

FDPF Building at Ipsen, Ash Road North Wrexham Industrial Estate (ABE P/2020/0625)

GCN Reasonable Avoidance Measures

Background

Planning Consent has been granted by Wrexham CBC for the erection of an Industrial Building at the Ipsen Biopharm site, located off Ash Road North, Wrexham Industrial Estate (WIE).

Planning Condition 12 attached to the consent states;

“No part of the development shall commence until a Method Statement including details of the proposed Reasonable Avoidance Measures (RAMs) have been submitted to and approved in writing by the Local Planning Authority. The details shall include (but not be limited to) the following:

- a) Details of a toolbox talk on the identification and ecology of great crested newts to be made available to all construction staff employed on the project;*
- b) Details of an artificial amphibian hibernacula to be constructed adjacent to the site (Details of the design can be found in great crested newt mitigation guidelines - August 2001); - note: a site has been selected for this.*
- c) Details of a walk over survey of the site prior to commencement of development, and a destructive search (under the supervision of a licensed great crested newt handler) made of any potential great crested newt habitat (such as rubble piles or sheet materials that are on the site) on the site. Any amphibians found should be relocated to the artificial hibernacula;*
- d) Details of storage of material on pallets off the ground, and bulk materials which are to be delivered on site and used within the day of delivery.*
- e) Confirmation that excavated trenches will be covered over at the end of each working day with plywood and the edges sealed with sand or soil. Trenches are to be checked each morning for any amphibians. Any amphibians located are to be moved to the artificial hibernacula.*

The development shall be carried out in strict accordance with the Method Statement and RAMs as are approved.”

WIE is designated as a Wildlife Site comprising a series of land parcels within the estate which include unmanaged grassland at Bryn Road and on Cefn Park land and ancient broadleaved woodland, Erlas Black Wood. The WIE is also recognised to support a Nationally significant population of GCN.

The document has been prepared by Etive Ecology Ltd to provide the required details to satisfy Planning Condition 12.

Reasonable Avoidance Measures (RAMs)

Pre-commencement Survey

A pre-commencement walkover survey of the site will be undertaken by Russell Grey (MCIEEM, BSc, CEnv), prior to the commencement of any physical works in relation to the

consented scheme. Russell holds a Natural Resources Wales (NRW) license to disturb (handle) GCN (S088565/1).

The walkover will include all working areas covered by the planning consent and will include a thorough hand-search and destructive search of any potentially suitable GCN refugia found within the working area. Any GCN, or other amphibians, that are found during this search effort will be carefully translocated into the newly created hibernacula (see below).

Toolbox Talk

A Toolbox Talk will be delivered by Russell Grey on the first day of construction works on the consented scheme. The talk will cover topics including:

- Legal protections afforded to GCN
- GCN status within the immediate vicinity of the site
- Summary of any locations within the working area of high value to GCN
- Identification of GCN and other amphibian species
- Procedure to follow if GCN are encountered.

The reference material used as part of the Toolbox Talk is provided in Appendix 1.

Hibernacula

An artificial amphibian hibernacula will be constructed in accordance with the design provided within the GCN Mitigation Guidelines (Figure 3) and shown in Appendix 2. The design mimics natural conditions which GCN and other amphibians are known to use for refuge and hibernation. The structure should be a minimum of two metres in diameter and 0.5-1 metre in height. Only clean and inert material should be used to form the base of the hibernacula (a mixture of rubble and woody material) with topsoil arising from site earthworks used to cover.

A location has been identified for the hibernacula. It has been agreed that the hibernacula will be located in semi-natural habitat adjacent to a small aquatic feature at the northern end of the Ipsen site (approximate grid reference; SJ 3745 5039). This location is shown in Appendix 2.

RAMs

The low risk posed to disturbing and harming GCN and other amphibians during the development works in relation to the FDPF Building at the Ipsen site will be mitigated through the implementation of the following Reasonable Avoidance Measures (RAMs):

- Clearance of ground vegetation, rubble, detritus and any other potentially suitable refugia for GCN (such as pallets, rubble piles or sheet material) will be undertaken during the active period March – September. During this period, amphibians will be active, and the impact of physical disturbance will be low.
- Any clearance works described above will be undertaken with care and by hand.
- If any GCN are encountered, works in the area of the discovery should cease immediately and an experienced GCN-licensed ecologist called for advice.
- During construction works;
 - all materials will be stored off-ground on stillages or pallets.
 - all rubble/spoil/earth arising from works is skipped or removed from site on a daily basis.

