

Adran Seilwaith yr Economi  
Department for Economic Infrastructure



Llywodraeth Cymru  
Welsh Government

**THE LONDON TO FISHGUARD TRUNK ROAD (A40) (LLANDDEWI  
VELFREY TO PENBLEWIN IMPROVEMENT AND DE-TRUNKING) ORDER  
201-**

**THE LONDON TO FISHGUARD TRUNK ROAD (A40) (LLANDDEWI  
VELFREY TO PENBLEWIN IMPROVEMENT) (SIDE ROADS) ORDER 201-**

**THE WELSH MINISTERS (THE LONDON TO FISHGUARD TRUNK ROAD  
(A40) (LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENT))  
COMPULSORY PURCHASE ORDER 201-**

**SUMMARY PROOF OF EVIDENCE**

**Pete Wells, BSc, MSc, MCIEEM, CEnv**

**WELSH GOVERNMENT, ECOLOGY AND NATURE CONSERVATION**

**DOCUMENT REFERENCE: WG REF. NO. 1.5.1**

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## **1. Author**

- 1.1 I am Peter John Wells and I am a Senior Ecologist at Ove Arup & Partners Ltd (hereafter referred to as “Arup”).
- 1.2 I am a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and am a Chartered Environmentalist.
- 1.3 I am the lead ecologist on the A40 Llanddewi Velfrey to Penblewin Scheme (hereafter referred to as “the Scheme”) and the author of the Chapter 8 of the ES (Ecology and Nature Conservation) (Doc. 3.08.01) and author of the Statement to Inform an Appropriate Assessment (SIAA) (Doc. 4.06.12).

## **2. Scope and Purpose of this Proof of evidence**

- 2.1 My evidence will explain the ecological aspects of the Scheme including details of the methods of surveys undertaken, the results of the surveys, the assessment of impacts, mitigation measures and changes to published scheme after the publication of the draft Orders.

## **3. Legislation, Policy and Guidance**

- 3.1 My evidence has presented the legislation, policies and guidance relevant to the design, assessment and construction of the Scheme.

## **4. Methodology and Consultation**

- 4.1 Within my evidence I have outlined the suite of ecological surveys which were undertaken during 2016 and 2017 to determine the baseline environment in terms of ecological receptors. All of the survey were undertaken in accordance with published guidance as set out in Section 8.4 of Chapter 8 of the ES (Doc. 3.08.01).
- 4.2 The potential effects of the Scheme have been assessed within the ES following the guidance published by the Chartered Institute of Ecology

and Environmental Management for Ecological Impact Assessment (Doc. 4.6.20).

- 4.3 Consultation, during the development of the Scheme, with environmental stakeholders was undertaken through the Environmental Liaison Group Meetings. In addition, two meetings were held with the Protected Species Team of Natural Resources Wales (NRW).

## **5. Ecological Baseline**

- 5.1 My evidence has presented a summary of the baseline information set out within the Chapter 8 of the ES (Doc. 3.08.01).
- 5.2 Ecological receptors identified within the vicinity of the Scheme include European designated sites, bat roosts, dormice, badgers, otters and populations of other common species.

## **6. Effects of the Construction of the Published Scheme on Ecological Receptors**

- 6.1 The assessment of impacts from the construction of the Scheme was made in the absence of mitigation measures.
- 6.2 The assessment in Chapter 8 of the ES identified the potential for significant effects on watercourses from pollution, bat species from the severing of flight routes, dormice from the loss and fragmentation of habitats, otters from the severing of habitats and entrapment in excavations and badgers from the loss of setts and entrapment in excavations.

## **7. Effects of the Operation of the Published Scheme on Ecological Receptors**

- 7.1 Significant effects from the operation of the Scheme identified within the ES are the risk to animal populations from collision with vehicles, in particular bat species, and the potential for pollution of watercourses.

## **8. Effects of the Published Scheme on European Designated Sites**

8.1 The assessment in the Statement to Inform an Appropriate Assessment (SIAA) (Doc. 4.06.12) concluded there was the potential for significant effects on the otter populations of the Cleddau Rivers SAC and Carmarthen Bays and Estuaries SAC, the greater horseshoe bat populations of the Pembrokeshire Bat Sites and Bosherton Lakes SAC and the Limestone Coast of South West Wales SAC, the lesser horseshoe bat population of the Pembrokeshire Bat Sites and Bosherton Lakes SAC, and the barbastelle bat population of the North Pembrokeshire Woodlands SAC.

## **9. Mitigation and Compensation Design in the Published Scheme**

- 9.1 My evidence has presented the mitigation and compensation measures which were proposed as part of the published Scheme.
- 9.2 Mitigation measures for legally protected species were included within the Scheme design and the set out in Chapter 8 of the ES (Doc. 3.08.01). Enhancement opportunities are also identified along with monitoring proposals.

## **10. Residual Effects of the Published Scheme**

- 10.1 The Appropriate Assessment documented in Section 7 of the SIAA (Doc. 4.06.12) concluded that with, the mitigation measures identified and described in the SIAA and Chapter 8 of the ES, there would be no adverse effects on the integrity of the European sites being considered.
- 10.2 Section 8.9 of Chapter 8 of the ES (Doc. 3.08.01) concluded that with the various mitigation and compensatory measures that were proposed the potential effects of the Scheme would be reduced to levels that would not be significant.

## **11. Consultee's Responses and Objections to the Scheme**

11.1 My evidence has addressed two objections to the Scheme, being those of NRW (R0046) and Ms Amoore (R0069).

## **12. Changes to the Mitigation Proposals**

12.1 In light of the concerns raised by NRW the culverts within the Scheme design which are intended to provide safe passage for bats have been increased in size to 3m by 3m as a minimum. In addition, a drainage culvert has been increased to 2m high by 3m wide, and a bat underpass and pedestrian underpass have been combined. These changes have been made to ensure the culverts are used by both lesser and greater horseshoe bats to provide safe crossing points.

12.2 Dormice crossing structures which were proposed as separate features have been included within the enlarged culverts under the Scheme and two additional crossing structures proposed to ensure that the dormice are able to safely cross the Scheme during dispersal.

## **13. Residual Effects of the Revised Scheme**

13.1 My evidence has presented my opinions and assessment of the residual impacts of the Scheme in light of the changes to the Scheme, in particular to the effects on bats, dormice, otters and the effects on the features of European Sites. In addition, the effects of the Scheme on wildlife and biodiversity have also been considered.

## **14. Conclusion**

14.1 It is my opinion that the Scheme, taking in to account the revised mitigation proposals, will not give rise to significant effects on ecological receptors and will therefore not give rise to adverse effects on the integrity of European Sites.