



Report to the Secretary of State for Communities and Local Government and the Secretary of State for Transport

By Jack Moffett, BSc (Hons), FICE, MIHT.

**An Inspector appointed by the Secretary of State
for Communities and Local Government and the
Secretary of State for Transport**

The Planning Inspectorate
4/11 Eagle Wing
Temple Quay House
2 The Square
Temple Quay
Bristol BS1 6PN
☎ 0117 372 6372

03/04/2008

HIGHWAYS ACT 1980

ACQUISITION OF LAND ACT 1981

**The A421 Trunk Road (M1 Junction 13 to Bedford Improvements and
Detrunking) Order 20..**

**THE A421 TRUNK ROAD (M1 JUNCTION 13 TO BEDFORD IMPROVEMENTS)
COMPULSORY PURCHASE ORDER (MP No.), 20.. .**

**THE A421 TRUNK ROAD (M1 JUNCTION 13 TO BEDFORD IMPROVEMENTS
SIDE ROADS) ORDER 20..**

The A421 Trunk Road (M1 Junction 13 Improvements) Order 20 .

**THE A421 TRUNK ROAD (M1 JUNCTION 13 IMPROVEMENTS) COMPULSORY
PURCHASE ORDER (MP No.), 20..**

**THE A421 TRUNK ROAD (M1 JUNCTION 13 IMPROVEMENTS SIDE ROADS)
ORDER 20..**

The M1 Motorway (Junction 13 and Connecting Roads) Order 20 .

**THE M1 MOTORWAY (JUNCTION 13) COMPULSORY PURCHASE ORDER (MP
No.), 20..**

THE M1 MOTORWAY (JUNCTION 13 SIDE ROADS) ORDER 20..

Dates of inquiry: 4-6, 11-13, 18-20 December 2007, 29 January–1 February
and 13 February 2008.

Ref: HA/65/11/111

CONTENTS	Page No.
PRINCIPAL ABBREVIATIONS USED IN THIS REPORT	2
CASE DETAILS	4
1.0 PREAMBLE	5
2.0 DESCRIPTION OF THE SITE AND ITS SURROUNDINGS	8
3.0 LEGAL SUBMISSION	9
4.0 THE CASE FOR THE HIGHWAYS AGENCY	9
Statement of case	9
Engineering	14
Traffic and economics	16
Construction	20
Landscape	23
Noise and vibration	26
Agriculture	29
Built Heritage	30
Archaeology and historic landscape	31
Ecology	31
Water environment	32
Air quality	33
5.0 THE CASES FOR THE SUPPORTERS	34
6.0 THE CASES FOR THE OBJECTORS	35
7.0 THE RESPONSES OF THE HIGHWAYS AGENCY	49
8.0 CONCLUSIONS	75
9.0 RECOMMENDATIONS	98

APPENDICIES

A Appearances

B Lists of Documents

C Report: The circumstances surrounding inquiry adjournments No. 1 and No. 2.

PRINCIPAL ABBREVIATIONS USED IN THIS REPORT

AADT: Annual Average Daily Traffic
AGPC: Aspley Guise Parish Council
ALC: Agricultural Land Classification
AST: Appraisal Summary Table
BCC: Bedfordshire County Council
BCR: Benefit Cost Ratio
BRWA: Bedfordshire Rights of Way Association
CEMP: Construction Environmental Management Plan
COBA: Cost Benefit Analysis Programme of the Department for Transport
CPO: Compulsory Purchase Order
CTCRRN: Cycling Touring Club Right to Ride Network
DEFRA: Department for Environment, Food and Rural Affairs
CRTN: Calculation of Road Traffic Noise
dB(A): Decibels
DfT: Department for Transport
DM: The road network without the Scheme
DS: The road network with the Scheme
DMRB: Design Manual for Roads and Bridges
EA: Environment Agency
EU: European Union Council
ECI: Early Contractor Involvement
EoEP: East of England Plan
ES: Environmental Statement
HA: Highways Agency
HGV: Heavy Goods Vehicle
IDB: Internal Drainage Board
ILD: Increased Land Development Growth Scenario
IRP: Interchange Retail Park
KSI: Killed or Seriously Injured
LCA: Landscape Character Area
LDF: Local Development Framework
LHA: Local Highway Authority
LSMMMS: London to South Midlands Multi Modal Study
M: Million
MKC: Milton Keynes Council

