

OBJ/229&230/ECO/001

**The Network Rail (East West Rail  
Bicester to Bedford Improvements) Order**

Transport and Works Act 1992

The Transport and Works  
(Inquiries Procedure) Rules 2004

**Proof of Evidence of Dr Dan Simpson**

**Ecology**

On behalf of Gladman Developments Ltd:

Objection References OBJ/229 & OBJ/230

February 2019

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# 1 Introduction

## 1.1 Qualifications & Experience

1.1.1 My name is Dr Dan Simpson. I hold a Bachelor of Science Honours degree in Biological Sciences (specialising in Animal Science) from Nottingham University and a research doctorate (PhD) from the University of Bristol. I have over 15 years of professional experience in ecological consultancy and am a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). I am a Technical Director at Aspect Ecology working with a team of over 20 full-time ecologists.

1.1.2 I have extensive experience in carrying out ecological surveys and assessments in relation to a wide range of development schemes across the UK, including across the transport, residential, industrial, retail, educational, commercial, leisure and renewable energy sectors. I hold, and have held, numerous scientific and development licences in respect of protected species, including bats, Badger, Barn Owl, Dormouse and Great Crested Newt.

1.1.3 I am regularly employed to advise on the potential impacts of development proposals on sensitive habitats and species, and designated sites including sites of local, national and international importance, and to formulate mitigation strategies and also to advise on ecological enhancement opportunities.

1.1.4 I have provided expert ecological evidence on a variety of matters at Section 78 planning appeals, including through written representation, appeal hearings, public inquiries and 'call-in' inquiries.

1.1.5 The evidence that I have prepared and provide in this Proof of Evidence is true and has been prepared and is given in accordance with the guidance of my professional institution and I confirm that the opinions expressed are my true and professional opinions.

## 1.2 Background

1.2.1 Aspect Ecology Ltd has been appointed by Gladman Developments Ltd (GDL) to advise on ecology matters in relation to its objections (refs. 228-231), on behalf of interested parties, to the Transport and Works Act 1992: Application for the proposed Network Rail (East West Rail Bicester to Bedford Improvements) Order (TWAO). Specifically, we were asked to review the background information relevant to the East West Rail Phase 2 (hereafter 'the project'), in particular the ecological mitigation strategy and associated compulsory purchase under the TWAO of approximately 1.8ha of land off Great Horwood Road, Winslow located at grid

reference SP77242857 (see Plan 1021/PRF1 enclosed at Appendix 1021/1). The TWAO relating to this parcel of land is to provide Ecological Compensation Site (ECS) B10 within Route Section 2B. The land subject to the TWAO forms part of a proposed housing allocation in the submission version of the Vale of Aylesbury Local Plan (Site WIN001, see plan at Appendix 1021/2) and is promoted by GDL as such.

1.2.2 Aspect Ecology previously reviewed the Ecology Chapter<sup>1</sup> of the 2018 Environmental Statement (hereafter the '2018 ES') and associated technical appendices, with our initial findings provided within a Technical Briefing Note in October 2018 (reproduced at Appendix 1021/3). Since this time, additional information has been produced in the form of Further Environmental Information (hereafter referred to as 'FEI')<sup>2</sup>. Furthermore, Network Rail issued letters in response to GDL's objections, dated 04/11/2018. GDL acts on behalf of a number of different interested parties / landowners and hence four response letters were issued by Network Rail (refs. 228-231). The response letters refs. 229 and 230 are relevant to ECS B10 and contain identical responses in relation to B10, and hereafter for simplicity are referred to collectively as the 'response letter'.