- any excavations left overnight will either be back-filled and compacted or else covered by plastic sheeting and secured by plywood batons (or similar) to prevent amphibians from gaining access to them.
- pre-start checks of the working area will be undertaken each morning, looking for any amphibians.
- all site workers will be made aware of the potential presence of GCN and an identified sheet will be kept on site in case any amphibians are encountered.

The RAMs have been designed such that the site can be carefully cleared without harming GCN and that subsequently the site is kept tidy and unsuitable for GCN to utilise, so that they do not take refuge within the working area.

Provided this scheme of RAMs is followed in full, the risk of encountering, disturbing or harming GCN during the consented development works is considered to be very low.

It is noted that if GCN are encountered, then works will cease until the risk posed to GCN is re-assessed by a GCN-licensed ecologist. If the risk posed to GCN is considered to be significant, then a license may be required in order for works to recommence.

APPENDIX 1

TOOLBOX TALK MATERIAL

Amphibian Identification

Common frog

Adults 6-7 cm.
Smooth skin, which appears moist.

Coloration variable, includes brown, yellow and orange. Some females have red markings on lower body.

Usually has a dark 'mask' marking behind the eye.

Breeding male

Grey/pale blue throat.

Thick front legs.

Dark (nuptial) pad on inner toes of the front feet.



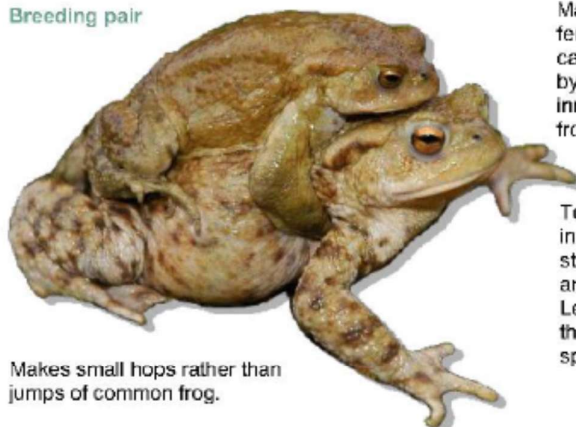
Markings also variable, including varying amounts of black spots and stripes.

Young froglets look like smaller versions of the adults.

Common toad

Adults 5-9 cm. Rough skin. Brown with darker markings. Less commonly, some individuals are very dark, almost black, others are brick-red.

Breeding pair

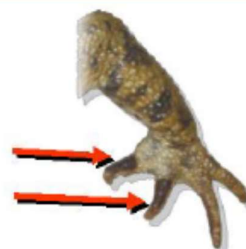


Makes small hops rather than jumps of common frog.

Toadlets transforming from the tadpole stage are often very dark in colour.



Males smaller than females. Breeding males can also be distinguished by dark (nuptial) pads on innermost two toes of the front feet.



Toad spawn is laid in gelatinous strings, wrapped around vegetation. Less conspicuous than common frog spawn.



Juveniles are similar colours to adults, including brick-red.



Natterjack toad

Similar in size and appearance to common toad, but with a pale stripe running along the back.



Strictly protected species, requiring a licence to handle or disturb.



This is a rare species, unlikely to be found outside specific dune and heathland habitats.

Tadpoles

On hatching common frog and toad tadpoles are black. As they develop, common frog tadpoles become mottled with bronze, whereas toad tadpoles remain uniformly dark until the last stages of development.

Common frog and toad tadpoles generally complete development in the summer, but development rates are variable; some tadpoles may not transform until later in the year, or they may even remain as tadpoles over winter, becoming much larger than normal.

Tadpoles of water/green frogs grow larger than native frog and toad tadpoles. There are usually mottled markings on the base of the tail and the belly is usually white.

