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-

Chief Witness Proof of Evidence Clarifications

Matthew Jones BEng (Hons), CEng, MICE

Welsh Government, Chief Witness

Document Reference: WG1.1.5

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Annex A: Development in Magor Undy since 1994

Annex B: Table showing numbers of current and withdrawn objections and supporters

1. Introduction

1.1 This document provides responses to questions of elucidation raised by Mr Wadrup in correspondence dated 20 February 2017 and verbally at inquiry by Mr Wadrupon 28 February 2017.

2. Clarifications

- 2.1 Evidence Section 4: **Question:** Following the 94 consultation has there been significant development in the North of Magor relative to the south?
- 2.2 Evidence. Section 4: **Response:** Please refer to the plan at Annex A from Monmouthshire County Council Planning Department showing the development in Magor and Undy since 1994.
- 2.3 Evidence para 4.5: **Question:** Can you point to a plan which shows the extent of the Docks Way landfill site which was said this to be the determinant in selecting a route through the middle of the docks?
- 2.4 Evidence para 4.5: **Response:** The Preliminary Sources Study Report 2014 summarises geotechnical information available regarding the landfill site at the time of decision making on a strategic plan and announcement of the extant preferred route. This report is Inquiry Library Document 4.6.1 and borehole information relating to the landfill is on Drg Reference M4-OA-01-00-DR-Z-XX-0047.
- 2.5 Evidence Section 6 Table 1: **Question:** Supplementary order objection period.2016 not 2017...also re modifications to CPO.
- 2.6 Evidence Section 6 Table 1: **Response:** Noted. Errata to be issued.
- 2.7 Evidence Section 6 Table 1: **Question:** If there are further publications of draft Orders or schemes could I have a replacement page 23 please.
- 2.8 Evidence Section 6 Table 1: **Response:** The published list is still current but may be added to with supplementary Orders for additional viaduct

- protection measures in Newport Docks and an additional eastbound offslip in the vicinity of Magor services.
- 2.9 Evidence para 6.1.5: **Question:** It would be useful to have the proposed modifications presented to the Inquiry early on so that any affected parties could be made aware of them before their respective cases come to be considered. This affects those concerned with the modifications but also those who may be affected in the area nearby.
- 2.10 Evidence para 6.1.5: **Response:** Noted and these will be provided to the inquiry in due course.
- 2.11 Evidence para 7.8: **Question:** Is there documentation which led to the Department endorsing the WG approach available?
- 2.12 Evidence para 7.8: Response: The WG approach is consistent with the Department's latest available Trip End Model Projections (TEMPRO 7.2) which are available at https://www.gov.uk/government/collections/tempro which were formally released on the 1st March. A DfT letter of 12 Dec 2016 has been provided to the Programme Officer which confirms that the trip end projections used by WG are consistent with those now formally released by the Department.
- 2.13 Evidence para 7.10/8.5: **Question:** If the evidence demonstrates that the M4 is already subject to "congestion with frequent accidents" then that would indicate that its capacity (100%) is frequently exceeded, yet the paragraphs do not indicate that, so are you claiming that there is a disconnect between theoretical capacity (80%) and frequent reality on the existing M4? In other words, I'm trying to get a feel as to whether the evidence of supporters who claim frequent and long breakdown of flow is exaggerated or not. If there is a disconnect between theoretical highway capacity, as accounted for in traffic models and economic models, and reality then does that throw into question the validity of the claimed benefits (and limitations) that the scheme might bring in the real world?