1.2.3 Aspect Ecology's review of the FEI and response letter was set out in an Ecology Analysis, submitted to Network Rail in December 2018 (reproduced at Appendix 1021/4). I have since met with the East West Rail Alliance acting on behalf of Network Rail on 03/01/2019 and its ecologist (Dr Stephanie Wray) on 25/01/2019 in order to discuss outstanding areas of concern in relation to ECS B10. However, at the time of writing a number of issues remain unresolved. My evidence focuses on the following key issues:

- **Fauna**, with a particular focus on whether ECS B10 is required to compensate for impacts on Great Crested Newts;
- **Ecological designations**, in particular the proposition that ECS B10 will provide improved connectivity between Old Quarry Winslow Biological Notification Site (BNS) and Woodland Copse off Magpie Way Local Wildlife Site (LWS);
- **Habitats**, in particular whether ECS B10 is required to compensate for terrestrial habitat loss arising from EWR2.

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<sup>1</sup> The Network Rail (East West Rail Bicester to Bedford Improvements) Order Environmental Statement (NR16)

<sup>2</sup> The Network Rail (East West Rail Bicester to Bedford Improvements) Order Further Environmental Information (NR47)

## 2 Ecological Compensation Site B10

### 2.1 Description

2.1.1 Technical Appendix 9.13\_v2 of the FEI deals with ecological mitigation and describes the reasons why each Ecological Compensation Site (ECS) was selected. In relation to ECS B10, paras. 2.3.12 – 2.3.14 provide the following explanatory text:

#### **‘B10 Land East of Great Horwood Road, Winslow**

2.3.12 *It has not been possible to secure ECS B10 prior to the TWAO so far therefore it has only been subject to high level ecological design.*

**Table 2.11: Ecological compensation site details for ECS B10**

<b>Ecological Compensation Site:</b> B10	<b>Area:</b> 1.8 ha
<b>Specific IEFs for compensation:</b> <i>Great crested newts, designated sites, terrestrial habitats, aquatic habitat and species, otters, birds, terrestrial invertebrates, bats, badgers</i>	
<b>Existing habitats to be lost:</b> <i>Improved grassland (pasture)</i>	
<b>Proposed habitats to be gained:</b> <i>Ponds and marginal planting (HPI), lowland mixed deciduous woodland (HPI) lowland meadow (HPI), hedgerows (HPI), open mosaic habitat (HPI), scrub, reptile embankments, hibernacula, log piles</i>	

2.3.13 *ECS B10 is close to an area where pond habitat supporting great crested newts would be lost. ECS B10 will be used for the translocation of great crested newts (under a Natural England licence). ECS B10 will also be used for the translocation of reptiles. ECS B10 will include creation of ponds and marginal planting, lowland mixed deciduous woodland, open mosaic habitat, lowland meadow, native species-rich hedgerows with trees, scrub, south-facing reptile embankment, hibernacula and log piles. The provision of these habitats, once established, will support great crested newts, reptiles, birds, badgers, bats and terrestrial invertebrates such as black, brown and white-letter hairstreak butterflies.*

2.3.14 *ECS B10 is situated immediately east of Old Quarry, Winslow BNS and 90 m north of Wood Copse off Magpie Way LWS and ancient woodland. Once the habitats within ECS B10 have established and are under adaptive management, this will connect up the BNS with the LWS and ancient woodland, consequently extending the area supporting habitats that are currently present within each of these designated sites and enabling the ranges of the protected and/or notable species these support to expand.’*

2.1.2 From the above description, I deduce that ECS B10 is primarily intended to provide compensation in respect of:- i) Great Crested Newts; ii) designated sites (specifically Old Quarry Winslow BNS and Wood Copse off Magpie Way LWS); iii) Habitats of Principal Importance (HPI)<sup>3</sup>; iv) reptiles, and v) other fauna generally (including Badgers, bats, birds, Otters and terrestrial invertebrates). I consider each of these main elements in the following chapters.

<sup>3</sup> Habitats of Principal Importance (HPI) are those listed as a requirement of Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 as being of principal importance for conservation in England.