Frog



Toad



Water frog



Water/green frogs

This is a group of non-native frogs, including pool, edible and marsh frogs (although there is one population of pool frogs which is native). There is considerable variation in colour and markings within each species, so identification by eye can be difficult. Water frogs breed in late spring/early summer. Males call loudly at this time and sporadically later in the summer. The calls are a useful way of distinguishing the species and can be heard on the *Alien Encounters* website (www.alienencounters.org.uk).



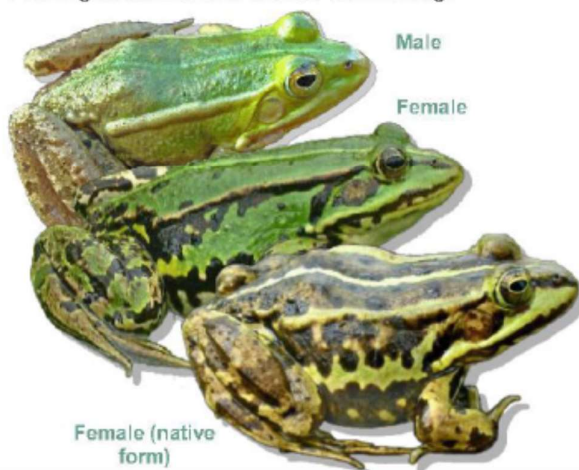
Calling marsh frog

Calling pool frog

Calling male water frogs inflate a pair of balloon-like vocal sacs, one either side of the head. These sacs are dark grey in marsh frogs, white in pool frogs and pale grey in edible frogs.

Pool frog

Pool frogs are similar in size to the common frog.



Male

Female

Female (native form)

Edible frog

Grows to a little larger than the common frog.



Marsh frog

A large frog growing to 13 cm (much larger than the common frog). Variable coloration and markings. May, or may not, have pale dorsal stripe. Marsh frogs usually have some vivid green coloration, but some can be predominantly brown.



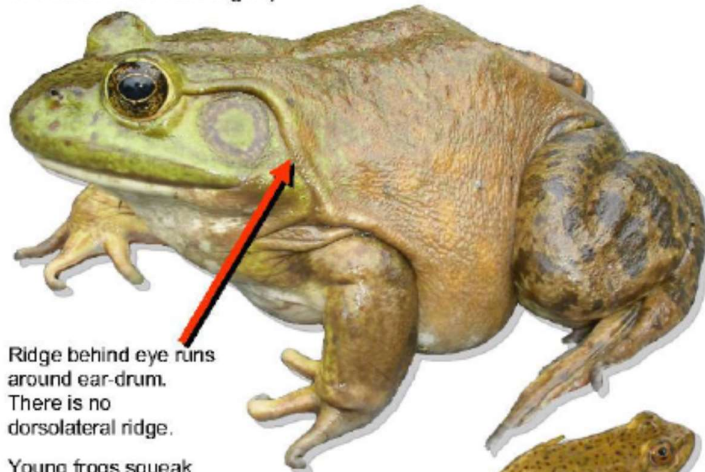
Sometimes mistaken for North American bullfrog, but marsh frogs have dorsolateral ridges and calling males have paired vocal sacs, either side of the head (both features absent in bullfrogs).

North American bullfrog

A very large, non-native frog growing to 15 cm. Calls loudly and breeds during the summer (call can be heard on the *Alien Encounters* website www.alienencounters.org.uk).



Black spots on body of tadpole. The tadpole stage can last several years and tadpoles grow to a large size, exceeding 10 cm.



Ridge behind eye runs around ear-drum. There is no dorsolateral ridge.

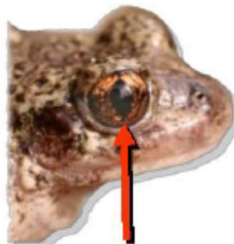
Young frogs squeak when disturbed.

Unlikely to be found (there is only one known population in the UK) but vigilance is important to identify any additional released animals.



Froglet with remains of tail

Midwife toad



A small non-native species, growing up to 5 cm. Rough skin, so potentially mistaken for a juvenile common toad. Midwife toads, however, have vertical pupils (horizontal in common toad) and males carry the eggs.

