

Land at Darnau Farm
Glascoed, Wrexham

**Great Crested Newt
Conservation Plan**

July 2021

Produced by



www.wildbanksconservation.com

Report Version	Date	Completed by:	Checked by:	Approved by:
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The information we have prepared is true and we confirm that the opinions expressed are our true and professional bona fide opinions.

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1.0 INTRODUCTION

- 1.1 Mr. P. Billington commissioned Wildbanks Conservation to prepare a Conservation Plan for Great Crested Newts (*Triturus cristatus*) in relation to the development of the land at Darnau Farm as per the Preliminary Ecological Appraisal April 2021 and planning permission (BRY P/2021/0418). The purpose of this Plan is to outline how the ecological enhancements at the site should be managed in future to maximise the biodiversity value of the site, as well as details of protective measures to be taken to minimise the impacts upon GCN. The aim of the Great Crested Newt Conservation Plan is to satisfy planning condition 4.
- 1.2 The site visit and formulation of the Conservation Plan have been conducted and prepared by Mick Smith MCIEEM (NRW GCN license S087617/1). This report gives details of the daytime visit conducted on the 26th March 2021 and the reasonable avoidance measures and ecological enhancements considered necessary in order to comply with relevant legislation and conservation objectives.
- 1.3 The proposed development site is in a rural setting 7km Northwest of Wrexham city centre. It is surrounded by pastoral land and horse grazing land and woodland with hedgerows and small roads. Development proposals for the site are to build a barn to the west of Darnau farmhouse and to build a menage in the field adjacent to the farm with an area of hardstanding as an access point. The proposed location of the menage and access point falls within the boundary of Nant y Ffrith Local Wildlife Site (LWS), citation is within Appendix 2. The location of the barn does not fall within the LWS boundary. Horses currently graze within the Site.
- 1.4 This report outlines a great crested newt method statement and management plan providing appropriate recommendations for undertaking works in order to prevent any unlawful actions to be undertaken with regards to this protected species.
- 1.5 Great Crested Newts are protected under Schedule 5 of the Wildlife and Countryside Act (1981) as amended and the Conservation of Habitats and Species Regulations 2010 (as amended). Because of their rarity they are also

protected under Annexes IIa and IVa of the Habitats and Species Directive and under the Berne Convention.

Langton *et alia* (2001) make the point that:

“The wording in the 1981 Act and 1994 Regulations is slightly different.” “Taken together, the Act and the Regulations (following the CROW Act 2000) make it illegal to:

- *Intentionally or deliberately capture or kill, or intentionally injure great crested newts.*
- *Deliberately disturb great crested newts or intentionally or recklessly * disturb them in a place used for shelter or protection.*
- *Damage or destroy a breeding site or resting place.*
- *Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.*
- *Possess a great crested newt, or any part of it, unless acquired lawfully.*
- *Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.*

*Reckless offences were added by the Countryside and Rights of Way Act 2000, which applies only to England and Wales”.

2.0 RATIONALE

- 2.1 This section provides a brief overview of the site and the current status of GCN within it, and around the proposed application Site.
- 2.2 The location of the barn is within the garden of the farmhouse; habitat is dominated by amenity grassland with some herbaceous plants located around the periphery. A walnut tree (*Juglans regia*) is located within the garden its canopy spread does not cover any areas of the barn footprint.
- 2.3 Opposite Darnau Farm are two fields, a smaller one to the northeast (Field 1) and larger one to the southwest (Field 2) (Fig. 1 & 3). The menage is to be sited within the northern corner of Field 1. This northern section of Field 1 is species poor semi-improved grassland with locally enriched areas and very heavily grazed by horses and is extensively poached (plate 6). Field 2 is an acidic semi-improved grassland with a good assemblage of species (plate 9-10). Horse grazing has been significantly lower in this area, and it has become a wild grassland.
- 2.4 Between the two fields a ditch runs to a pond on the southern boundary, the ditch is lined with silver birch, hawthorn, goat willow, grey willow and bramble and soft rush. The pond is heavily shaded by willow trees and has significant amounts of grass within it. No other marginal species were evident. There is small areas of open water and little depth to it.
- 2.5 A Habitat Suitability Index assessment was carried out on the pond on the 26th of March 2021. The pond scored poor (4.88). This means that the habitat within the ponds is sub-optimal for GCN, and they are less likely to be present than if the ponds were scored higher in the HSI. No further ponds were located within 500m of site.
- 2.6 No works (prior to or proposed) will impact on any ponds themselves or their marginal habitats. Some works will destroy or disturb habitat within the Core Habitat Zone (50m zone around a pond).
- 2.7 It is considered unlikely that GCN would be present on the development Site or traverse it. The pond in closest proximity is heavily choked by vegetation and does not provide open water that is required by GCN for courtship

