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MANAGEMENT PLAN AND METHOD STATEMENT

HOME FARM, GRESFORD ROAD, LLAY.

Site: Land at Home Farm
Gresford Road
Llay
Wrexham

Clients:

Anwyl Homes
Anwyl House
St David's Park
Ewloe
Flintshire
CH5 3DT

Bellway Homes Limited (North West)
2 Alderman Road
Hunts Cross
Liverpool
Merseyside
L24 9LR

Job Ref.: 0942-Home Farm Report – Release of Condition-V4

1.0 INTRODUCTION

EDC has been instructed to undertake an ecological management plan and ecological method statement with regards to the findings and recommendations within the Ecological Assessment undertaken by TEP (TEP Report Reference: 4358.01.001) June 2014, findings and recommendations within the Penny Anderson Associates (Great Crested Newt Assessment and Mitigation) October 2016, comments within the Planning Inspectors Report ref: APP/H6955/A/16/3147116. This plan and statement will address the requirements as set out within the reports, the Welsh Assembly Government Technical Advice Note 5, 'Nature Conservation and Planning' and Local Planning Guidance Note No.32 in respect to the reserved matters application, and the conditions attached to the Welsh Ministers decision to allow planning appeal APP/H6955/A16/3147116 – Outline decision for up to 365 dwellings and erection of 300 sq.m retail unit – all detailed matters reserved at Home Farm, Gresford Road, Llay, Wrexham. This statement considers the impacts in relationship to the preliminary layout plan reference: - AH085-NTS1 and provides recommendations for mitigation.

2.0 DRAFT CONDITION 8

Condition 8 of the outline planning permission states:

8) An ecological management plan and ecological method statement, to include details of all surveys recommended by TEP Ecological Assessments (Reference 4358.01.001 Version 1.0 June 2014) for the approved site, shall be submitted to and approved in writing by the Local Planning Authority as part of the first reserved matters application. This information shall demonstrate how the findings of the surveys have informed the layout of the development, show how existing features of ecological interest will be protected, including protection measures during the construction period, identify areas of compensation and mitigation,

include biosecurity risk assessments and demonstrate the management and monitoring of the site in the long term. The management plan and method statement as approved shall be fully implemented in accordance with timescales to be agreed in writing as part of the approved details. All subsequent reserved matters applications shall be submitted in accordance with the approved ecological plan and ecological method statement unless otherwise agreed in writing by the local planning authority.

3.0 SUMMARY OF SURVEYS

The surveys undertaken to accompany the planning applications, identified the following main ecological points, which have been identified on site and are addressed fully in the main texts of the reports:-

TEP Report – June 2014

- The most significant features for wildlife identified were the waterbodies, mature trees and hedgerows for Bats, Great Crested Newt (GCN) and Nesting Birds.
- The report recommended further survey with regards to Bats, GCN and Nesting Bird.
- The invasive species Japanese Knotweed and Ornamental Cotoneaster have been identified within the road boundary to Gresford Road.

Penny Anderson Report – October 2016 (GCN Specific)

- EDNA results recorded a positive within the cluster of ponds referenced no's 4 to 10
- Distance from the pond sites 4 to 10 was in excess of 170 m and located on the northern side of the Straight Mile, further reducing the potential of GCN being present within the development zone.
- The implementation of Reasonable Avoidance Measures was recommended
- A draft mitigation/landscape strategy was put forward

EDC Report – June 2017

- Predominantly the main area of development is on species poor improved grassland
- Badger activity has been recorded along the eastern and southern boundaries of the site, no setts have been identified within 50 m of the site boundaries
- The EDNA surveys undertaken during the 2017 spring surveys plus the torch count survey recorded a negative for the protected species GCN
- Any features lost need to be negated and mitigated for through the development landscape biodiversity enhancement
- The boundary features should be retained and managed to improve their diversity

- Loss of hedgerows due to the development layouts to be compensated for by planting of equivalent native species within the green space.

- Biodiversity enhancement by including bird/bat boxes and bird soffit boxes and bat bricks to be considered where feasible.

- Mammal friendly fencing to the rear gardens to allow the passage of hedgehog, small mammal etc.

- No major adverse impacts on species or habitats have been identified

4.0 SITE

An updated survey was undertaken by EDC, June 2017, the survey addressed the points as identified within the previous surveys by TEP and Penny Anderson. The survey area is as previously identified and outlined in the application, the area to be developed lies to the east of Gresford Road and south of The Straight Mile, Llay, Wrexham. The survey area is dominated by improved agricultural grassland bordered by species poor, highly managed hedgerows. The site is spilt into 5 fields, an area of hard standing and an agricultural shed. The site is level and is approximately 12 Ha in area. Access to the site is off Gresford Road, via a short farm access road to an area of hard standing and a single agricultural shed formed by a steel portal frame and steel sheet cladding. The shed has direct flight through the northern and southern elevations. The shed is used for farm machinery storage and cattle pens. The main features are considered to be a line of mixed species trees adjacent to Gresford road, a wet ditch line in the same location and a seasonal water body to the south of the site. The site is generally managed by grazing stock and forage crops.