Few established populations, which are usually associated with gardens.

Secretive, but has a distinctive call, a single, repeated tone, like an electronic bleep, given on warm summer evenings (can be heard on www.alienencounters.org.uk).



Male carrying eggs

Smooth newt

A widespread species which breeds in a variety of water bodies. Often found in garden ponds.



Male

Female

Both sexes have an orange or yellow belly stripe and rounded spots, which are larger in the male.



Male

Female

Grows to about 10 cm. Breeding male has an undulating crest running from head to tail tip.



Non-breeding male

Non-breeding adults live mostly on land. Juveniles live entirely on land.



Juvenile (eft)

Palmate newt

Grows to 9 cm. Breeding male has a ridge running along the back, rather than a crest. Dark, webbed hind feet, and tail ends in filament.



Non-breeding male



There are two pale coloured nodules on the underside of the hind feet of the female.



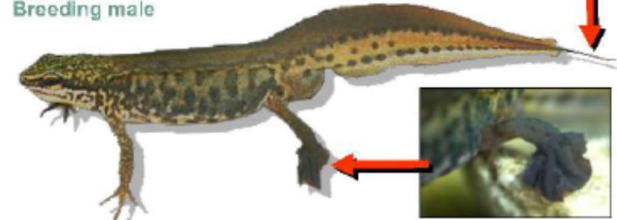
Palmate



Smooth

Throat of palmate newt has no pigment (looks pink). Throat of smooth newt is off-white and usually spotted.

Breeding male



Female



Female looks similar to smooth newt.



Underside (male)

Juveniles live on land.



Juvenile (eft)

Great crested newt

Grows to 16 cm, but usually smaller. Crest in male has break at base of tail. Silvery-white stripe towards rear of tail conspicuous.

Both sexes have rough, granular skins and yellow/orange bellies with irregular black spots.

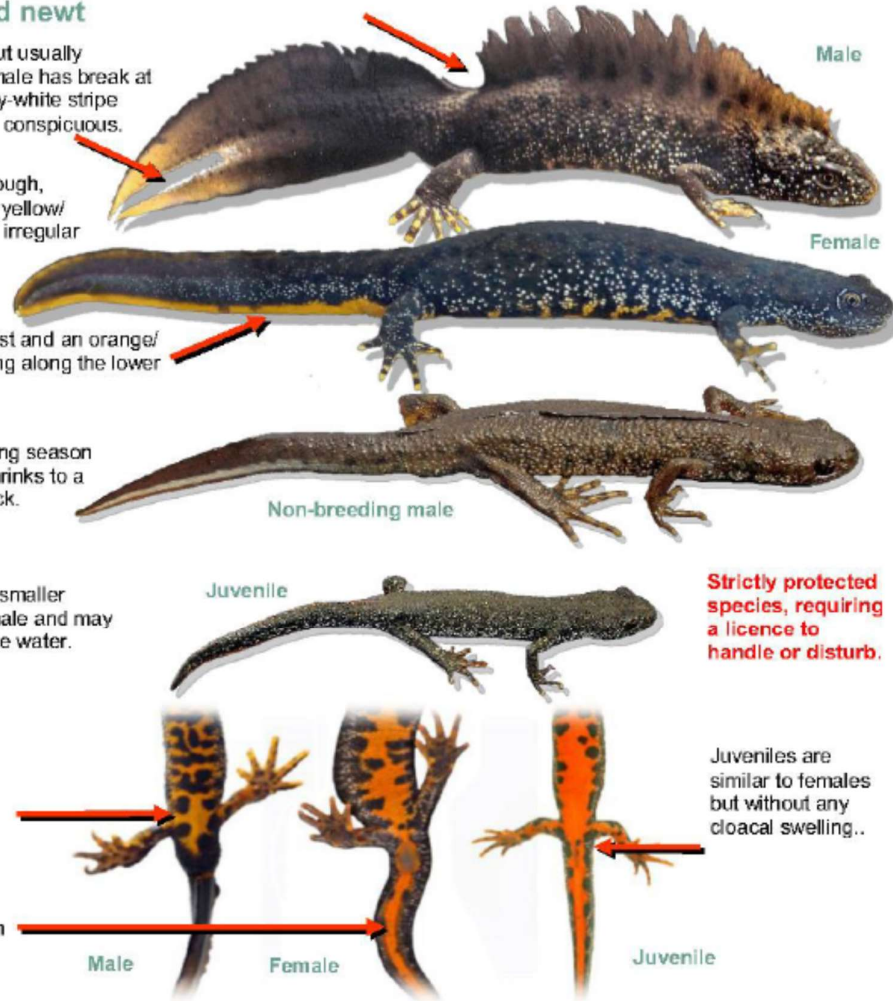
Female has no crest and an orange/yellow stripe running along the lower edge of the tail.