## 3 Fauna

### 3.1 Great Crested Newt (GCN)

#### Aquatic Habitat

- 3.1.1 It is common ground that no waterbodies (e.g. ponds or ditches) supporting breeding GCN are to be lost within 500m of ECS B10. It is therefore apparent that ECS B10 is not required to compensate for the loss of aquatic habitat for GCN at this location. The response letter (p.3, 3<sup>rd</sup> para.) confirms that ECS B10 will provide '*aquatic habitats to **enhance** this location for great crested newts in the long-term*'. ECS B10 is therefore intended to provide an enhancement rather than compensation for loss of aquatic habitat. This does not form a valid basis for acquiring the land, as Network Rail is only obligated to mitigate impacts of the project and not to provide enhancement, as set out in NR's Statement of Case, e.g. para. 10.9.8:

*'Whilst Network Rail is under an obligation to mitigate all of the impacts of EWR2, **it does not consider that there is any statutory or policy basis which require provision of a net gain, nor that it has the compulsory purchase powers to achieve it.***

- 3.1.2 Furthermore, I note that for Route Section 2B as a whole there will be a net gain of eight waterbodies for GCN (see Table 11.1 on p. 6 below) and project-wide there will be a net gain of 33 ponds (see para. 3.1.9 below).

#### Terrestrial Habitat

- 3.1.3 The Network Rail response letter suggests that ECS B10 is required to mitigate for the loss of terrestrial habitat surrounding the GCN population centred on waterbodies 72, 456 and 501 (see Plan 1021/PRF2 at Appendix 1021/5 for locations). Specifically, the response letter states (p.3, 2<sup>nd</sup> para.):

*'The woodland and scrub that would be lost in this location during construction of EWR2 equates to approximately 57% of the total suitable terrestrial habitat within 500m of this metapopulation of great crested newts. Loss of this habitat is likely to negatively affect the favourable conservation status of this metapopulation of great crested newts in this location. This impact needs to be mitigated or compensated for to meet the requirements of UK planning policy and European legislation.'*

- 3.1.4 Network Rail's Ecologist has clarified that the figure of 57% was based on aerial imagery to (see clarification note at Appendix 1021/6). I have carried out my own assessment using aerial imagery supplemented by Phase 1 habitat survey data collected in relation to the WIN-001

housing allocation. I estimate that the figure of 57% is an overestimate and that in fact closer to 10% of suitable terrestrial habitat within 500m of the GCN breeding ponds would be lost (see Plan 1021/PRF 3 at Appendix 1021/7).

3.1.5 Regarding the need to mitigate or compensate for the loss of GCN terrestrial habitat, the response letter is in contradiction to the FEI, which does not refer to ECS B10 within the discussion of compensation for GCN terrestrial habitat loss. Specifically, para. 11.3.14 of the FEI Main Report (reproduced in full at Appendix 1021/8) states:

*'The creation of terrestrial habitat in **ECS B7** (3.4 ha), **ECS B13** (1.5 ha) and **ECS C1** (8.1 ha) will compensate for the potential long-term effects to great crested newts from habitat loss during construction.'*

3.1.6 ECS B10 is not included within the above list of ECS and I therefore conclude is not essential to compensate for GCN terrestrial habitat loss arising from the project.

3.1.7 When assessing impacts on GCN, the relevant licensing authority (in this case Natural England) focuses on impacts within the 'core area', namely terrestrial habitat within 50m of the breeding ponds<sup>4</sup>. A review of the project proposals (see Plan 1021/PRF3 at Appendix 1021/7) demonstrates that there will be negligible terrestrial habitat loss within 50m of the relevant breeding ponds.

3.1.8 In terms of the extent of terrestrial habitat loss beyond the core area, up to 500m, this is summarised for Route Section 2B as a whole within Table 11.1 of the FEI, reproduced overleaf. The table demonstrates that there will be an estimated loss of 66.7ha of terrestrial habitat and 12.7km of linear habitat (e.g. hedgerows, ditches, etc.) within 500m of known or assumed GCN populations along Route Section 2B. This loss will be compensated by 16.9ha of terrestrial habitat creation within ECS, 49.2ha of terrestrial habitat and 22.6km of linear habitat on the new embankments, and 16ha of terrestrial habitat and 10.4km of linear habitat reinstatement. In summary, within Route Section 2B there will be a **net gain** of 15.4ha of terrestrial habitat and 20.3km of linear habitat for GCN.