MKSM: Milton Keynes and South Midlands
ML: Most Likely Growth Scenario
MOVA: Microprocessor Optimised Vehicle Actuation
MoU: Memorandum of Understanding
NIR: Noise Insulation Regulations
NMU: Non-Motorised User
NPV: Net Present Value
pcu: Passenger Car Units
PIA: Personal Injury Accident
PIM: Pre-Inquiry Meeting
PMA: Private Means of Access
PoE: Proof of Evidence
PPG: Planning Policy Guidance
PPS: Planning Policy Statement
P&R: Park and Ride
PRoW: Public Rights of Way
RLD: Reduced Land Development Growth Scenario
RPG: Regional Planning Guidance
RSS: Regional Spatial Strategy
SEMKCD: South-East Milton Keynes Consortium of Developers
SEoEP: South-East of England Plan
RTS: Regional Transport Strategy
SoS: Secretary of State
SRO: Side Roads Order
SRS: Sub-Regional Strategy
TAME: Traffic Appraisal, Modelling and Economics Division of the HA
TEMPRO: Trip End Model Presentation Programme
The Scheme: The A421, M1 Junction 13 to Bedford Improvements
TN: Technical Note
TPI: Targeted Programme of Improvements
vph: Vehicles per hour
WHO: World Health Organisation

CASE DETAILS

The draft Line and Detrunking Orders

- The A421 Trunk Road (M1 Junction 13 to Bedford Improvements and Detrunking) Order 20.., was published on 22 March 2007, under Sections 10, 12 and 41 of the Highways Act 1980. The Order will provide that the roads which the Secretary of State proposes to construct along the routes described in the Order, shall become trunk roads from the date when the Order comes into force. The draft Order will also provide that the lengths of the trunk road to be superseded by the new trunk road shall cease to be trunk road. They shall be re-classified as classified roads from the date on which the new trunk road on the main route is open for traffic. The Secretary of State shall notify Bedford County Council of this opening date, whereupon the County Council will become the highway authority responsible for those lengths.
- The A421 Trunk Road (M1 Junction 13 Improvements) Order 20 , which was published on 22 March 2007, under Sections 10, 12 and 41 of the Highways Act 1980, will provide that the roads, which the Secretary of State proposes to construct along the routes described in the Order, shall become trunk roads from the date when the Order comes into force.
- The M1 Motorway (Junction 13 and Connecting Roads) Order 20 , which was published on 22 March 2007, under Sections 16, 17 and 19 of the Highways Act 1980 will provide that the roads, which the Secretary of State proposes to construct along the routes described in the Order, shall become trunk roads from the date when the Order comes into force.

The draft Side Roads Orders

- THE A421 TRUNK ROAD (M1 JUNCTION 13 TO BEDFORD IMPROVEMENTS SIDE ROADS) ORDER 20.., THE A421 TRUNK ROAD (M1 JUNCTION 13 IMPROVEMENTS SIDE ROADS) ORDER 20.. and THE M1 MOTORWAY (JUNCTION 13 SIDE ROADS) ORDER 20.. which were published on 22 March 2007, under Sections 12, 14, 18 and 125 of the Highways Act 1980, in relation to the A421 Trunk Road and the new trunk roads to be constructed by the Secretary of State at Husborne Crawley, Hulcote, Salford, Aspley Guise, Brogborough, Lidlington, Marston Moretaine, Wootton, Stewartby, Kempston and Elstow in the County of Bedfordshire would authorise the Secretary of State to provide new highways and new means of access and alterations to existing highways, footpaths and Private Means of Access to premises as would be necessary because of the construction of the new highway where it did not form part of the new road on the main route. The Order would provide for the transfer of each new highway to Bedfordshire County Council, as the highway authority, from the date agreed with Bedfordshire County Council. In addition the Order, under Section 18 of the Highways Act 1980 in relation to the M1 Motorway Junction 13 at Husborne Crawley, would authorise the Secretary of State to stop up the four existing slip roads.