displays in the breeding season. The pond scored poor on HSI calculation, which does not remove the chance GCN could use it but does reduce its chance.

- 2.8 GCN disperse over land to forage for food and move between ponds; distances covered during dispersal will depend on habitat quality and availability. It is acknowledged that most adult newts likely stay within 250m of breeding ponds (English Nature, 2001; Langton et al., 2001) but may travel up to 500m if required. Newts are more likely to travel greater distances from their breeding ponds if there is higher quality foraging and refuge habitat extending beyond their breeding pond. In the context of the Site (and from review of aerial images); high quality terrestrial habitat (woodland, rough / marshy grassland) is present around the ponds within the wider area.
- 2.9 Provided that works within the development area adheres to the subsequent Method Statement, and that good terrestrial habitat around any ponds surrounding the Site are unaffected and that suitable mitigation measures listed below are implemented for great crested newts further surveys are not required. In addition, compensation measures should be implemented in the form of improving the existing pond for GCN (See Section 4.0).
- 2.10 It should be noted that during the construction phase it is possible the Sites value to GCN may increase through the presence of new features more 'attractive' to GCN, such as rubble piles, open excavations, stores of equipment or materials etc. The Method Statement below provides a number of measures that will have to be followed in order to minimise the chances of any individual GCN being killed or injured during the development.

3 PRECAUTIONARY METHOD STATEMENT

3.1 The objectives of this method statement are to:

- Ensure no harm to individual GCN occurs during the development
- Avoid committing an offence under the above-mentioned legislation; and,
- To ensure that favourable conservation status of GCN is maintained.

3.2 Any development related activities on the Site, such as vegetation clearance or excavations in areas of suitable newt habitat may potentially affect this species. As a result, safeguards must be implemented to protect this species and the Method Statement below details measures to be implemented to ensure an offence is not committed.

Toolbox talk

3.3 All site operatives will receive a briefing by a NRW licensed ecologist. The briefing would include details of the legal protection of Great Crested Newts, the precautionary methods of working (outlined in this document), tips on identification of Great Crested Newts and procedures to follow should the species be discovered during works. The briefing will form part of the Site induction process for each site operative. A GCN factsheet will also be pinned to the Site information board in the Site office.

Timing of Work

3.4 The construction phase will start outside of the overwintering period of newts (December – February). During this period the chance of disturbing GCN are minimal and the risk of disturbing hibernating newts is eliminated.

Hand Searching

3.5 Any areas that potentially offer refuge for GCN will require hand searching prior to disturbance. This will include but not be limited to concrete pads/foundations, log piles, vegetation, hedgerows, tree roots, rubble piles. Areas of tall vegetation will be cut 100mm in height and hand searched prior to being cleared. Any excavations will be back filled the same day or following a hand search. Any

clearance work to these areas, inside the overwintering period of newts (December – February), will be carried out by hand and must not be carried out when outside temperatures are below 5C.

- 3.6 During the hand searching, any debris (e.g., wood and rubbish) would be lifted and removed from the working area. Hand searching would be timed for immediately prior (i.e., within 24 hours) to the onset of works. If any GCN are encountered work must stop and Wildbanks Conservation or Wrexham Council Ecologist contacted.