3.1.9 At a project-wide level, a net gain of 31ha of GCN terrestrial habitat is to be provided, as summarised at para. 11.1.11 of the FEI:

*'The environmental design measures and the mitigation detailed above for great crested newts will result in the **net gain of 33 ponds and approximately 31 ha of terrestrial habitat**. Although*

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<sup>4</sup> Natural England GCN Licence Method Statement: Instructions (see extract at Appendix 1021/9)

*there will be a short-term loss of connectivity during construction, due to the net gains in habitat, the long-term replacement of connectivity post construction, and the long-term protection of the ECS, the Project is expected to result in a positive effect on great crested newts significant at a County scale.'*

3.1.10 Therefore, even in the absence of ECS B10 (comprising 1.8ha) the project would be providing a significant net gain for GCN. It is common ground that although it would be preferable to provide terrestrial habitat compensation as close to the source of impact as possible, alternative locations would be acceptable providing the overall area of compensation matches or exceeds that currently proposed by B10. Given that the majority of the core area around the relevant GCN breeding ponds is to be safeguarded and that overall there is a significant net gain in terrestrial habitat for GCN (both within Route Section 2B and at a project-wide level), I conclude that ECS B10 is not essential to mitigate the effects of the project on GCN at this location.

**Table 11.1: Summary of great crested newt potential impacts and compensation**

Route Section	Water bodies with known or assumed GCN populations to be lost	Water bodies to be created within ECS	Terrestrial habitat loss (within 500 m of known or assumed populations)	Terrestrial habitat compensation
2A	9 ponds (complete loss of 7 ponds and partial loss of 2 ponds)	19 ponds	29.9 ha and 11.3 km	ECS – 26.9 ha Embankments – 30.7 ha and 12.7 km Reinstatement <sup>70</sup> – 9.5 ha and 6.1 km
2B	2 ponds (complete loss of 1 pond and partial loss of 1 pond)	9 ponds, 1 ditch	66.7 ha and 12.7 km	ECS – 16.9 ha Embankments – 49.2 ha and 22.6 km Reinstatement – 16 ha and 10.4 km
2C	0	7 ponds	4.8 ha and 10 m	ECS – 8.1 ha Embankments – 6.9 ha and 135 m Reinstatement – 0.2 ha and 7 m
2D	2 ponds	minimum of 4 <sup>71</sup>	18.7 ha and 4.2 km	ECS – 7.8 ha Embankments – 5.2 ha and 2 km Reinstatement – 11.1 ha and 2.7 km
2E	1 pond (partial loss) 1 linear water body (full loss)	minimum of 6 <sup>72</sup>	21.8 ha and 1.7 km	ECS – 30.7 ha Embankments – 10.5 ha and 4.8 km Reinstatement – 6.7 ha and 1.5 km

<sup>70</sup> Reinstatement refers to the areas of good suitability great crested newt habitat (as defined in the Stage 2 screening methodology) that will be reinstated following the construction of the Project.

<sup>71</sup> Detailed design of these ECS has not been completed at this stage.

<sup>72</sup> Detailed design of these ECS has not been completed at this stage.

### Translocation of Great Crested Newt

- 3.1.11 Appendix 9.13v2 of the FEI states that ECS B10 will be used for the translocation of GCN (para. 2.3.13, reproduced in Chapter 2 above). However, para. 9.4.156 of the 2018 ES (reproduced at Appendix 1021/10) states:

*'any Great Crested Newts present will be captured and relocated to suitable habitat in **ECS B7, ECS B13 and ECS C1**'*

- 3.1.12 ECS B10 is not included in the above list of ECS and is therefore evidently not required for the translocation of GCN. In any event, it would be ecologically preferable to relocate any GCN captured along the railway corridor to adjacent, existing, suitable habitat, rather than within newly created ECS. In respect of GCN utilising ponds 72, 456 and 501 (close to ECS B10), the logical site to release individuals would be the existing suitable terrestrial habitat located in close proximity to these ponds, within the Old Quarry Winslow BNS, rather than translocating individuals to newly created habitat. The ES does not appear to have explored this possibility. In any event, it is common ground that GCN could be relocated to alternative suitable habitat elsewhere within Route Section 2B if ECS B10 were not to be secured.