The draft Compulsory Purchase Orders

- THE A421 TRUNK ROAD (M1 JUNCTION 13 TO BEDFORD IMPROVEMENTS)

COMPULSORY PURCHASE ORDER (MP No.), 20.., THE A421 TRUNK ROAD (M1 JUNCTION 13 IMPROVEMENTS) COMPULSORY PURCHASE ORDER (MP No.), 20.. and THE M1 MOTORWAY (JUNCTION 13) COMPULSORY PURCHASE ORDER (MP No.), 20.. which were published on 22 March 2007, under Sections 239, 240 and 246 of the Highways Act 1980, as extended and supplemented by Section 250 of that Act and under Section 2 of the Acquisition of Land Act 1981 and all other enabling powers, would authorise the Secretary of State to purchase compulsory land rights for the construction of the new trunk road in the areas described in the draft Orders in pursuance of the Trunk Road Orders. In addition, the draft Orders would authorise acquisition of land necessary for the construction and improvement of highways and the provision of new means of access to premises in those parishes and districts in pursuance of the Side Roads Orders used by the Secretary of State in connection with such construction and improvement of highways and the execution of other works mentioned above, and the mitigation of any adverse effects which the existence or use of the highways proposed to be constructed or improved will have on their surroundings.

- **Recommendations:** I recommend that the draft Line and Detrunking Orders be modified and so modified be made. I recommend that the draft Side Roads Orders be modified and so modified be made subject to consideration by the Secretary of State of submissions to be made to her, by the end of June 2008, with regard to the (1) an agreement between the Highways Agency and Bedfordshire County Council, under Section 4 of the Highways Act 1980, to carry out capacity enhancement works at Cowbridge Roundabout and (2) confirmation from the Interchange Retail Park owners that these works would be acceptable to them. I recommend that the draft Compulsory Purchase Orders be modified and so modified be made.

PREAMBLE

- 1.1 I have been appointed by the Secretary of State for Transport and the Secretary of State for Communities and Local Government, pursuant to para. 7 of Schedule 1 to the Highways Act 1980 and Section 13 (2) of the Acquisition of Land Act 1981, to hold local public inquiries into the above draft Orders and the proposed A421 (M1 Junction 13 to Bedford) improvements ("the Scheme"), giving rise to the draft Orders.
- 1.2 Reference in this report to the Secretary of State ("SoS") means the Secretary or Secretaries of State with responsibility for the element of the proposals being addressed. For ease of reference, the concurrent inquiries will hereinafter be referred to as the inquiry.
- 1.3 The Scheme would comprise a 13km dual two-lane carriageway between M1 Junction 13 and the A6 at Bedford, except for the section between

Marsh Leys Roundabout and the A421/A6 Interchange, which would be a dual three-lane carriageway. Grade-separated junctions would be provided at M1 Junction 13, Marston Moretaine and at Marsh Leys.

- 1.4 A pre-inquiry meeting ("PIM") was held at the Saturn Facilities, Bedford Heights, Manton Lane, Bedford, MK41 7PH on 25 October 2007. Notes of the PIM (ID/1) were issued on 2 November 2007.
- 1.5 The inquiry commenced at 10.00am on 4 December 2007 at the Saturn Facilities and closed at 3.30pm on 13 February 2008. At the opening of the inquiry the Highways Agency ("HA") confirmed that it had complied with all statutory formalities (ID/HA/5).
- 1.6 At the commencement of the inquiry there were 19 Supporters and 81 subsisting objections and representations, eight of which were withdrawn during the inquiry. One Supporter and 12 Objectors appeared at the inquiry.
- 1.7 The main grounds for objection were:
 - the inadequacy and the inappropriateness of the proposed cluster of junctions at M1 Junction 13 and the urgent need for dualling the A421 from M1 Junction 13 to Milton Keynes;
 - the lack of provision at M1 Junction 13 for non-motorised users ("NMUs");
 - insufficient and unsatisfactory landscaping provision and noise mitigation in the area of Lower Shelton Road;
 - a reasonably convenient alternative means of access would not be provided to the Interchange Retail Park ("IRP") Roundabout when the B530 Link from the A421 is stopped up;
 - the Scheme would increase congestion on the A6 corridor generally and on the Cowbridge Roundabout in particular;
 - insufficient consideration has been given to the impacts from the changed traffic conditions on adjacent side roads when the Scheme would become operational;
 - the Scheme should be routed further away from existing settlements;
 - the extent of the Compulsory Purchase Orders ("CPOs") and access arrangements relating to individual properties; and
 - unsatisfactory provision of public rights of way ("PRoW").
- 1.8 There was a representation regarding the Scheme from Mr Alistair Burt MP, which was withdrawn on 24 October 2007 (R3/2).
- 1.9 Two Objectors who appeared at the inquiry, Aspley Guise Parish Council ("AGPC") and the South East Milton Keynes Consortium of Developers ("SEMKCD") had particular concerns about the impact of M1 Junction 13 on the surrounding area and the junction's ability to cope with traffic from planned growth in the region. The inquiry was adjourned from 20 December 2007 to 29 January 2008 (adjournment No. 1) and from 1