Fig 1: Aerial Photograph of the application area

The northern field boundary is onto The Straight Mile, with a mix of arable and grazing pasture beyond, the eastern field boundary is onto improved grassland, with a public footpath adjacent to the boundary running north south. The Southern boundary is onto a mix of semi-improved grassland and formal gardens. The western boundary is onto Gresford Road with housing developments beyond. The present proposals are for housing, the field within the north western corner of the site is not included within the housing development proposals.

No designated sites are located within the development area or abut the development area.

5.0 EXISTING DATA

Data search from the COFNOD, NBN Atlas and local records.

AMPHIBIAN: - No data is available for the immediate site. The nearest records are to North West of Llay Industrial Estate. Water Bodies are recorded on site and adjacent to site at varying distances from 40 to 450 m of the site boundaries. The location of the water bodies in relationship to the site areas recorded on fig 2.

MAMMAL: - No data was available at the time of survey for the immediate site area for either, Badger, Bat, Otter or Water Vole. However the following species are to be found within the locality:-

Otter *Lutra lutra* – nearest records are 1000 m south east

Water Vole Arvicola *amphibious (terrestris)* – no local records for this species

Badger *Mele mele* – nearest records are 200 m east

Bat *Chiroptera* - nearest records are 550 m north

The following species have been recorded locally and at a county level

Pipistrelle Pipistrellus *pipistrellus/pygmaeus*
Brown Long-eared *Plecotus auritus*
Lesser Horseshoe *Rhinolophus hipposideros*
Daubenton's *Myotis daubentonii*
Whiskered/Brandt's *Myotis mystacinus/brandtii*
Natterer's *Myotis nattereri*
Noctule *Nyctalus noctula*

6.0 SURVEY AREAS

As outlined in Fig 1 and the attached phase 1 plan

7.0 LEGAL PROTECTION

Under the 1981 Wildlife & Countryside, and the 2000 Countryside Rights Of Way (CROW) Act, it is an offence to "intentionally" or "recklessly" kill, injure or take any legally protected species. In some cases, even the species' habitat and places of shelter are protected.

7.1 GREAT CRESTED NEWT/BAT:

Both British and European laws protect the species and its habitat. In Britain it is protected under Section 9 (Schedule 5) of the Wildlife & Countryside Act 1981 (as amended), and by The European Union's "Habitats Directive" (Council Directive 92/43/EEC (a) on the Conservation Of Natural Habitats and of Wild Fauna and Flora. The Habitats Directive is implemented in Britain by the Conservation Regulations 1994. Under this legal protection (and with the minor amendments of the CROW Act 2000 in England & Wales), to be superseded by the introduction of "The Conservation of Habitats and Species Regulations 2010" which came into force on the 1 April 2010, it is an offence to:

- Intentionally or deliberately capture, kill or injure.
- 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 an animal, or any part of it, unless acquired legally.
- Sell, barter, exchange or transport or offer for sale or parts of them.

7.2 BIRDS:

All British birds, their nests and eggs are protected in law. It is an offence under Part 1 of The Wildlife & Countryside Act 1981 *as amended* (and with the minor amendments of the CROW Act 2000 in England & Wales) to intentionally or recklessly kill or injure any wild bird or to take, damage, or destroy any nest or egg of any wild bird. However, Schedule 1 of the Act provides an additional tier of protection so that rare species (e.g. barn owl) are specially protected by increased penalties and cannot be intentionally or recklessly disturbed when nesting.

7.3 MAMMALS:

All of the British species of bat are protected under the W&C Act 1981 (as amended). This protection is also extended to the otter (Lutra lutra), and the water vole (Arvicola terrestris). The badger (*Meles meles*) is protected under the Protection of Badgers Act 1992. Included in the Act it is an offence to damage any part of a sett or destroy it; obstruct access to any entrance of a sett; or to disturb a badger when it is in its sett.

8.0 LIMITATIONS TO RESURVEY

8.1 The initial walk over survey was undertaken on the 14 March 2017 at the beginning of the growing season. The grass sward was developing and retained a medium height as the grassing stock had only recently been introduced to the western fields. The eastern fields recorded a short sward due to sheep grazing. The short sward as a result of grazing has an impact on the plant species recorded. However it is felt that the area to be developed is primarily located on the areas of improved grassland which tend to be species poor thus the impacts on floral species will remain as identified.