### Connectivity

- 3.1.13 The Network Rail letter of response suggests (p.3, 3<sup>rd</sup> para.) there will be potential disruption of access to breeding ponds as a result of the scheme:

*'Although the EWR2 scheme will not result in the loss of any 'ponds' used for breeding great crested newts in this location, there will be a loss of terrestrial habitat and **potentially disruption of access to breeding ponds.**'*

- 3.1.14 As already discussed above (3.1.2), the only ponds supporting GCN within 500m of ECS B10 are ponds 72, 456 and 501 (shown on Plan 1021/PRF2 at Appendix 1021/5). The ponds lie within close proximity to one another and are currently interconnected by good quality terrestrial habitat within Old Quarry Winslow BNS, in particular the deciduous woodland habitat within which the ponds lie. The nearest proposed construction works are located ~50m south of these ponds, therefore there will be no disruption in terms of access to these breeding ponds. Furthermore, the proposed creation of suitable GCN habitat within ECS B10, to the east of the ponds, would not provide a link to any other GCN populations in the area, as the nearest such population is at pond 854 (with assumed GCN presence), located 350m east of B10. In any

event, any purported improvement in connectivity would be an enhancement not compensation, and therefore beyond scope of the TWAO.

- 3.1.15 It is possible that GCN may occasionally wander onto the existing railway trackside habitat, and these areas would be affected by the proposed construction works. However, as set out in para. 9.4.152 of the 2018 ES, the new trackside is to be replanted with grassland, scrub, woodland and hedgerow habitat, which will maintain long-term connectivity for GCN post construction. ECS B10 would therefore be superfluous in terms of providing or maintaining connectivity for GCN at this specific location, although I accept it would contribute towards connectivity in general along the proposed project.

### Consideration of Alternatives

- 3.1.16 The Network Rail response letter (Appendix 1021/11, last para p.4) states that the current location of ECS B10 is '*the only viable location*' to mitigate the impacts of construction, due to the constraints of other committed or reasonably foreseeable future developments with reference specifically to housing allocation site WIN001. However, this fails to recognise that the proposed location for ECS B10 in fact falls within WIN001 itself (see plan at Appendix 1021/2).

### Summary

- 3.1.17 In summary, for the reasons described above, in particular:- i) there is no loss of GCN breeding ponds within close proximity of ECS B10; ii) there will be negligible impact within the core area of GCN ponds 72, 456 and 501; and iii) there will be a significant net gain in terrestrial habitat for GCN within Route Section 2B and project-wide even without ECS B10; I consider that ECS B10 is not essential for providing compensation for GCN.

## 3.2 Reptiles

- 3.2.1 The 2018 ES text states at para. 9.4.167 that:

*'The loss of reptile habitat will be compensated for in ECS B2, B7, B9, B10, B13, B14, B23 and B26 with **a net gain of 9.2ha of grassland and scrub**. The ECS will also include ponds, south-facing embankments, hibernacula, log piles, gravel/rubble areas and compost heaps to replicate as close as practicable the existing railway embankments which are being lost.'*

3.2.2 As there is a net gain in suitable reptile habitat provided within the ECS as a whole, should the 1.8ha proposed for ECS B10 not be provided, this would not prevent a net gain in habitat elsewhere.

3.2.3 Para. 9.4.170 of the 2018 ES states that reptiles will be relocated to eight ECS, including B10, *'or areas of suitable retained habitat outside of the Scheme Area, dependent upon the maturity of vegetation in the ECS.'* As reptiles have been recorded along the entire length of Route Section 2B, there is no essential requirement for the location or extent of ECS B10 as a receptor site for reptiles.

