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To whom it may concern,

Response to Wrexham CBC Comments Regarding Bats and Great Crested Newt at Boozey Fields, Griffiths Road, Gwersyllt. Planning Reference P/2015/0790.

Following submittal of the Kingdom Ecology 'Ecological Assessment Report for Development Proposals for Boozey Field' dated 28 February 2015, the Wrexham CBC Ecologist (Emma Broad) has returned comments regarding the protection of great crested newt corridors at the site and concerns regarding the impact of lighting on bats along with a recommendation for further survey.

In response to these comments and following a telephone conversation between Emma Broad and Richard Roe of Kingdom Ecology, further clarification and additional detail on site protection measures is provided below.

Great Crested Newt

Richard Roe revisited the site on the 1 December 2015 to further assess potential great crested newt commuting routes from the pond at Stansty Park to the proposed development site. The pond is located approximately 130m to the south of the proposed development site boundary.

The stone wall that surrounds the estate was found to be well mortared and although there is the occasional small, blind-ending, crevice in the mortar it is very unlikely that this would provide a passage through the wall itself for migrating newts. The only significant gaps in the wall were identified at Stansty Park Farm and a 20m wide gap at the junction of Summerhill Road and Griffiths Road (located over 300m away from the pond). As previously described the Stansty Park Farm entrance is surrounded by hardstanding and buildings and is considered very unlikely to be encountered by newts. Consequently it is considered that the wall does represent a significant

barrier to great crested newt dispersal due to it largely being impervious to newts and where gaps are present these are either isolated by inhospitable habitat (the entrance at Stansty Park) or located a great distance from the pond.

Areas of woodland immediately around the pond at Stansty Park offer high value great crested newt terrestrial habitat within proximity to the pond. Habitats within the proposed development site largely comprise of closely grazed pastureland and are consequently offer less valuable habitat for newts.

Studies by Jehle (2000) determined a terrestrial zone of 63m around breeding ponds, within which 95% of summer refuges were located. A literature study carried out by Cresswell and Whitworth (2004) found that:

‘Great crested newt pitfall trapping in relation to avoiding disturbance, killing or injury is appropriate within 50m of a breeding pond. It will also almost always be necessary to actively capture newts 50-100m away. However, at distances greater than 100m, there should be careful consideration as to whether attempts to capture newts are necessary or the most effective option to avoid incidental mortality. At distances greater than 200-250m, capture operations will hardly ever be appropriate.’

Given that the core area of great crested newt terrestrial habitat generally lies within 50m of a breeding pond, the presence of the largely impervious stone wall around the Stansty Estate and the largely low value habitats located within the proposed development site itself, it is considered to be very unlikely that great crested newt would be present within the development site.

Taking this into account, my client considers it to be unreasonable to be required to provide any extensive great crested newt compensation or mitigation at the site or off-site as part of the development. Furthermore, such an obligation would fail all three statutory tests of a planning obligation which are set out in Section 122 of the CIL Regulations. With specific reference to these 3 key tests:-

- “*necessary to make the development acceptable in planning terms*” – a provision of on-site or off-site, local great crested newt compensation habitat should not be ‘necessary’ because it is very unlikely that great crested newt are present at the site and consequently it is very unlikely that any existing great crested newt habitat will be affected by the proposed development.
- “*directly related to the development*” – likewise, new compensation habitat cannot be considered to be ‘directly related’ because great crested newt will be unaffected.
- “*fairly and reasonably related in scale and kind to the development*” – again, similar reasons apply for why such an obligation would fail the test to be ‘fairly and reasonably related’ to the scheme.

It should also be borne in mind that targeted great crested newt mitigation, such as pond creation within the site itself, is unlikely to provide any conservation benefit to the species as the site is isolated from nearby

breeding ponds and so is very unlikely to ever be colonised. Nevertheless, proposals shown on Figure 1 (see Appendix and which shows protection measures for Bat Habitats) includes a buffer area along the western half of Griffiths Road which will link up with an area of open space/habitat creation at the western end of the site. These areas will be planted up with scrub, trees and wildflower grassland and therefore will provide a habitat linkage between the tree lines along the northern and southern boundaries of the site. Although this linkage is unlikely to be used by great crested newt (as it is isolated from local populations), it is likely to prove valuable to other wildlife.

The pond at Stansty Park estate is located within 150m of the development site. The development could be carried out following a Method Statement of Reasonable Avoidance Measures but it is considered that this would be unnecessarily restrictive considering the very low likelihood of newts being present at the site and consequently affected.

Bats

Given the ubiquity of bat species in the rural and semi-rural environment, the presence of bats at the site has been accepted, likely key habitat features identified and the way in which bats are likely to use the site has been considered during the design of the site layout.