8.2 The EDNA survey was undertaken early in the season, 21 April 2017. The early sampling was backed by early seasonal recordings of GCN within ponds. The follow up torch count survey was undertaken on 17 May 2017; both surveys recorded a negative for the ponds surveyed. This year's season has been dry and concerns with regards to reduced amphibian activity and

the validity of the survey results have been raised in this case with both Matthew Ellis NRW and Emma Broad, Wrexham County Council Ecologist, it was agreed by both parties that the results would be accepted although a precautionary approach should be reflected in the recommendations with regards to this species.

9.0 METHODOLOGIES

The following methodologies have been followed in undertaking the follow up surveys to identify any variation to survey identified and recommended within the TEP survey dated June 2014, and amend the recommendations accordingly.

9.1 *HABITATS/FLORA:*

Walkover survey to record floral species and classify and map the habitats in accordance with the JNCC Phase 1 Habitat Survey methodologies

9.2 *GREAT CRESTED NEWT*:

A walkover survey to identify potential breeding pools and refugia sites within the survey area was undertaken on the 14 March 2017. This was followed up by a desktop survey to identify any local records for this species within 500m of the site.

EDNA sampling was undertaken to all of the ponds identified within 250 m or direct habitat connection with the site. The EDNA sampling was undertaken on the 21 April 2017

A supplementary torch count survey was undertaken on the evening of the 17 May 2017 by licensed surveyors

9.3 *BADGER*:

Search for field signs (paths, latrines, foraging) indicating the presence of this species and if discovered an extended search up to 30m beyond the survey boundary for the presence of a sett(s).

9.4 *BATS*:

Walkover to identify any potential roost or foraging habitat within the survey area. Detector transects were also undertaken at the same time as the GCN torch count surveys.

9.5 *BIRDS*:

An assessment of habitat suitability for nesting sites.

9.6 *WATER VOLE:*

A walkover survey to identify any potential water bodies, search for field signs (paths, latrines, foraging) indicating the presence of this species

10.0 RESULTS

10.1 *HABITATS/FLORA:*

10.1.1 *B 4 Improved Grassland.*

The dominant habitat is the large areas of improved agricultural grassland, managed by grazing and fodder crops. None of the species recorded are considered to be species of local or national importance.

10.1.2 *J 2.1 Intact Hedge*

The boundaries are defined by species poor perimeter and internal hedgerows. The hedgerows are historic circa 1900's but have been managed seasonally to retain a short narrow hedgerow. Due to the grazing by stock and the singular sided stock fencing, the hedgerows have become leggy with a thin under store. The dominant species is Hawthorn with some areas of Holly.

10.1.3 *J2.5 Wall*

The southern section of the western field boundaries are formed by random rubble walling, backed by sections of hedgerows. An area of Japanese Knot weed is recorded on the verge side of the walling alongside Gresford Road as noted on the attached Phase One Plan.

10.1.4 *J3.6 Buildings and J4 Bare Ground*

The site only records a single agricultural building formed by a steel portal frame and corrugated sheet cladding. The building is used for machinery storage, barn and stock shed. The building has direct flight access through the southern and northern door ways.

The building stands at the northern end of a mixed surface stack yard, comprised of areas of concrete and hard cores. The stack yard is bunded and screened along its western edge; the screen is formed by planted cypress stock. The stack yard is used for storage of materials, wood, tyres and farm implements.

10.2 *GREAT CRESTED NEWT:*

The surveys identified 14 water bodies within 500 m of the site boundaries, of which 2 are recorded within the site boundary and 9 are within 250 m of the site boundaries. The TEP and the secondary Penny Anderson surveys have undertaken Habitat Suitability Index assessment for 12 and 9 of the water bodies respectively, water bodies 2A and 13 were not included in the TEP and Penny Anderson assessments. The location of the pond sites are as identified on Fig 2.

10.2.1 Pond Descriptions

Pond 1 – Ephemeral pond only recorded during the winter months or at times of heavy rainfall. At no time during the 2017 season's surveys did this site record water or vegetative evidence of seasonal water.

TEP – HIS result – Poor
EDNA result – negative
Torch Count – negative

Pond 2 – Field pond located 280 m to the east of the development boundary. The pond site is fed from a piped surface water drain from the west. The site is heavily puddled by cattle and records shallow water interlaced with grasses and muddy pools.

TEP – HIS result – Average
EDNA result – negative
Torch Count – single adult Smooth Newt

Pond 2a – A small field pond located 200 m to the east of the development boundary, recorded historically on the OS mapping system. The pond recorded water during the walkover survey, but was dry at the time of the EDNA survey and the Torch count survey

TEP – HIS result – Not Recorded – EDC – assess Average
EDNA result – N/A
Torch Count – N/A

Fig 2: Pond Locations

Ponds 4, 5, 6, 7, 8, 9 and 10 – A series of 6 ponds located 170 m to the north east of the development boundary on the northern side of the Straight Mile Road. The ponds are located within a small wooded area between arable farming land. The ponds are heavily shaded and record fishing platforms to suggest that the water bodies record fish.