### 3.3 Other Fauna

3.3.1 As indicated in the description of ECS B10, reproduced in Chapter 2 above, the proposed provision of habitats within B10 will, once established, support other fauna, including Badgers, bats, birds, Otters and terrestrial invertebrates (e.g. butterflies). However, this is understood to be a general aspiration for B10 in terms of contributing to mitigation for losses along the entirety of Route Section 2B and no justification for the specific location or extent of ECS B10 is provided in this regard.

## 4 Designated Sites

### 4.1 Compensation for Habitat Loss within Old Quarry Winslow BNS

4.1.1 As set out in Chapter 2, the description provided in Technical Appendix 9.13\_v2 of the FEI indicates that ECS B10 is required to compensate for impacts on designated sites, namely Old Quarry Winslow BNS and Wood Copse off Magpie Way LWS/ancient woodland. The locations of these designated sites are shown on Plan 1021/PRF4 included within Appendix 1021/12.

4.1.2 Impacts on designated sites are dealt with in section 9.4 of the 2018 ES. Table 9.16 and para. 9.4.7 of that section (see extract at Appendix 1021/13) set out that 0.1ha of woodland/scrub habitat will be lost within Old Quarry Winslow BNS as a result of land required for construction of the project. Para. 9.4.7 states that half of the area lost (i.e. 0.05ha) will be reinstated to woodland post construction and an additional 0.2ha of woodland will be planted to the east of the BNS outside of B10 (see Environmental Design Drawing enclosed at Appendix 1021/14). The 0.25ha of woodland creation/restoration outside of B10 would more than compensate for the 0.1ha lost from Old Quarry Winslow BNS. As the new woodland planting is to take place outside of B10 it is self-evident that B10 is not required in terms of compensation for habitat loss.

### 4.2 'Better' Connectivity Between BNS and LWS

4.2.1 As set out in para. 2.3.14 of Technical Appendix 9.13\_v2 of the FEI (reproduced in Chapter 2 above), one of the aspirations of ECS B10 is to 'connect up the BNS with the LWS'. This is elaborated on within para. 9.4.7 of the 2018 ES, which states that ECS B10:

*'...will contain woodland planting, scrub and grassland, and provide quality connecting habitat to Woodland Copse off Magpie Way LWS and ancient woodland. This ECS will therefore **better connect** Designated Sites in the landscape and provide additional habitat for species within Old Quarry Winslow BNS and Woodland Copse off Magpie Way LWS to expand their ranges into. This will be facilitated by reinstating the railway embankments with grassland and scrub to ensure continued ecological connectivity along the railway.'*

4.2.2 It is apparent that this aspiration for B10 is one of enhancement rather than compensation and this does not therefore form a valid basis for acquiring the land, as Network Rail is only obligated to mitigate impacts of the project and not to provide enhancement.

4.2.3 Furthermore, the ES fails to consider that post-construction the BNS and LWS will be separated by an active double-track railway line, which is clearly not likely to result in an improvement in connectivity between the designated sites. No amount of habitat creation within ECS B10 would alter this fact.

### 4.3 Summary

4.3.1 In summary, ECS B10 is not necessary to compensate for the loss of habitat within the adjacent Old Quarry Winslow BNS and there is no basis for the claim that B10 would improve connectivity between the BNS and Woodland Copse off Magpie Way LWS nor, by Network Rail's admission, any statutory or policy basis for acquiring land to deliver such an ecological enhancement.