Outside the breeding season the male's crest shrinks to a ridge along the back.

Juveniles look like smaller versions of the female and may live on land or in the water.

Orange/yellow coloration on underside extends to flanks (not confined to central stripe). This continues along lower edge of tail in females.

Strictly protected species, requiring a licence to handle or disturb.

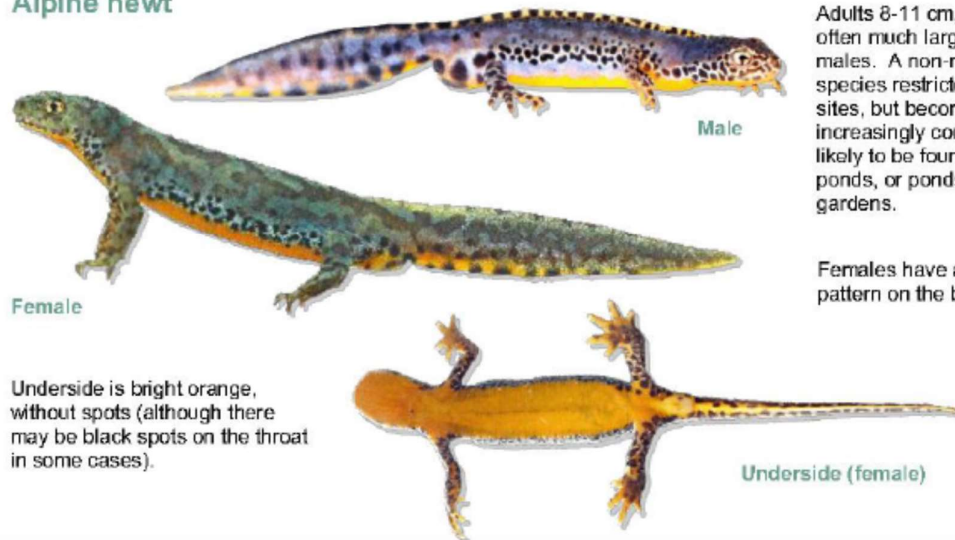


Alpine newt

Adults 8-11 cm, females often much larger than males. A non-native species restricted to few sites, but becoming increasingly common. Most likely to be found in garden ponds, or ponds near to gardens.

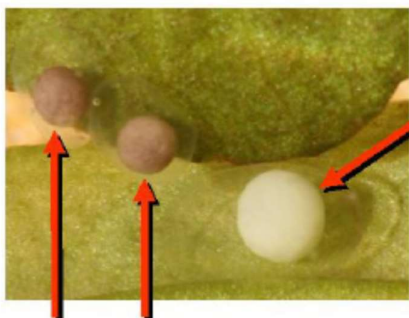
Females have a marbled pattern on the back.

Underside is bright orange, without spots (although there may be black spots on the throat in some cases).



Newt eggs

Newt eggs are usually wrapped, singly, in vegetation. Leaves folded around great crested newt eggs are particularly conspicuous. To identify, unfold the leaf. Identification of undeveloped eggs is easiest.



Eggs of smooth and palmate newts cannot be distinguished by eye, but they are smaller (jelly capsule 3 mm) than great crested newt eggs and are grey or beige when newly laid.