It is accepted that the tree lines at the site and Griffiths Road itself are likely to be used by foraging or commuting bats. Trees along Griffiths Road were not found to support cavities suitable for significant roosts sites or breeding sites rather some of the trees support ivy growth which offers low value bat roosting habitat which could be used by non-breeding bats.

The improved grassland habitats within the site itself are not considered to offer valuable bat foraging habitat with the key habitat features restricted exclusively to the tree lines and the hedgelines present on the site boundaries and areas of woodland located outside of the site in Stansty Park Estate.

The layout and outline landscaping and lighting proposals for the site have been designed to ensure that these features are not significantly affected and will be able to retain their ecological function as commuting routes and to provide foraging habitat. Furthermore measures are proposed to provide additional bat roosting and foraging habitat at the site.

Protection of Bat Habitat Features

The northern and southern boundaries of the site support tree, hedge and scrub habitats that are likely to be valuable to bats and other wildlife. Development proposals will not directly affect these features. However insensitive lighting of the development site could result in these features becoming unsuitable for bats.

A draft plan has been produced to retain dark corridors along the site's boundaries and to protect bat foraging/commuting habitat located immediately adjacent to the proposed development site. The proposed

protection measures are shown on Figure 1- Draft Bat Habitat Protection Plan (see Appendix) and summarised below:

1. The 'Bats and Lighting Research Project' (Stone 2013) provides recommendations for limiting the negative effects of lighting on bats. This report should be consulted by the appointed lighting designer when producing the lighting plan for the site.
2. Street lighting will be limited at the site by restricting lighting to the central spine road where possible with no new lighting proposed along the side roads within 15m of the site boundary. The lighting within the central spine road and along the side roads will be designed to avoid light trespass into surrounding areas by the fitting of hoods and cowls. No new street lighting is proposed for Griffiths Road.
3. A footpath is proposed along the eastern half of the site where it adjoins Griffiths Road. This would be lit with low-level, screened LED lighting as described within 'Bats and Lighting Research Project'.
4. Dark corridors will be retained along the northern and southern boundaries of the site. The boundary features would remain unlit and lighting located near to these areas would be designed so that increased light spill onto the boundary features is retained in the region of 1 Lux or less. External lighting will be fitted to the exterior of the proposed housing by the developer. This will allow control of the lighting design. Light trespass onto the surrounding boundary features can be controlled through directional lighting and the use of hoods and cowls. Lighting sources should be 'bat friendly' using LEDs or low wattage lamps.
5. Buffer areas have been identified between the proposed housing and Griffiths Road (see Figure 1). These will be planted up with tree and scrub to shield the boundary from ambient light spill from the adjoining properties and to strengthen habitat features in this area providing further bat foraging opportunities. These areas lie outside of the ownership of the new home owners and so would be maintained by the new management company. A management plan would be produced to ensure that they are maintained principally to provide an ecological function.
6. Housing along the northern boundary of the site largely faces away from the boundary itself therefore ambient light spill in this area is considered unlikely to be significant. External lighting in these areas can be directed to point away from the boundary features.
7. The area of open space at the western end of the site will be managed for conservation benefit through scrub and tree planting. Open grassland areas will be managed to provide wild flower meadow as opposed to closely mown amenity grassland. This will provide additional foraging opportunities for bats and other wildlife.
8. The cycle path that passes through this area of open space/ habitat creation at the western end of the site will remain unlit.

9. It is recommended that a bat and bird box scheme is produced for the site. The scheme should include the incorporation of at least 5 bat boxes which should be built into the south facing gable ends of properties adjoining the dark corridor along Griffiths Road. Suitable models of bat box include the Habibat 003 or 005 which can be built into the brickwork of the new houses.

Given that this is an Outline Planning Application, the detailed design of lighting, landscaping and management plans would be dealt with at the Reserved Matters Stage and so the above protection measures can be included as planning conditions.

Additional Bat Surveys

Given that the presence of foraging and commuting bats is accepted along the site's boundaries and that measures are proposed to avoid any significant harm or disturbance to bats or their associated habitats, further bat surveys are not considered relevant.

Further bat surveys are unlikely to provide any additional useful information and would likely just confirm that the site boundaries are used by feeding and commuting bats and may confirm that potential tree roosts are used by individual or low-numbers of non-breeding bats. The site layout and proposed protection measures will avoid significant impacts upon the ecological functionality of these habitat features.

Additional surveys would not provide any further input into proposed protection measures as recommendations made aim to achieve as much protection of all potential important habitat features as is practicably possible. Where possible, recommendations have been made for the enhancement of the site for bats through the provision of additional areas of potential foraging habitat and through the installation of bat boxes into new housing at the site.