TEP – HIS result – Average
EDNA result – negative
Torch Count – negative

Pond 11 – A small field pond located 190 m to the south east of the development boundary. The pond stands at the junction of a hedgerow and Cegin Lane. The pond is over shaded by the hedgerow and trees. The pond recorded water during the walkover survey, but was dry at the time of the EDNA survey and the Torch count survey.

TEP – HIS result – No Access, EDC - assess Average
EDNA result – N/A
Torch Count – N/A

Pond 12 – Large field pond formed as mitigation following reinstatement of the sand quarry. The pond is located 450 m to the south east of the development boundary within a small valley area. The pond has limited connectivity and is separated from the site by Cegin Lane. No access to the site was gained during the surveys.

TEP – HIS result – No Access
EDNA result – N/A
Torch Count – N/A

Pond 13 – Medium field pond located 40 m to the north west of the development boundary. The pond is located within dense scrub and self-generated tree stock, at the junction of Rackery Lane and Chapel Lane. The site is over shaded and would suggest that the site is partially fed by highway surface water. The pond records no marginal or sub aquatic vegetation.

TEP – HIS result – Not Recorded – EDC – assess Poor
EDNA result – negative
Torch Count – negative

10.3 *BADGER*:

The COFNOD data search records a presence for Badger 200 m to the east of the site boundary, however it does not define the type of record, i.e. field signs, observation or sett. The walkover survey did record evidence of foraging within the development area primarily along the eastern boundaries, the field signs are shown on the attached phase one plan. Anecdotal reports suggest that the sett is located to the south of the Cegin Lane. During the amphibian torch count survey, two adult Badgers were seen foraging along the eastern side of the eastern boundary, the Badgers when spooked, fled in the direction of Cegin Lane which would suggest that the sett or setts lie in that direction. The surveys have not identified any setts within the development boundaries nor within 50 m of the site boundaries to date.

10.4 *BATS*:

The TEP report and the Inspectorate report references the mature trees alongside the site boundaries, primarily the linear section of Oaks and Pines alongside Gresford Road in the north western corner of the site. All of the mature tree stock is recorded within the development boundary features to the site and to be retained as part of the development works as noted by the inspectorate. On observation few of the trees recorded any potential for use by bats, although some ivy cover, which is considered to be thin and a few small defects have been recorded. The buildings to be removed are modern portal frame buildings with steel corrugated cladding which offers little to no potential to support bat roosts. The general area is considered poor in respect to foraging habitat for bats, the grassland and the hedgerow are considered to be species poor which reflects in the limited diversity of the flying insects and moths. Similarly the hedgerows are heavily managed to a low height offering little protection from wind which again reduces the foraging by bats in adverse conditions.

Transect surveys were undertaken on the evening of the 17 May 2017, the transects were undertaken at the time of the GCN pond surveys as an auxiliary survey. The results from the detectors were as expected within the open field areas; no activity was recorded within the main development areas at the time of survey. Some foraging activity was recorded over pond 2 for 45 kHz Pipistrelle.

10.5 *WATER VOLE:*

The development site only recorded two water bodies; neither of the sites recorded any evidence of use by this species. The ditch P3 has insufficient suitable terrestrial habitat to support this species and the Pond P1 is ephemeral and has no recorded vegetation or banksides suitable for foraging or dry burrow systems.

10.6 *BIRDS*:

There are potential nesting sites for many species within the boundary hedgerows and trees. The main grassland areas are void of any potential nesting habitats. The stock grazing and the removal of the grassland as forage crops have reduced the nesting potential. The surveys did record commoner species of bird, mainly within the boundary hedgerows, Wood Pigeon, Robin, Starlings, House Sparrow, Gold Finch, Chaffinch, Great Tit, Blue Tit, Song Thrush, Dunnock, Blackbird and Long-tailed Tit. Starlings, House Sparrow and Song Thrush are recorded on the Birds of Conservation Concern red data list, and Dunnock is recorded on the amber list.

The Agricultural sheds also records a potential for nesting birds as does the stored and discarded materials in the stack yard for the likes of Swallow, Pied Wagtail, Robin and Wren.

11.0 RECOMMENDATIONS

11.1 *HABITATS AND BIODIVERSITY:*

The site as it stands is considered to be species poor, and the survey results reflect this in the species identified utilising the site. The recorded water bodies are also of little value, Pond 1 is ephemeral and only retains water in flood condition and P3 the linear ditch is primarily a

filter bed for grey water outfall form the existing offsite septic tank. The following habitat and biodiversity enhancements are therefore being recommended:-

11.1.1 The development landscape plan is to encompass the landscape strategy plan for the amphibians, and the biodiversity enhancement recommendations for Badger, Bat and Birds as set out below, this will greatly enhance and increase the species diversity of the site post development.