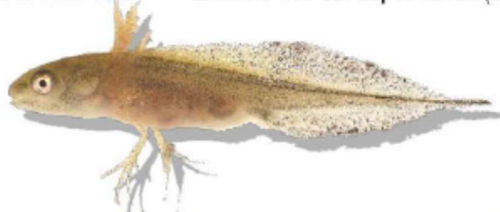
Great crested newt eggs are white, sometimes with a tint of green or orange (jelly capsule 5 mm).



Several great crested newt eggs folded into a single blade of flote grass, giving a 'concertina' effect.

Newt larvae

Examine well-developed larvae (late May to July, or to August for great crested newts).



Great crested newt larvae (above) have long toes and blotches of dark pigmentation on tail fins. Grow to approximately 5 cm.

Palmate and smooth newt larvae (above) are indistinguishable in the field—but do not have the long toes or spotted tail fins of great crested newt larvae. Grow to approximately 3 cm.

Overwintering and neoteny



Young newts usually leave the water in late summer or autumn, although sometimes they remain as larvae over the winter (e.g. smooth newt, right).

Neotenuous smooth newt



Exceptionally newt larvae grow to adult size, able to breed, but retaining their gills.

Further information Howard Inns (2009, reprinted 2011). *Britain's Reptiles and Amphibians*. WILDGuides.

Amphibian and Reptile Conservation & Fred Holmes (2014)

Additional photographs courtesy of Jon Cranfield, Ray Cranfield, Chris Glead-Owen, Howard Inns, Mark Jones, Phyl King, Liam Russell, Duncan Sweeting and Rose Tichiner.

Revised with financial assistance from Natural England.

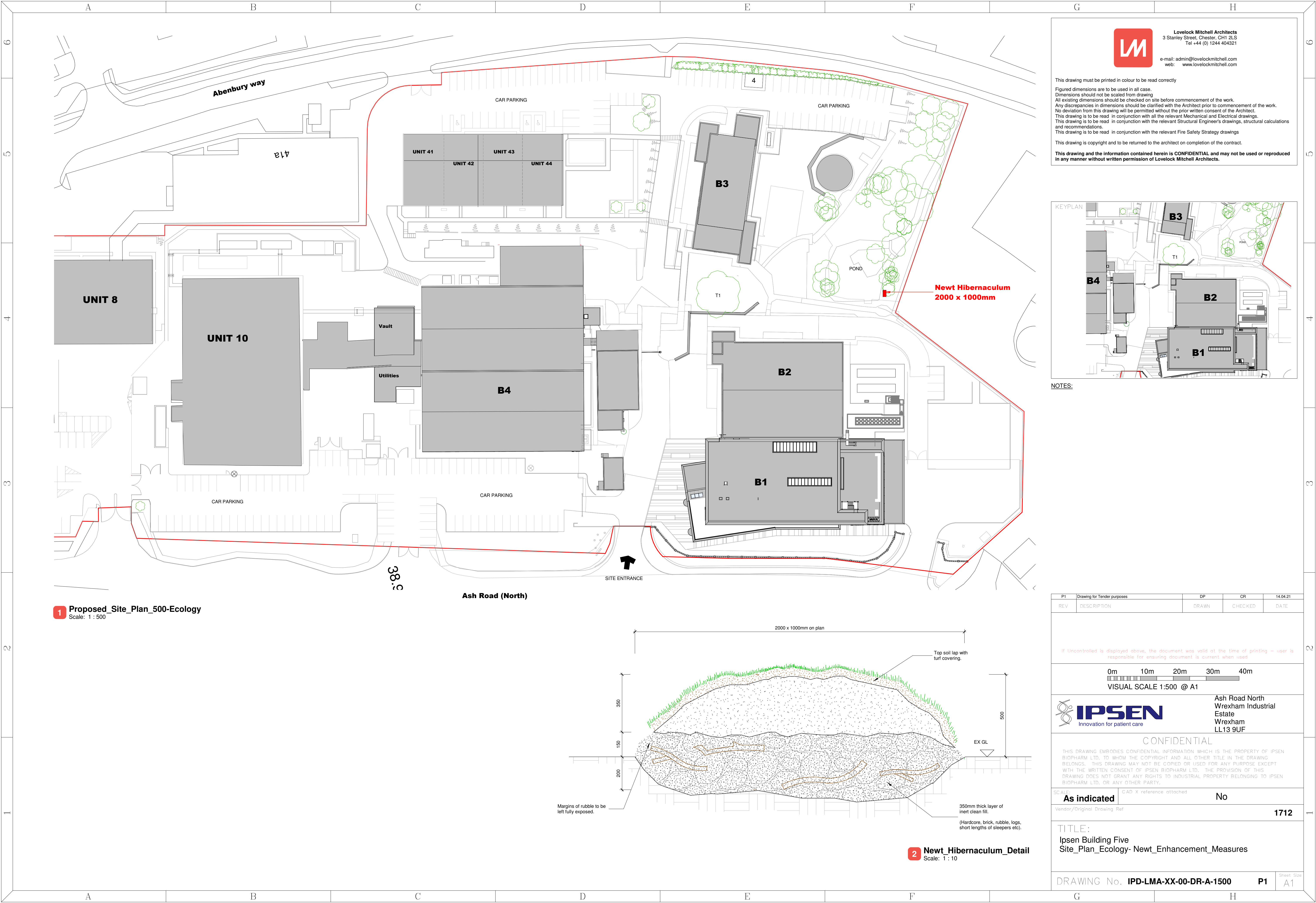
Amphibian and Reptile Conservation www.arc-trust.org