National Resources Wales Consultation

NRW have been consulted on the proposals. NRW consider the proposal to be unlikely to be detrimental to the maintenance of the favourable conservation status of any populations of British or European protected species.

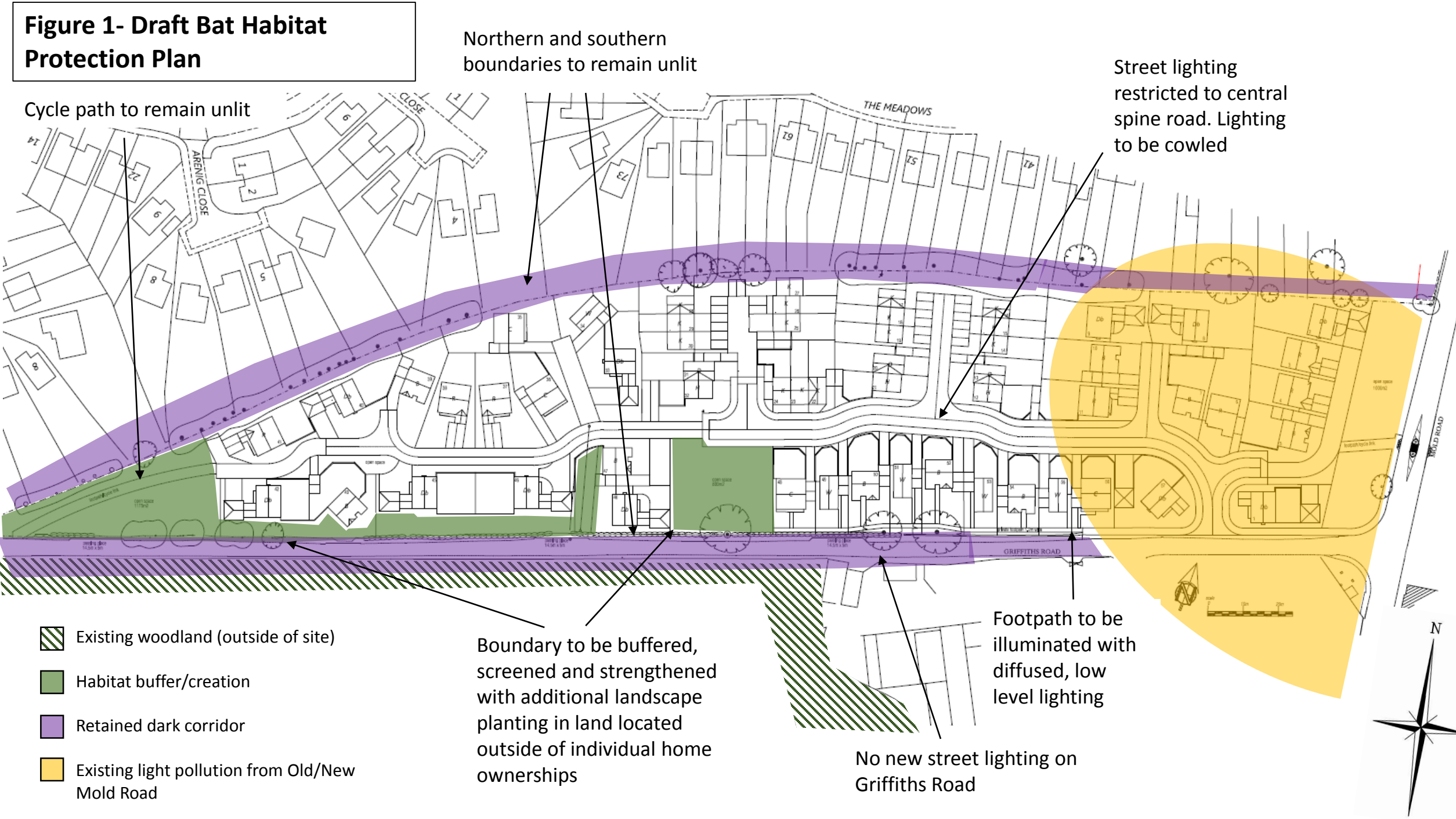
Should you have any queries, please do not hesitate to contact me.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Richard Roe', with a stylized flourish at the end.

Richard Roe
Principal Ecologist

Figure 1- Draft Bat Habitat Protection Plan



- Existing woodland (outside of site)
- Habitat buffer/creation
- Retained dark corridor
- Existing light pollution from Old/New Mold Road

Boundary to be buffered, screened and strengthened with additional landscape planting in land located outside of individual home ownerships

No new street lighting on Griffiths Road

Footpath to be illuminated with diffused, low level lighting

Street lighting restricted to central spine road. Lighting to be cowled

Cycle path to remain unlit

Northern and southern boundaries to remain unlit