11.1.2 The landscape plan should also consider improvement of the biodiversity value of the retained hedgerows by secondary and inter planting of diverse stock, to allow the hedges to thicken and develop a species rich under store. The planting should also include the introduction of fruit bearing stock, crab apple, blackberry, hazel. On reseeding the open space grassland more diverse species rich mixes should be considered.

11.1.3 To allow active use of the rear gardens of the properties by small mammal, the type and method of boundary separation is to be considered. Fencing should be erected without the use of concrete gravel boards, and be of an open fence type to the rear field boundaries/green space, this will allow access for locally threatened biodiversity species like Hedgehog which are impacted heavily by closed gardens.

11.1.4 As part of the landscape plan, a post development open space management plan will be required to include management to ensure the retention of the biodiversity value of the wildlife enhancement features. The plan should consider rotational hedgerow management, development of varying swards within the grassland management, variation of seasonal cutting to develop seasonal variation of flowering species and seed development with some areas allowed to develop tussocky grassland for the likes of voles and shrews.

11.1.5 As a biodiversity enhancement and to counter the loss of some of the identified features the following enhancement strategy is being recommended:-

LANDSCAPING ENHANCEMENT STRATEGY:

a) Hedgerows to be retained where feasible, enhanced and inter planted with native stock to increase the species diversity to compensate for the net loss of the internal species poor hedging.

b) The southern, northern and eastern boundaries to be enhanced to form green corridors to enhance connectivity. Secondary planting is to be planted along the corridors adjacent to the existing hedgerows.

c) The formation of a canalised swale and ditch system along the southern boundary to help feed water to the newly created pond.

d) The proposed green spaces to be enhanced with planting to increase the biodiversity value of the site. The planting is to be detailed in the site landscape plan

e) The green spaces grassland to be sown with species rich grass seed mixes along with a variable grass management scheme so as to enhance seasonal biodiversity value of the introduced green spaces.

f) The existing trees within the north western boundary and southern boundary to be managed and retained in perpetuity as part of the landscape scheme. Damaged or diseased stock to be replaced with equivalent species.

11.2 *BADGER:*

The walkover survey and the night time survey identified foraging of the species adjacent to the eastern boundary of the site and evidence of foraging within the grassland within the site boundary. Badgers are creatures of habit and are highly likely to continue utilising the site during the development process and post construction therefore continuous use of the site needs to be managed as part of the development process with the following recommendations being put forward:-

a) During the construction period any trenches/excavations over 600 mm deep should either be guarded over night or left with an incline no greater than 40 degrees at one end of the excavation, this is to allow any trapped animal which has entered the system a means of escape.

b) Any open drainage with an internal diameter greater than 150 mm should be blocked each evening at the finish of works; this is to prevent access to the drainage system by badgers and to ensure no Badgers are trapped within any piped system.

c) Any stored materials which have voids which Badgers can gain access to should be visually checked before being transported around site.

d) Bunded stock piles of sub soils, top soils etc. should be checked regularly, specifically each start of the working week to ensure no outlier setts have been opened up.

e) On completion of the works it is likely that Badgers will enter the site through the south and eastern boundaries to gain access to the historic foraging grounds. The grassland within the southern borders is to be enhanced and managed to allow for worm foraging along the borders and similarly planted with seasonal fruit bearing stock, crab apple, blackberry etc., this is to reduce the need to forage further afield.

Traffic calming is to be considered along the eastern and southern road systems in accordance with Highways adoptable standards.

11.3 *BAT:*

The TEP recommendations identified a potential impact on the line of trees along the western boundary at its northern end, and advised that further survey was undertake. This advice was however based on the outline application. The proposed layouts however, show these trees being retained with no direct impact onto the treeline by the development proposals. On further survey of the trees it was found that the trees offered little to no potential for use as bat roosts. This assessment was undertaken by a licensed bat consultant with 32 years of licensed experience.

The surveys identified limited potential for roosts and foraging within the proposed development zone, due to species poor grassland and heavily managed species poor hedgerows and the limited mature tree stock, which is located generally within the retained boundaries of the site.

Based on survey of previous sites it has been found that sites that offer these types of habitats generally offer poor foraging habitats, and tend only to be used by small numbers of bats, which was confirmed during the transect surveys in this case.

The general development of the site and the enhancement of the green spaces and the formal gardens of the housing stock will in itself increase the biodiversity value by increasing flying insect diversity for foraging bats and the housing stock inadvertently creates connectivity and potential roost opportunity.