Working methods

- 3.7 Only light machinery or hand tools to be used for the excavation operations.
- 3.8 Ideally the method employed for excavation works would be dig and backfill on the same day to avoid any trenches exposed overnight. If this is not possible, hand searching of the excavated area should be carried out by someone who has been through the toolbox talk or by a licensed ecologist and would be carried out prior to filling. 'Ladders' (timber planks or branches greater than 15mm in diameter) must be installed overnight to allow amphibian and small mammals to escape.
- 3.9 No arisings from excavations should be stored within the development Site as this may provide resting opportunities for GCN. Any soil removed from the development Site will be stored in its final resting position. Alternatively, arisings can be stored within skips on Site.

Storage of materials and vehicle movements

- 3.10 All material storage will be within the development Site and be raised off the ground by 100mm so as not to create resting places for newts (e.g., on pallets). All vehicle movements will be restricted to within the development Site and the access tracks and areas of hardstanding.

Procedure if Great Crested Newts are found

- 3.11 If a Great Crested Newt is found at any time during construction, all works would cease immediately. If not present on Site, a licenced ecologist would be contacted to make an assessment of the situation, remove the individual and to determine whether a licence would be required before work proceeds. If considered necessary, further guidance would be sought from Natural Resources Wales

4.0 Ecological Enhancements – Habitat Management Plan

- 4.1 As part of the Preliminary Ecological Appraisal April 2021 and planning permission (BRY P/2021/0418), it was recommended that a 5yr management plan was implemented in relation to the ecological enhancements recommended. This Habitat Management Plan (HMP) contains a list of enhancement measures contained within. These have been guided by the ecological surveys carried out by Wildbanks Conservation and is intended to build on the information contained within Preliminary Ecological Appraisal.

Time period covered by this Plan

- 4.2 This plan will need to be followed for five years between 2022 and 2027. Ideally this plan should be used in perpetuity as it includes simple management operations required each year.
- 4.3 The main aim of the HMP is to provide works that will maximize the biodiversity value of the Site and fulfill the ecological requirements of the European Protected Species for GCN and bats. The HMP proposes enhancement measures to mitigate any potential adverse impacts of the development on the ecology and nature conservation interests of the site. This will primarily involve the protection of habitats and species, mitigation and the creation and enhancement of habitats to diversify and improve biodiversity and conditions of the existing habitats on site.
- 4.4 It is proposed that this is a working document like all Management Plans should be. An aim has been established and agreed and this Plan provides details as how to meet that aim. However, alterations to plans do occur through changes to farming practices, natural events, accidents or changes to priorities and it is important that a Management Plan can accommodate this. As such a review of this Management plan is suggested to take place in year 3 (Autumn 2025).
- 4.5 Enhancement measures are listed below for the Site. Also refer to the calendar in section 4 for ongoing tasks.

- Action 1. Create refugia pile for reptiles within Ecological Enhancement Area
- Action 2. Create an Ecological Enhancement Area along the southern strip of Field 1 and 2 (to include the pond). To exclude grazing and manage as a grassland.
- Action 3. Removal of willow trees around the pond and reprofile to create deep areas, shelves and draw down areas
- Action 4. Plant hedgerow trees within the hedge along the northern boundary of Field 2 to infill hedge
- Action 5. Install 5 x bird boxes within the boundary trees of Fields 1 and 2.
- Action 6. Install one bat box (Schweglar 1FF or equiv.) and 3 swallow cups within new barn development.
- Action 7. Ditch improvement works

4.6 Action 1 – Creation of a reptile refugia on site. This will be in the form of a brash log pile. An existing log pile is on site; additions and improvements will be made through the use of brash created from pond clearance. Additionally, an egg-laying pile will be created through the piling of the meadow cutting arisings near the brash pile.

4.7 Action 2 – A 115m by ~15m (1750m²) ecological enhancement area will be created. This area will be excluded from grazing through the erection of stock fencing. The area will be placed on a 5yr management plant. The native grassland will be managed as a meadow. It will be subjected to two cuts a year: a mid-summer cut (late July to early August), and a late summer cut (end of September). All arisings will be placed upon refugia pile within site. Spot treatment of some undesired perennial weeds, such as docks or thistle will be carried out for the five-year management period.