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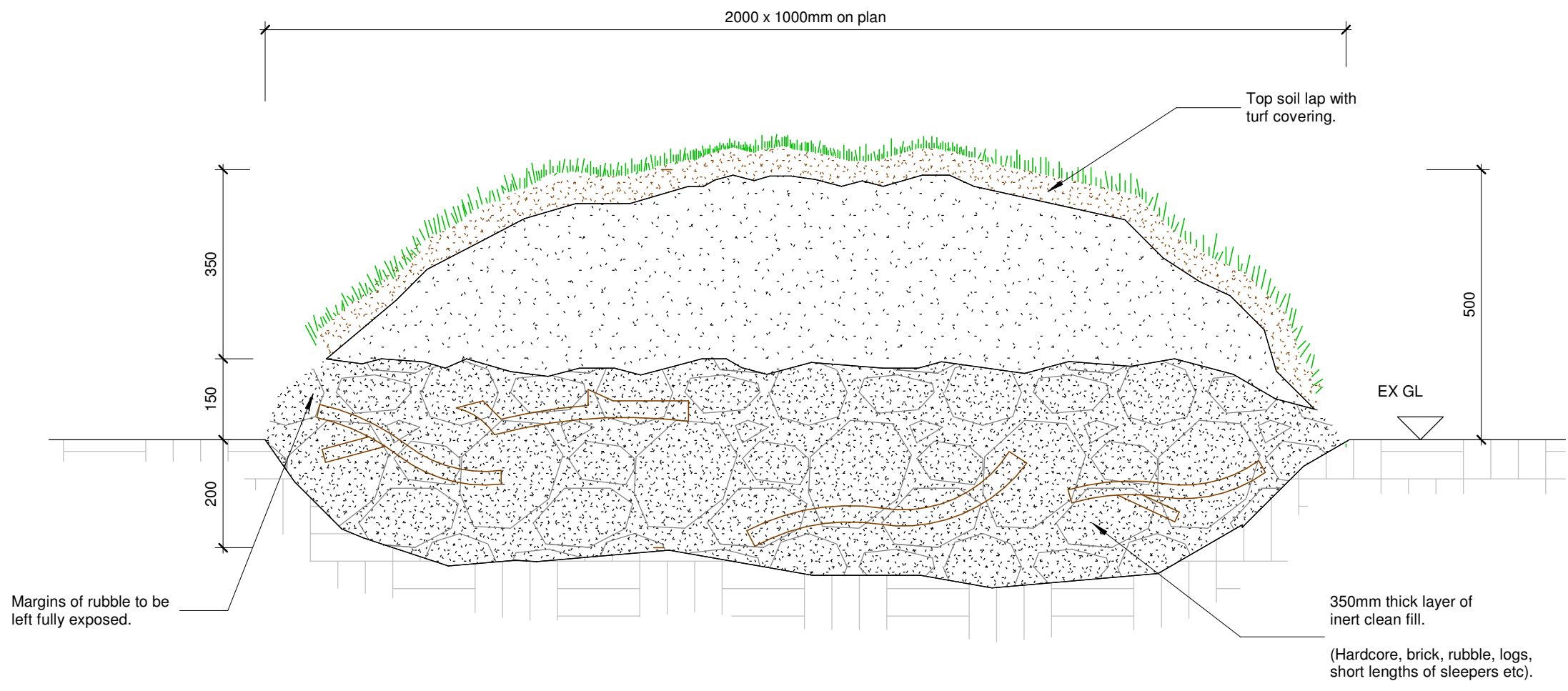