## 5 Habitats

### 5.1 Terrestrial Habitats of Principal Importance (HPI)

- 5.1.1 Para. 3.3.14 of the FEI (see extract at Appendix 1021/15) identifies that within Route Section 2B there will be a total loss of 18.73ha of terrestrial Habitats of Principal Importance (HPI), comprising 2.23ha of woodland south of Horwood House, 4.5ha lowland mixed deciduous woodland, 10.1ha open mosaic habitat and 1.9ha arable field margins, in addition to the loss of approximately 4.5km of species-rich hedgerow with trees and 1.1m of species-rich intact hedgerow.
- 5.1.2 In the locality of ECS B10, the only HPI to be impacted is lowland mixed deciduous woodland, as indicated by the Phase 1 Habitat Survey plan (Figure 9.3O – reproduced at Appendix 1021/16) and Phase 2 Botanical Surveys & Habitats of Principal Importance plan (Figure 9.4G – reproduced at Appendix 1021/17). The deciduous woodland HPI occurs on the existing embankments along the length of Route Section 2B, which will be lost due to construction of the project.
- 5.1.3 As stated above (5.1.1), in total, 4.5ha of deciduous woodland HPI will be lost within Route Section 2B. New woodland (and hedgerow) planting is proposed outside of ECS along the entirety of Route Section 2B and project-wide, as shown on the Habitat Connectivity plan (Figure 9.24G – reproduced at Appendix 1021/18). In addition, new woodland planting is to be provided within the ECS, namely B10, B14, B17, B20, B23 and B26. Excluding B10, the remaining ECS proposed for woodland planting (amongst other habitats) cover a total area of 25.9ha. Taking a conservative estimate that 50% of the area of these ECS would provide woodland habitat, this would deliver a total of 12.95ha. This would represent a net gain of 8.45ha of new woodland habitat in this route section. Therefore, even in the absence of ECS B10 there would be a significant net gain in woodland habitat provided by the other ECS within Route Section 2B. In addition, there would be further woodland (and hedgerow) planting outside of the ECS, as mentioned above, which would provide additional gain.
- 5.1.4 As such, my view is that there is no requirement for compensatory deciduous woodland HPI planting within ECS B10 and no justification for requiring compensatory woodland planting at this specific location.
- 5.1.5 As shown in the description set out in Chapter 2 above, in addition to lowland mixed deciduous woodland HPI, ECS B10 is intended to deliver other HPI such as ponds and

marginal planting HPI and lowland meadow HPI. However, none of these habitat types appear to be affected by the part of Route Section 2B adjacent B10, as indicated by the Phase 1 Habitat Survey plan (Figure 9.3O – reproduced at Appendix 1021/16) and Phase 2 Botanical Surveys & Habitats of Principal Importance plan (Figure 9.4G – reproduced at Appendix 1021/17). As such, I find no justification for ECS B10 being required to provide compensation for these other HPI.

5.1.6 Furthermore, para. 9.4.35 of Chapter 9 of the 2018 ES sets out:

*'The creation of habitat in ECS B2, B7, B9, B10, B13, B14, B17, B20, B23 and B26, once established, will compensate for the loss of terrestrial HPI and other terrestrial habitats (see Appendix 9.13, Volume 3). **These ECS total an area of 34.5 ha** and will be transformed from areas of mainly arable land or improved grassland into lowland meadows, dense scrub, mixed lowland deciduous woodland, open mosaic habitat, semi-improved grassland, ponds, ditches, scattered scrub, species-rich hedges with trees and marshy grassland.'*

5.1.7 A detailed breakdown of the 34.5ha in terms of habitat types and areas to be created in each ECS is not provided in the 2018 ES and ECS B10 has only been subject to 'high level ecological design' (see para. 2.3.12 reproduced above in Chapter 2). However, it is assumed that the majority of the 34.5ha will comprise HPI, rather than non-HPI of lower ecological interest, in which case there would be a surplus of approximately 15ha of HPI under the project. Given that ECS B10 only contributes 1.8ha of compensatory land, there is evidently scope to compensate for the loss of 18.73ha of Priority Habitat from Route Section 2B without the inclusion of ECS B10.

## 5.2 Other (Non-HPI) Terrestrial Habitats

5.2.1 Para. 9.4.33 of the 2018 ES (see extract at Appendix 1021/19) identifies that there will also be a loss of other terrestrial habitats of lesser ecological value within Route Section 2B (approximately 151ha of habitats such as arable, improved grassland, etc. and ~4.25km of hedgerow). Habitat loss arising from the project has been the subject of a biodiversity accounting assessment, in which a metric has been applied before and after construction of the project, as set out in Appendix 9.16 of the FEI (extract reproduced at Appendix 1021/20). A detailed, habitat-by-habitat breakdown is not included within Appendix 9.16, however summary tables are provided. With respect to non-linear habitats (arable, grassland, etc.) Table 4.6 of Appendix 9.16 shows that within Route Section 2B there will be a net loss of 16.9ha equating to a 'net biodiversity balance' score of -373 units. With respect