As part of the scheme street lighting will be a requirement as part of the highway standards; however careful design of the lighting so as to minimalise light spillage over the green spaces and the southern and eastern corridors will greatly enhance these areas for use by foraging bats over that which presently exists on site.

The inclusion of bat boxes within the development is to be considered as biodiversity enhancement, with preference for placement being garages, facilities buildings etc. A suggested location of the bat boxes is shown on the Biodiversity enhancement plan Ref 0942 MIT-01A. The houses chosen should be located adjacent to the open green spaces and away from any statutory lighting. The bat boxes are to installed away from doors and windows and preferably adjacent to landings bathrooms etc. away from bedrooms. One bat box per elevation, i.e. north, east, south, west orientation.

As a precautionary approach, any proposed management works to any of the retained boundary mature trees should be preceded by a site specific survey to cover the variation to the potential for roosting bats and nesting birds since the report surveys being undertaken. Where feasible any management works should be undertaken outside of the breeding season May to September and before hibernation November through to March dependant on seasonal conditions.

11.4 *BIRDS:*

The areas of scrub and hedging within the survey area have a high potential for use by nesting birds. It is therefore recommended that any scrub/hedge clearance or tree works are undertaken outside of the nesting season. If works are undertaken within this period then it is recommended that advice from a suitably qualified ecologist must first be sought and check surveys undertaken. Undertaking surveys may facilitate the removal of sections of vegetation that are free from nests and also highlight areas that have a greater potential for nesting birds, specifically ground nesting birds within ruderal herbs, rank grassland etc.

It is also recommended that if there is a period between the cease of the farming activities on site and the development of the site, all grassland areas should be managed to retain a short sward and maintained during the construction period, this is to reduce the potential for nesting during the development stage.

It is recommended that the hedgerow boundaries are managed and retained on site and enhanced where required. In positions where it is feasible, hedges of native species should be planted and any standard trees planted should be selected to provide foraging opportunities for insects (blossom) and birds (berries), and year-round cover and nesting sites for birds.

The landscaping enhancement strategy noted above should aid the development of a landscape plan that offers greater biodiversity within the green spaces which will provide cover and additional nesting sites for birds, and flower borders to provide foraging opportunities for insects. Open grasslands are also important for ground feeding birds like Blackbird.

11.5 *GREAT CRESTED NEWT:*

The TEP recommendations where based on the original outline planning application and prior to the Penny Anderson eDNA surveys and reference Natural England license applications requirements. Any license application, recommendations would be given in this instance by following Natural Resources Wales (NRW) guidance. The following recommendations are therefore being put forward based on the proposed planning layout reference AH089 – PL03 Rev D

11.5.1 The development site only records two water bodies, an ephemeral pond P1 and a wet ditch P3.

11.5.2 Pond 1 – (P1) – The ephemeral pond is located in the southern field and is recorded over an existing drainage system. This would explain the drying of the pond seasonally and only being present during periods of continuous wet weather. The immediate grassland flora would confirm this, as little visual variation in flora within the grassland is recorded. This pond has never had sufficient water present within the accepted survey periods for Great Crested Newt (GCN).

11.5.3 Pond 3 – (P3) - The wet ditch is the results of the effluent (grey water) outfall form the adjacent dwellings septic tanks. The ditch varies in water content and dries periodically. The ditch line is heavily vegetated and is occasionally cleaned out at its northern end. This year's surveys undertook eDNA sampling followed by a torch count, this ditch line to date has recorded a negative for GCN and other amphibian species.

11.5.4 The 2017 season survey recorded a negative at all of the sites which retained water suitable for survey. Only a single record for 1 adult Smooth Newt was recorded within Pond 2 (P2), no other amphibians have been recorded during the surveys.

11.5.5 The Inspectors report references the appellants witness statement and the Penny Anderson report which was commissioned during the 2016 survey season as supporting documentation for the planning application. Only eDNA surveys were undertaken due to seasonal constraints, the results however recorded a positive for GCN in ponds 5, 6 and 7. These ponds lie within a group of old fishing ponds, the ponds are interconnected by small channels, to which during certain seasonal conditions can be classed as a singular water body.

11.5.6 All reports agree that the group of ponds 4 to 10 and the associated habitats are isolated by the Straight Mile road with no direct linear connectivity. Similarly the ponds stand at a distance of 170 m from the proposed development boundary. It is documented that as general guide most populations forage within 50 m of the breeding ponds during the terrestrial phase and that it is the juveniles that venture further distance. Not only are the group of ponds isolated from the southern habitats but the abutting fields are managed rotationally from grazing pasture to arable crops, this again can deter movement and foraging due to the species poor habitats being not general supportive for amphibians.