- 2.14 Evidence para 4.249: **Response:** Question referred to Mr Bryan Whittaker for a technical response. Reference also given to the press reports of incidents, and their associated public transport impacts as reported on social media, in Appendix B of Matt Jones' main Proof of Evidence.
- 2.15 Evidence para 8.6: **Question:** Does this paragraph mean that the methodology used in developing the forecasts are in accordance with government policy for the prediction of future traffic forecasts?
- 2.16 Evidence para 8.6: Response: Yes.
- 2.17 Evidence para 8.9: Question: This raises the issue of whether or not the economic case for the scheme has included these economic disadvantages of urban congestion when the M4 is blocked, or not. Does it?
- 2.18 Evidence para 8.9: Response: Yes.
- 2.19 Evidence para 8.11: **Question:** If the VSL system restricts traffic speeds (as it is designed to do for safety reasons) does this mean that the economic traffic model has overestimated actual speeds to the detriment of the economic case for building a relief road?
- 2.20 Evidence para 8.11: Response: No. VSL is taken into account indirectly since the speed-flow curves in the transport model for all M4 links are calibrated based on observed speed and flow. In particular therefore the speed-flow curves between J24 and J28 are calibrated to the VSL conditions.
- 2.21 Evidence para 8.13: **Question:** Why is the projected accident saving of 300 accidents regarded as conservative?
- 2.22 Evidence para 8.13: **Response:** The observed rates on the existing M4 have been applied in both the Do Minimum and Do Something scenarios. This is despite the fact that in the Do Something scenario the existing M4 is reclassified as a trunk road or 'A' road, with various

changes to its layout to improve safety. For the new section of motorway, average accident rates have been applied which are national averages across the UK motorway network. It is reasonable to assume that proposed new the motorway, designed and constructed to current standards for the forecast traffic flows, including Intelligent Transport Systems, would provide a route which would perform better than national average.

- 2.23 Evidence para 8.19: Question: The traffic modelling work associated with the levy of tolls on the Severn crossings needs precise clarification in that, as I understand it, you have assumed that tolls will be cut to half the current level. Yet the current consultation is for tolls to be reduced somewhat lower than half the current level and there was a suggestion of zero tolling from 2027 which is within the traffic forecasting and economic analysis period. Are you intending to supply the Inquiry with a sensitivity analysis around this issue so that a reasoned assessment can be made of the effect that tolling is likely to have on traffic flows on the existing M4 and thereafter the proposed M4 or any of its alternatives?
- 2.24 Evidence para 8.19: **Response:** We have tested a full spectrum of tolls, ranging from no toll to current toll. The core scenario has been based on a half toll reflecting the 2015 and 2016 budget statements by then Chancellor of the Exchequer. The half toll assumption in the core scenario is very similar to the DfT's toll that is currently in their Consultation. The half toll is modelled in perpetuity. Sensitivity analysis will be presented and any toll level not directly tested would be within the spectrum of tolls tested.
- 2.25 Evidence para 9.1/9.6: Question: It would be beneficial if a map of the probable Metro routes was made available at the Inquiry to enable understanding of how the Metro would reduce traffic flows in the M4 east-west corridor to be made. Can I conclude that the percentage reduction in motorway traffic has featured in the current WG figures?

- 2.26 Evidence para 9.1/9.6: **Response:** In line with guidance set out in WebTAG only schemes that are "near certain or more than likely" were included in the M4CaN traffic model. This meant that Metro Phase 3 was excluded from the M4CaN traffic model due to the lack of certainty or opening dates of the schemes it encompasses. An 'alternative approach' described in section 12 of Mr Whittaker's evidence assumed that the Metro Phase 2 and 3 schemes would be fully implemented in order to test the maximum potential for traffic switching from the M4 motorway around Newport to public transport. This analysis showed a reduction in traffic on the M4 around Newport of up to 4%. Diagrams illustrating the South Wales Metro Phase 2 assumed service patterns and frequencies are included in Figures 12.1 and 12.2 of the proof of evidence of Mr Whittaker. Paragraphs 12.1.5 and 12.1.6 of Mr Whittaker's evidence describe the Metro Phase 3 schemes that were identified as valid alternatives to the M4 around Newport for inclusion in the 'alternative approach'.
- 2.27 Evidence para 10.3/10.6: Question: The status of these aims and objectives needs clarification. In other words, are they the aspirations of Officials, or Ministers, or actual Government Policy?
- 2.28 Evidence para 8.19: **Response:** The strategic 'Plan' adopted in July 2014 by the Welsh Ministers' became Government policy.
- 2.29 Evidence para 13.3/13.4: Question: An explanation would be helpful in respect of the Caldicot Moor mitigation reduction and at paragraph 13.4 why a similar reduction in risk allowances (within the estimate I assume) would be appropriate.
- 2.30 Evidence para 13.3/13.4: **Response:** It is Welsh Government's view that the Caldicot Moor mitigation area can be reduced in size and a modification (MOD 71) has been prepared. This modification is already included in the draft SSSI Mitigation Strategy for Caldicot Moor (Appendix SR10.35) that was published in the December 2016 ES Supplement.