APPENDIX 2

GCN HIBERNACULA DESIGN & LOCATION



1 Proposed_Site_Plan_500-Ecology
Scale: 1 : 500

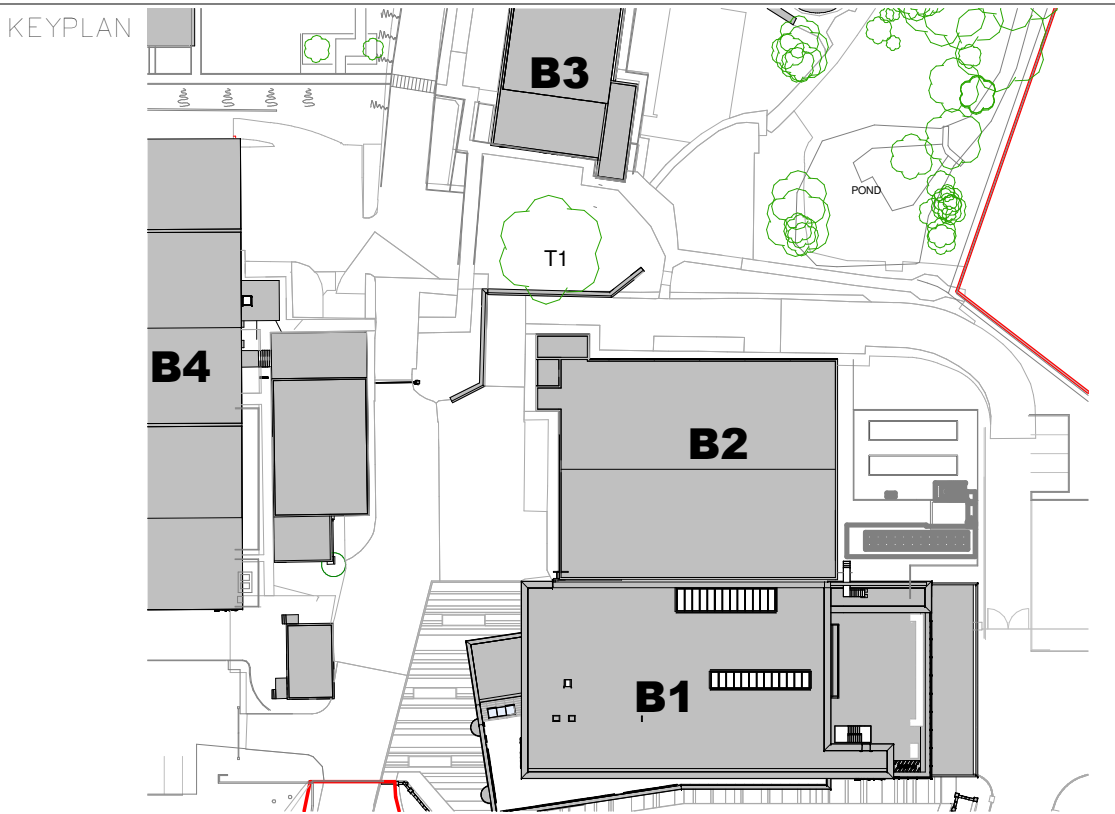


2 Newt_Hibernaculum_Detail
Scale: 1 : 10

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Dimensions should not be scaled from drawing.
All existing dimensions should be checked on site before commencement of the work.
Any discrepancies in dimensions should be clarified with the Architect prior to commencement of the work.
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NOTES:

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