11.5.7 It can be agreed that although the likely hood is low for amphibians to migrate from the pond sites across the road system into the development zone, it is still potentially feasible. The grassland within and adjacent to the development area is also considered species poor and of low quality foraging habitat for this species and it can be argued that the population levels are likely to be very low, based on distance, no direct connectivity, poor foraging habitats, and very low occurrence of the species at survey level.

11.5.8 Based on the survey data, consultation with NRW and the Local Authority, and as recommended within the previous surveys the following approach is to be considered as follows:-

a) Reasonable Avoidance Measures are to be undertaken

and

b) Landscaping Enhancement Strategy

11.6 *REASONABLE AVOIDANCE MEASURES:*

a) The grassland is to be retained at a sward length no greater than 50 mm until the top soil strips have been undertaken, this to reduce movement across the grassland by amphibians.

b) Any hedgerow/scrub to be removed within 300 m of the pond cluster 4 to 10, ponds 2 and 2a are to be cut back to ground level, ensuring that the correct methodology for nesting birds is adhered to. The root structure is to be carefully grubbed up and a destructive search undertaken to ensure no amphibians are harmed during the works.

c) Similarly to 10.2.4 during the formation of the new road access and roundabout, the hedgerows are to be cut back and cleared to ground level and the roost system is to be grubbed up and a destructive search is to be undertaken to ensure no amphibians are harmed during the works.

d) If at any time during the work phase the protected species the great crested newt is encountered the works are to cease and further advice is to be sort between the retained ecologist and NRW.

e) The methodologies are to be agreed with NRW to establish whether a European Protected Species Derogation License is required to be applied for in this case.

12.0 CONCLUSION

No major adverse impacts have been identified from the proposed development of the site. Any features of ecological merit are outside of the development zone. In the case of the great Crested Newt, the development site is considered, firstly, to be at too greater distance to be utilised as a primary foraging area and secondly the habits recorded are considered to be of low ecological value for this species. In general, the site as surveyed is considered to be of a low ecological value in terms of the, improved grazing pasture and the species poor boundary hedging. Although two water bodies are recorded on site, again both are considered to be of

low ecological value, with the pond being seasonally dry and the ditch line recording oxygen deficient grey water.

The proposed development although extensive and will remove sections of the existing hedgerow, will however, if the landscape plan encompasses the recommendations set out in this report together with the RAM statement and landscape enhancement strategy will negate any loss of the hedgerows and will provide a more diverse landscape in the medium to long term.

It is therefore the surveyor's opinion that the proposed landscape enhancement proposals are considered to be beneficial with increased species diversity, negating any identified impacts and thus the development is unlikely to have no long term impact on the favorable conservation status of locally recorded protected species, or their ecological functionality if the works are carried out in accordance with the recommendations given within this report, and that sufficient detail is included to address the draft condition 8 as stated in the planning inspectorates approval of the appeal.

Tim Hodnett
June 2017

13.0 References

TEP, 2014. Ecological Assessment Home Farm Llay. Report Ref: 4358.01.001
Penny Anderson Associates Ltd, 2016. Great Crested Newt Assessment and Mitigation
The Planning Inspectorate, 2016. Appeal by Mrs Margaret Crewe, Home Farm, Gresford Road, Llay

14.0 Addendum – Cross References to TEP report Recommendations

14.0 Addendum – Cross References to TEP report Recommendations

Cross References to TEP report Recommendations and as stated within the inspectorates draft Condition 8

7.0 RECOMMENDATIONS

Habitats and Flora

7.1 It is recommended that the hedgerows across the site and area of trees to the south west are retained within the development. If possible these features should be enhanced and extended to provide additional habitat for wildlife.

See section Habitats and Biodiversity 11.1.5

7.2 A tree protection plan must be implemented during development works to ensure that trees and scrub to be retained and trees in close proximity to the site are appropriately protected.

Refer to Acerta plan and report.

7.3 The ditch in the south of site should be extended and enhanced to provide additional habitat for the local fauna.

See section Habitats and Biodiversity 11.1.5

7.4 It is recommended that the creation of new ponds be included in the site design and that these ponds include native planting of local provenance

See section Habitats and Biodiversity 11.1.5

Site designations

7.6 To minimise increased public pressure on local wildlife sites and green spaces it is rrecommended that green space and recreational features are included within the proposals.

See Site layout plan ref: AH085-NTS1

Bats

7.7 Prior to works commencing the trees identified as having bat potential in drawing G4358.01.001 must be subjected to an aerial inspection by a licensed bat consultant to determine whether bat roosts are present. All advice provided by the licenced bat consultant following the inspection must be adhered to and further survey may be required during the period from early May to early September. Scrub, hedgerow and tree removal should be avoided wherever possible to maintain the potential commuting routes and foraging habitats for bats within and across the site.

