuttall's Waterweed, Least Duckweed) New Zealand Pigmyweed	Spread of species via construction machinery/ movement of soil/water. Introduction of seeds via contaminated soil/water.	Low. Not known to be present on site. Low. There are no requirements to import soil/water.	Ensure contractors know what these species look like and that equipment has been cleaned/sterilised prior to use near water features.
Chytrid fungus	Spread through the movement of soil, water and/or equipment.	Low. Not known to be present on site. Low. There are no requirements to import soil/water.	Clean/sterilise any equipment prior to use near water features and between separate waterbodies. Refer to ARG-UK Advice Note 4 for generic guidance in respect of amphibian disease precautions.

• **Activity risk assessment**

Activity	Risk (High, Medium, Low)	Control measures	Risk after control measures implemented	Control measure in place	
				No	Yes
Torch surveying	Low	Avoid entering the pond(s) wherever possible.	Low	☐	☒

Activity	Risk (High, Medium, Low)	Control measures	Risk after control measures implemented	Control measure in place	
				No	Yes
		If entering a pond, clean equipment, boots/waders and clothes after each survey and between waterbodies.			

- Spatial activity risk assessment**

Factor	Number	Risk	Score
Total number of ponds to be surveyed per annum	1 – 10	Low	☒ 1
	10 – 100	Medium	☐ 2
	100 +	High	☐ 3
Geographical extent of all surveys carried out per annum	0 – 1 km ²	Low	☒ 1
	1 – 10 km ²	Medium	☐ 2
	11+ km ²	High	☐ 3