4.8 Action 3 – The current pond on site is heavily shaded and silted up, evidenced by the reduced water levels and vegetation growing within pond. It is recommended the pond should be re-profiled creating a central minimum depth of 1.5m and have marginal shelves no more than 300mm deep for 6m of its edge, and the willow cleared. Arisings from willow clearance will either be used to create a

hibernacula or used in the creation of Action 4. Further works will be carried out along the ditch to north, which feeds into the pond.

- 4.9 Action 4 - Cell grown trees (45-60cm) to be planted within gaps of existing hedge line to north of Field 1 to form a solid hedgerow. Trees will be planted with biodegradable tubex guards (75-110mm diameter) or similar, timber stakes, and 0.5m x 0.5m weed suppressant mats of jute material secured using 5 bamboo pegs. Trees planted at 5 per metre in staggered line separated by approx. 250mm. Planting species mix will contain hawthorn (30%), blackthorn (30%), Elder (10%), Hazel (10%) Crabapple (10%) and Holly (10%). New planting will be protected from horse grazing by stock proof fencing some 2m from line of nearest trees to stop horse browsing new trees. Any tree losses will be replaced within the 5 years like for like.
- 4.10 Action 5 – In total 5 bird boxes will be installed within Fields 1 & 2. These boxes will be a mix of 1B Schwegler Nest Box (x3) (26 and 32mm holes), and 2H Schwegler Robin Box (x2); or similar box styles. 1B boxes will be hung at 1.5 metres or higher and will face away from prevailing winds. 2H Schwegler Robin Box will be placed in inconspicuous trees within fields and hidden amongst vegetation growth for predator protection.
- 4.11 Action 6 – Once the barn development is complete 3 swallow cups will be installed, along with one bat box (Schweglar 1FF or equiv.). The bat box will be installed on the western aspect of the barn, overlooking the adjacent field.
- 4.12 Action 7 – Cut areas of bramble along length of ditch and clear silt from ditch. Excavator to be working from one side only so that one side is left undisturbed.

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A1 Appendix – Site Photographs

A1.1 Plate 1: View of plot for the building of the barn, looking northwest



A1.2 Plate 2: View of plot of the menage, facing north



A1.3 Plate 3: View of plot of menage facing East



A1.4 Plate 4: View of menage plot facing south



A1.5 Plate 5: heavily grazed ground within plot of menage within Field 1



A1.6 Plate 6: remainder of Field 1 to the west of the menage plot facing northwest, no development works to take place.



A1.7 Plate 7: Pond 1 showing grass within it and heavy shading from trees



A1.8 Plate 8: Central tree lined ditch between Field 1 and 2



A1.9 Plate 9: Field 2 and area of Ecological Enhancement Area



A1.10 Plate 10: Field 2, southwestern boundary facing south



A1.11 Plate 11. Area of refugia within Field 2 and within Ecological Enhancement Area to be retained



A2 APPENDIX – LOCAL WILDLIFE SITE CITATION

25SE01 – Nant y Ffrith, 89.4ha

Large area of conifer plantation about half of which has been recently felled and some parts planted with broad-leaved saplings. Within this site are areas of mixed woodland and birch scrub. The Nant Y Ffrith river runs along the southern boundary of the site. Where felling has occurred in the north west area, birch, heather and wavy hair-grass are dominant. The woodland ground flora occurs largely along tracks and includes plants such as wood sedge, great wood-rush, dog's mercury, hard fern, sanicle, wood millet and yellow archangel.

W210 – Nant y Ffrith. 47ha

A large wooded area on the steep sided valley of the Nant y Ffrith. The river has steep cliffs and waterfalls. There are large areas of conifer plantation. The broad-leaved woodlands are dominated by downy birch with willows and the ground flora is dominated by heather, bilberry and wavy hair-grass with occasional ferns. Bryophytes are frequent including Sphagnum species. There are several disused quarry sites surrounded by birch woodland and dwarf dry heath. Along the forestry tracks broad-leaved helleborine and common spotted orchid are found. Erosion has occurred in one disused quarry site by motor bikes. Bird species present include bullfinches and dippers. There is a herb rich semi-improved neutral grassland to the east with abundant catsear, ribwort plantain and black knapweed plus common spotted orchids occur. Darnau field is a species rich acid grassland which is grazed by cattle. It is marshy with frequent rushes and sedges and some Sphagnum species. Common bent and sweet vernal grass are dominant and common spotted orchid and lousewort occur. There is a drain across this field with hawthorn and willow bushes. The surrounding gappy hedge includes crab apple.