See section 10.4 and 11.3

7.8 Due to the size of the site and the presence of features suitable to support foraging and commuting bats it is recommended that a bat transect survey is undertaken prior to development. Three transect survey visits should be undertaken between June and September 2014 to identify bat activity on site.

See section 10.4 and 11.3

Birds

7.9 *Vegetation clearance, works affecting trees and demolition of the building should be implemented outside of the bird nesting season (avoiding March to August inclusive). If this period cannot be avoided, alternative measures will need to be implemented prior to the site clearance. Any works undertaken during this period will require a nesting bird check to be carried out by a suitably qualified ecologist immediately prior to the works commencing, to establish that no active bird nests will be disturbed or destroyed. In the event that active nests are discovered, site clearance within an appropriate buffer zone would need to be delayed until nesting(and fledging of young) is complete. The size of the buffer zone would be dependent upon the species nesting*

See section 11.4

7.10 *Trees, hedgerows and scrub should be retained where possible and a tree protection plan should be prepared to safeguard retained features during construction.*

See section 11.4 and 11.1.5

7.11 *The loss of nesting bird habitat should be mitigated through replacement planting in landscape proposals, using locally sourced, native species*

See section 11.4 and 11.1.5

Non-native invasive plant species

7.12 *A non-native invasive species method statement is required to cover development activities on site. All parts of cotoneaster plants, including berries, should be removed from site and disposed of at a waste facility. Although not classed as a controlled waste, confirmation should be sought from the Local Planning Authority as to whether disposal to landfill is acceptable.*

See Knotweed Eradication Proposals in accordance with NRW (EA) code of practice

7.13 *Japanese knotweed treatment will require a more detailed management strategy. Treatment options for Japanese knotweed include*

Herbicide spraying (in situ or excavated and stored in a secure area on barrier material): three treatments per year, requiring a minimum of three years to eradicate the plant;

Excavation and removal to landfill: there are costs associated with disposal as Japanese knotweed material is controlled waste and must be sent to an appropriately licenced facility;
or
Excavation and burial on site: this requires sufficient space within the development site to bury the contaminated material

See Knotweed Eradication Proposals in accordance with NRW (EA) code of practice

Great Crested Newts

7.14 *An amphibian survey of the waterbodies on site and within 250m is required. This will initially involve a minimum of four survey visits between March and mid-June (with at least two visits undertaken between mid-April and mid-May). Survey methods will include torch, bottle trapping, egg searching and/or netting. If great crested newts are found, a further two visits will be required before mid-June to provide a population estimate and inform a subsequent license application. If great crested newts are identified during the survey, a license would be required from Natural England to allow development works to proceed.*

See sections 10.2, 11.5 and 11.6

7.15 *Alternatively to identify the presence of great crested newts, eDNA surveys can be undertaken. These involve a single visit to each pond, during which a small water sample is collected and then sent to a laboratory for testing. These tests provide a presence/absence result only and if great crested newts are found to be present, traditional survey methods (as outlined above) will be required to determine the population size and provide data to support a Natural England license application. The eDNA surveys may only be undertaken from mid-March to the end of June.*

See sections 10.2, 11.5 and 11.6

Opportunities for enhancement

7.16 *In line with advice provided under Chapter 11 of the National Planning Policy Framework, where possible features of the natural environment should be conserved and enhanced.*

See section 11.1.5 to be implemented in conjunction with the proposed site landscape plan

7.17 *Biodiversity within the site could be maintained and enhanced by including a mix of wildlife friendly species in the planting scheme. Native species, ideally of local stock, should be used. Species could include hawthorn, blackthorn, dogwood Cornus sanguinea and hazel Corylus avellana. Further input to the detailed design can be provided on request.*

See section 11.1.5 to be implemented in conjunction with the proposed site landscape plan

7.18 *Within the proposed development, boundary features should ideally include native hedgerow planting using a variety of native woody species. Green trellising using ivy, honeysuckle Lonicera periclymenum or other scented and berry producing climbers could be installed on buildings, boundary walls or fences within the new build to provide additional foraging and sheltering opportunities for insects, birds and bats. Suggested plant species for planting schemes are listed in Appendix C*

See section 11.1.5 to be implemented in conjunction with the proposed site landscape plan and planting schedules.

7.19 *Bird and bat boxes could be incorporated into or onto new buildings and examples of these are provided in Appendix D. This would provide breeding opportunities for both bird and bat species. These should be located an appropriate height and aspect, with suitable lighting levels and close to vegetation.*

See section 11.3

Lighting near the site boundaries and near to any retained linear features should be designed to avoid or minimise adverse impacts on foraging and commuting routes for bats or on new bat boxes

See section 11.3 and proposed street lighting layout plan