to linear habitats (e.g. hedgerows) Table 4.5 of Appendix 9.16 shows a net gain of 20.3km of hedgerow habitat equating to a 'net linear balance' score of +20.3 units. For context, the project-wide biodiversity accounting calculations (Tables 4.1-4.2 of Appendix 9.16 of the FEI) show a net biodiversity balance score of -432 units and a net linear balance score of +27.6 units

5.2.2 Given that there is a net loss of terrestrial habitat within Route Section 2B (and project-wide), irrespective of the inclusion or otherwise of ECS B10, which is not proposed to be compensated by the project, I can see no requirement for other terrestrial habitats to be provided by ECS B10 at this specific location, as it is evidently only intended to provide general mitigation for habitat loss, which could be provided anywhere along the route.

### 5.3 Summary

5.3.1 In summary, there is no justification for the location or extent of ECS B10 in relation to compensation for terrestrial habitat loss.

## 6 Summary & Conclusions

- 6.1 Ecological Compensation Site (ECS) B10, within Route Section 2B, overlaps with land allocated for housing within the submission version of the Vale of Aylesbury Local Plan (forming part of Site WIN001). Accordingly, I have been asked by Gladman Developments Ltd, who act on behalf of interested parties, to review the background information relating to the East West Rail Phase 2 project, in particular the ecological mitigation strategy and associated compulsory purchase (under the Transport and Works Act Order) of approximately 1.8ha of land for ECS B10.
- 6.2 Based on the description contained within the environmental information supporting the TWAO and subsequent clarification provided by Network Rail, ECS B10 is primarily intended to provide mitigation for impacts on Great Crested Newts (GCN). In addition, ECS B10 is intended to contribute towards the overall route-wide mitigation in terms of other fauna, ecological connectivity and habitats.
- 6.3 In relation to GCN, I note that no ponds or other waterbodies supporting GCN are to be lost in the proximity of ECS B10. Across Route Section 2B as a whole there will be a net gain of eight waterbodies for GCN and project-wide there will be a net gain of 33 ponds. In terms of terrestrial habitat loss, there will be negligible impact within the core area (50m radius) of GCN ponds 72, 456 and 501 and even in the absence of ECS B10 there will be a significant net gain in terrestrial habitat for GCN within Route Section 2B (15.4ha) and project-wide (31ha). In addition, I consider that alternative ECS could be utilised for the translocation of GCN and the desired mitigation / enhancement in terms of general connectivity. I therefore conclude that ECS B10 is not essential to mitigate for the effects of the project on GCN at this location.
- 6.4 In terms of other fauna, I note the habitats proposed to be created within ECS B10 would be capable of supporting Badgers, bats, birds, Otters, reptiles and terrestrial invertebrates. However, I consider these to be side-benefits and therefore not an essential mitigation requirement at this specific location.
- 6.5 Regarding designated sites, I note the minor loss of habitat within Old Quarry Winslow Biological Notification Site (BNS) will be fully compensated by habitat creation and reinstatement outside of ECS B10. In addition, I note the aspiration to better connect the BNS to Woodland Copse off Magpie Way Local Wildlife Site (LWS) is proposed as an

enhancement, rather than mitigation. Accordingly, I conclude that ECS B10 is not required to mitigate impacts on designated sites.

6.6 In terms of Habitats of Principal Importance (HPI), such as deciduous woodland, the proposed habitat creation and reinstatement within Route Section 2B is likely to provide a net gain in habitat, even in the absence of ECS B10. As such, I do not consider that ECS B10 provides essential mitigation for HPI at this specific location.

6.7 In conclusion, I consider there is insufficient justification for the proposed extent or specific location of ECS B10 and in my view there is no ecological reason why the compensation purported to be delivered by ECS B10 could not be provisioned elsewhere.