If implemented there would therefore be a reduction in land acquisition cost and compensation liable to the farmer landowner. This cost saving would reduce the land & compensation liability, but is offset by additional land costs of culverts added to the design at this point. Hence the land cost remains the same. These elements do not change the risk allowance.

However, NRW suggest that the hydrological conditions that would result may affect current water level management on the now excluded parcels of land to the south (see proof of evidence of Jessica Poole at paragraph 5.2.2.5) and that the land to be removed from the draft Orders should be retained. Discussion on this matter are ongoing with NRW to inform decision making on the potential modification which shall be presented to the Inquiry in due course.

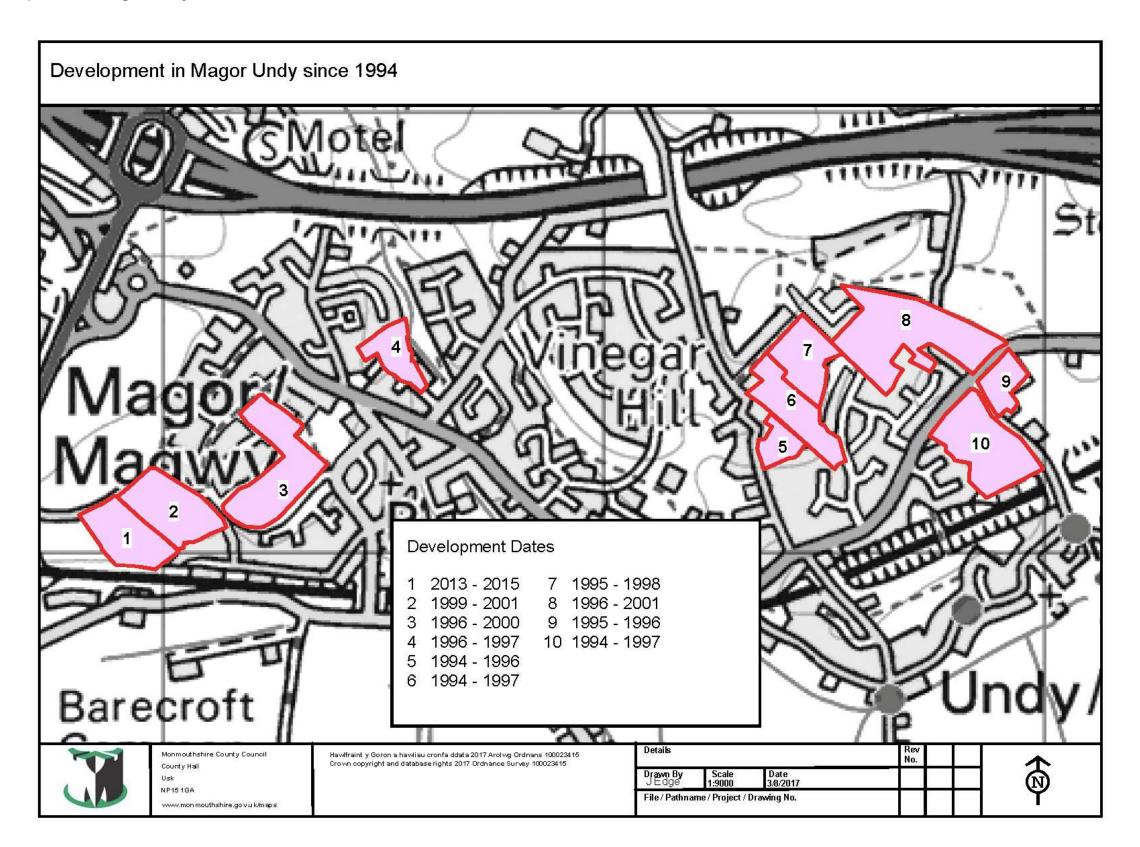
- 2.31 Evidence para 17.13: Question: Section 61 of what?
- 2.32 Evidence para 17.13: **Response:** The Control of Pollution Act 1974.
- 2.33 Evidence para 18.6: Question: What degree?
- 2.34 Evidence para 18.6: **Response:** Although I said that this point will be expanded upon by Dr Peter Ireland it is now covered by PIQ / INQ 19.
- 2.35 Evidence para 22.1: **Question:** At the Inquiry I will need an up-to-date list of which objections have been withdrawn.
- 2.36 Evidence para 22.1: Response: To date 34 objections removed. See full table at Annex B which provides the latest statement. This includes reclassification of Coal Authority, previously classed as Supporter but neither objection nor support and now classed as Issues.
 - A check has been carried out on all items classed as being of support and the submission from Monmouthshire Local Access Forum has also now been reclassified as 'Issues' rather than support.
- 2.37 Evidence para 23.7/8: **Question:** Do we take it that currently there are therefore 19 alternatives under consideration or 13+1?