W202 – Glascoed Wood. 38.2ha

A large ancient broad-leaved woodland along the Glascoed valley, part of which is steep sided. The wood is dominated by oak, ash and sycamore with an area of hazel coppice and a section of larch plantation. In the shrub layer hazel, holly and rowan are frequent. There is a rich ground flora which includes frequent bramble, broad buckler fern, soft grass, bluebell and greater wood-rush. Bryophytes, yellow archangel and woodruff are occasional. The northern end of the wood has disused mines with birch and willow scrub with small patches of herb rich grasslands. A small hay field to the west is a diverse semi-improved neutral grassland dominated by common bent and ribwort plantain with abundant sweet vernal grass, crested dog's-tail and yorkshire fog. Common spotted orchid and yellow rattle are also found here. Other herb-rich semi-improved grassland with sweet vernal grass and common bent, black knapweed, sharp-flowered rush, crested dog's-tail and yorkshire fog occurs along the western edge of the woodland. Sneezewort, greater bird's-foot trefoil and lesser spearwort also occur. Towards the southern end, alder trees are encroaching.

Figures

Figure 1. Site location plan

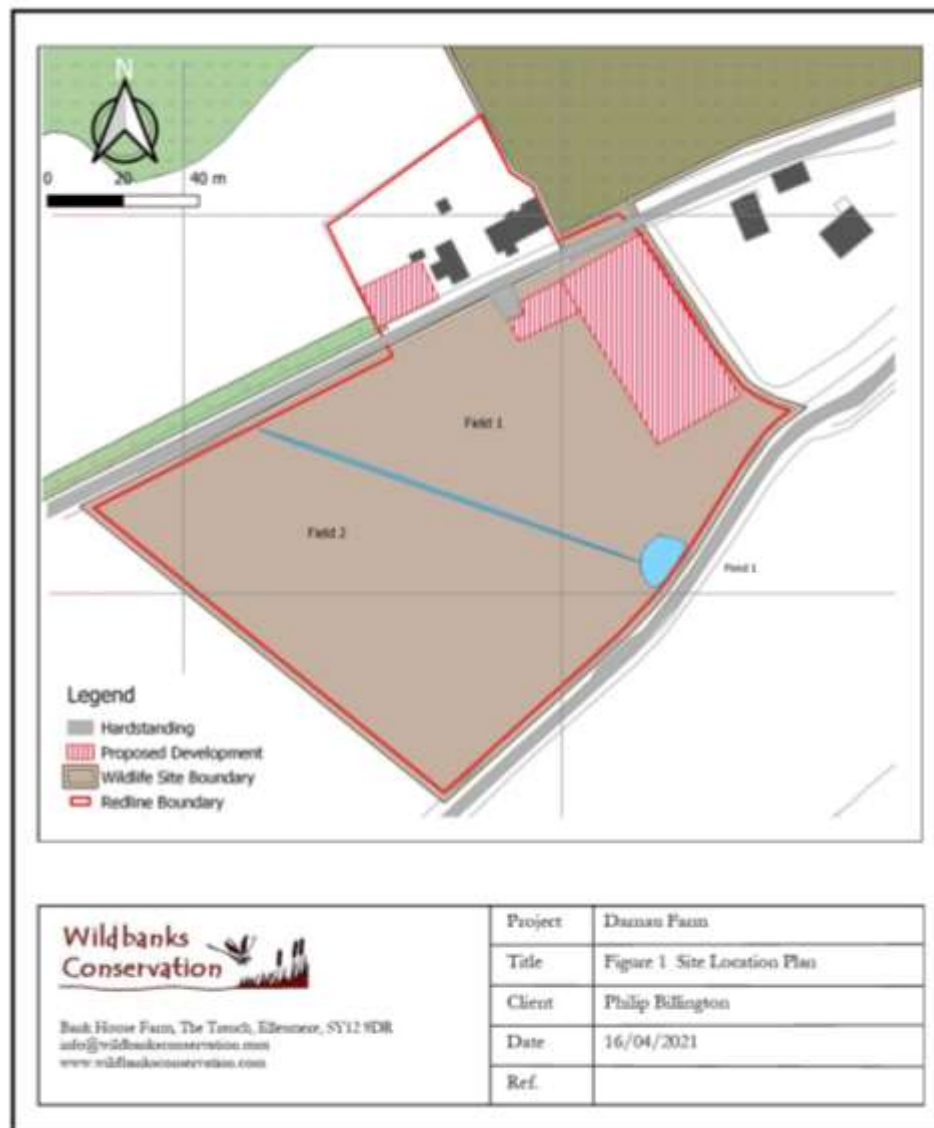


Figure 2: Local Wildlife Site location plan

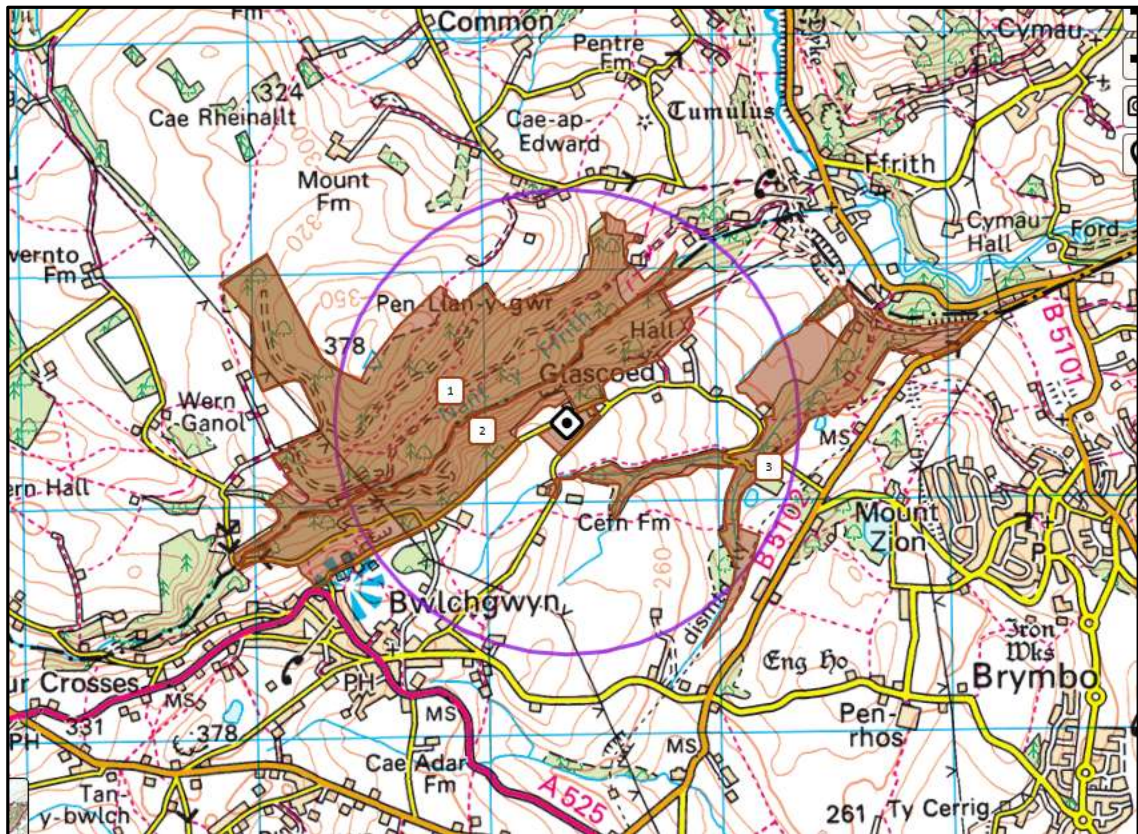
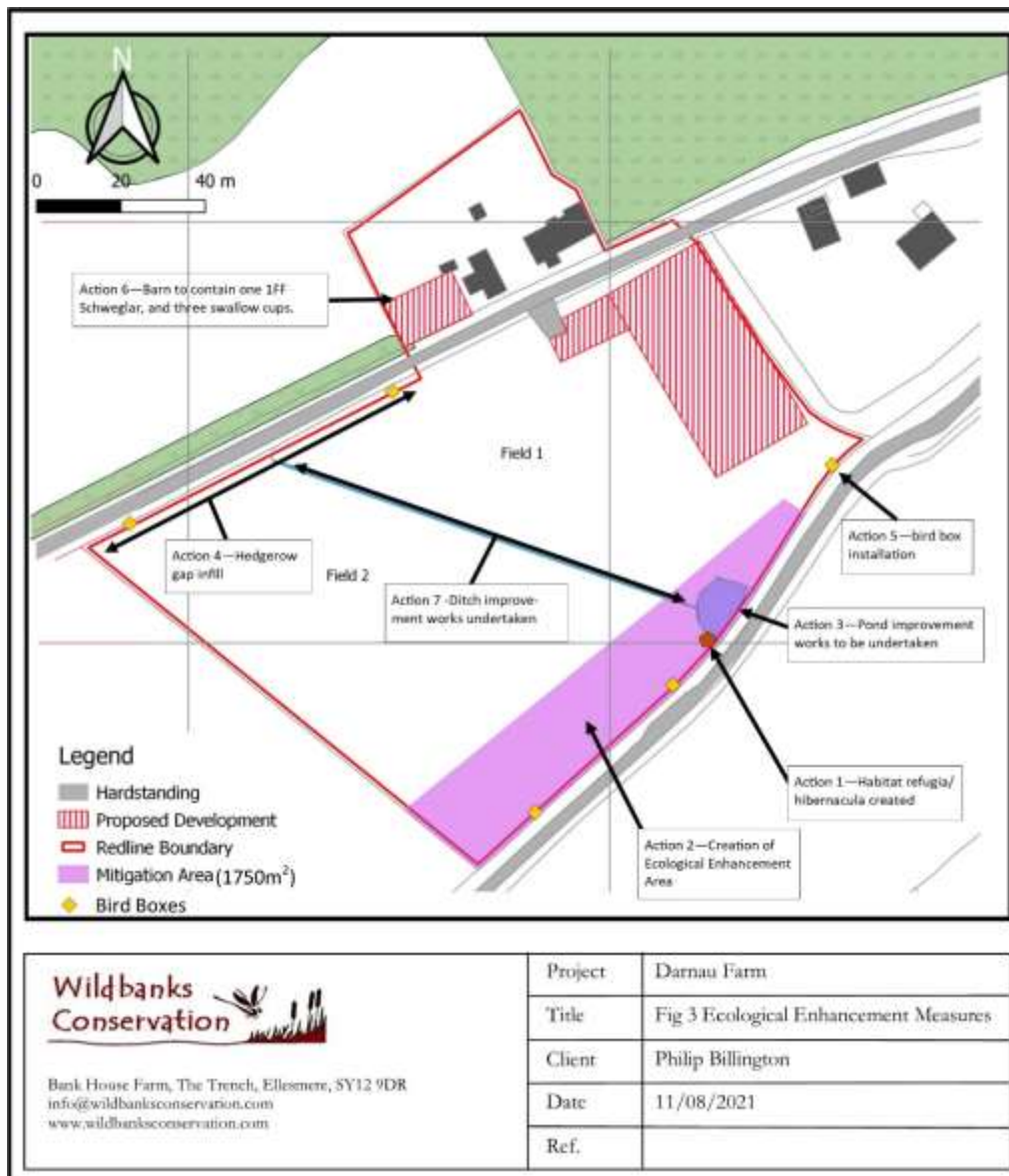


Figure 3. Ecological Enhancements Measures



5.0 REFERENCES

English Nature (2001) Great Crested Newt Mitigation Guidelines. English Nature.

Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001), Great Crested Newt Conservation Handbook, Froglife, Halesworth.