Adran yr Economi a'r Seilwaith Department for Economy and Infrastructure



The M4 Motorway (Junction 23 (East of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and The M48 Motorway (Junction 23 (East of Magor) Connecting Road) Scheme 201-

The M4 Motorway (Junction 23 (East of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and The M48 Motorway (Junction 23 (East of Magor) Connecting Road) (Amendment) Scheme 201-

The London to Fishguard Trunk Road (East of Magor to Castleton) Order 201-

The M4 Motorway (West of Magor to East of Castleton) and the A48(M) Motorway (West of Castleton to St Mellons)(Variation of Various Schemes) Scheme 201-

The M4 Motorway (Junction 23 (East of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and the M48 Motorway (Junction 23 (East of Magor) Connecting Road) and The London to Fishguard Trunk Road (east of Magor to Castleton) (Side Roads) Order 201-

The Welsh Ministers (The M4 Motorway (Junction 23 (East of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and the M48 Motorway (Junction 23 (East of Magor) Connecting Road) and the London to Fishguard Trunk Road (East of Magor to Castleton)) Compulsory Purchase Order 201-

The M4 Motorway (Junction 23 (East Of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and The M48 Motorway (Junction 23 (East Of Magor) Connecting Road) (Supplementary) Scheme 201-

The Welsh Ministers (The M4 Motorway (Junction 23 (East Of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and The M48 Motorway (Junction 23 (East Of Magor) Connecting Road) and The London to Fishguard Trunk Road (East of Magor to Castleton)) Supplementary Compulsory Purchase Order 201-

Proof of Evidence - Erratum

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Welsh Government, Carbon

Document Reference: WG 1.13.4

March 2017 Page 1

- 1.1 An error has been noted in the calculated extrapolation towards carbon neutrality in Paragraph 4.3.16 of WG Document 1.13.1 (Proof of Evidence). The error resulted from excluding from the calculation the operational annual carbon for each year. The correct date is 2072 instead of 2066. This date is also mentioned in Paragraphs 4.3.18, 5.2.1 and 6.4 of the main Proof of Evidence and in Paragraph 3.4 of the Summary of the PoE; and the payback period is 50 years instead of 45 years in Section 6.4 and the Summary.
 - 1.2 The extrapolation has been carried out as follows. The "carbon neutral" calculation is based on my Table 2 of VISSIM / PHEM which addresses user carbon on the existing M4 and on the new M4 between junctions 23 and 30:
 - 1% improvement in 2022 having regard to user carbon
 - 3% improvement in 2037 having regard to user carbon
 - Linearly interpolate between those 2 dates i.e. a proportionate net increase in carbon savings having regard user carbon from 2023 onwards until the 3% annual saving in 2037.
 - For each year after 2037 it is assumed that the annual user carbon savings are identical to those in 2037.
 - The operational carbon costs of the new road are assumed to be the same for each year from 2022 onwards
 - Having regard to the net annual carbon savings (user savings less operational carbon cost) as calculated in accordance with the previous five bullet points the capital carbon incurred during construction, 2018 to 2022, is repaid in 2072.

March 2017 Page 2

- 1.3 The extrapolation set out in 1.2 does not take into account the impact of the Scheme on user carbon on the wider South Wales road network. The SATURN carbon results for 2022 and 2037 in combination with the VISSIM/PHEM results reported in Tables 1 and 2 of the proof of evidence suggest that there would be further user carbon savings beyond the existing M4 and the new M4 both in the opening year and the design year of 2037. The carbon neutrality extrapolation ignores these savings and is, in this regard, conservative.
- 1.4 The above correction does not change the conclusions of the Proof of Evidence, apart from that change in date.

March 2017 Page 3