2.38 Evidence para 23.7/8: Response: Currently 22:

- M4 Corridor around Newport Objectors' Suggested Alternatives
- 1 Blue Route
- 2 Blue Route (Phase 1)
- 3– Green Route (West of Wilcrick Route and M48 / B4245 Connection)
- 4 North and West of Wilcrick Route
- 5 Move Part of J23 between Rogiet and Caldicot
- 6 M48 / B4245 / Severn Tunnel Junction Station Connection
- 7 Direct Access to Severn Tunnel Junction Station from J23
- 8 Free-flow J23 and Connection at J23A, with Grade Separated M48 Roundabout
- 9 Free-flow J23 and Connection at J23A, without M48 Roundabout
- 10 Free-flow J23 and Connection at J23A, with At-Grade M48 Roundabout
- 11 J23A Westbound On-slip
- 12 Move Main Alignment South at Meadows Road
- 13 Northern Dock Route 1
- 14 Northern Dock Route 2
- 15 Northern Dock Route 3
- 16 Northern Dock Route 4
- 17 Remove Docks Way Junction and Link
- 18 Free-flow J23 and Connection at J23A (2006 TR111 Route)
- 19 Online Widening of Existing M4 including Brynglas Tunnels
- 20 Tunnel from Magor to Castleton
- 21 South of Magor Route
- 22 Closure of Existing M4 Junctions

Annexes

Annex A: Development in Magor Undy since 1994



Annex B: Table showing numbers of current and withdrawn objections and supporters.

Latest Figures	of	ponded of use of objection	emails s either it email ovided.	nses	rawn	as	ø.	ing to	e of	<u> </u>	st	o to	(post onses s	es to		General Point of Objection (on latest number)						
as of 2/3/17	Original number at close Response Period	Number that have respond advising no knowledge of u their email to register an obj	Number to which response en have failed to deliver as e incorrect or non-existent e address provi	Number of duplicate respor consolidated	Number of objections withd	Number now not classed Objector or Supporter	Number sent in duplicat campaign emails	No of people no longer wishir receive correspondence	Number of new since clos Response period	Latest numbe	Number of WG first (post acknowledgement) response Issued to Objectors	Number of first responses Objectors to be issued	Number of WG Second (p acknowledgement) respon Issued to Objectors	Number of Second response Objectors to be issued	Stakeholder	Policy	Legal	Environment	Construction	Engineering	Alternatives	
Supporters	191	0	0	0	0	2	-		14	203	-	-	-	-	-	-	-	-	-	-	-	
Issues	6								7	13	12	0									1	
Statutory Objections	81	0	0	1	8	2	0	1	2	71	71	0	2	6	57	6	0	2	0	10	5	
Bespoke Non-Statutory Objections	267	0	0	4	7	2	0	0	16	270	269	1	7	3	15	86	0	190	4	121	137	
Campaign Objections related to RSPB	5399	177	210	36	13	0	57	76	0	4830	5399	0	4	1	0	0	0	4904	0	0	0	
Campaign Objections related to Woodland Trust	764	8	50	8	5	0	6	0	0	687	764	0	1	0	0	0	0	687	0	0	0	
Campaign Objections related to Wildlife Trust Wales	223	4	5	61	1	0	0	2	0	150	223	0	0	0	0	0	0	161	0	0	0	
Campaign Objections related to Gwent Wildlife Trust	168	0	9	7	0	0	0	0	1	153	168	0	3	0	0	0	0	152	0	0	0	
Total	6902	189	274	117	34	4	63	79	19	6161	6894	1	17	10	72	92	0	6096	4	131	142	