February to 13 February 2008 (adjournment No. 2), at the request of the HA, to allow it to undertake further work and traffic modelling in response to these concerns. Following consideration of the HA's submission of further evidence AGPC confirmed withdrawal of its objection on 13 February 2008 (ID/O22/3). The SEMKCD also withdrew its objection on 13 February 2008, having obtained the HA's acceptance of SEMKCD's summary of the outcome of the HA's work (ID/O23/1). A report describing the circumstances surrounding adjournments No. 1 and No. 2 is provided in Appendix C to this report.

- 1.10 The inquiry was conducted under the Procedure Rules for Highway and CPO inquiries, Rule 5 of the Highways (Inquiries Procedure) Rules 1994 and Rule 5 of the Compulsory Purchase by Ministers (Inquiries Procedure) Rules 1994 (DD31). There were no procedural submissions and there was one legal submission, which is reported in Section 3 of this report.
- 1.11 I issued a note to the HA, Bedfordshire County Council ("BCC") the IRP owners and Elstow Parish Council on 11 January 2008 (ID/3). This note reflected my concern that highway land, which the HA had said could be used to undertake possible capacity enhancements at Cowbridge Roundabout, was not in the HA's ownership. Capacity enhancements might be necessary should the SoS decide that, when the B530 Link is stopped up, the alternative route to IRP proposed by the HA, would not be reasonably convenient. My note advised the parties that, without evidence of any agreement between the HA and BCC, I would be unable to presume that mitigation works could be undertaken without modification to the draft Orders.
- 1.12 I made unaccompanied inspections of the site on 24 October 2007, prior to the PIM and on 3 December 2007, prior to commencement of the inquiry. Accompanied inspections of the site were made on 12 December 2007 and again on 20 December 2007.
- 1.13 During the course of the inquiry, the HA submitted proposed modifications to the draft Side Roads Orders ("SROs") and to the draft CPOs (ID/HA/6a, 7a, 7b and 7c).
- 1.14 This report contains a brief description of the site of the Scheme and its surroundings, the gist of the cases presented and my conclusions and recommendations. Lists of inquiry appearances (Appendix A) and documents (Appendix B) are attached. References to the documents listed in Appendix B are given in brackets (). In the interest of completeness, the lists of documents include the statements of case, proofs of evidence, written representations, the HA's responses to objections, closing statements and other evidence submitted by the parties. This, however, is subject to the proviso that these may have been added to or otherwise amended at the inquiry either during examination-in-chief or cross-examination.
- 1.15 In accordance with the provisions of Schedule 1, 4(5) of the Acquisition of Land Act 1981, objections and representations in whole or in part relating to matters of compensation are not reported herein. However, all

correspondence that I considered relevant to each Supporter, Objector and representation, whether withdrawn or not, was lodged in the inquiry library. The document pack accompanying this report includes all of the documents referred to above, apart from those relating to objections or representations withdrawn before or during the inquiry. In these cases only the letters of withdrawal have been included.

2.0 DESCRIPTION OF THE SITE AND ITS SURROUNDINGS

- 2.1 The site of the Scheme occupies a roughly rectangular area of land running in a south-westerly/north-easterly direction, covering the corridor of the existing A421 (DD13, Fig. 1.1).¹
- 2.2 The Scheme is bounded to the west by the M1 motorway, where it connects with M1 Junction 13 and to the east, where it connects with the A6 on the western urban fringes of the City of Bedford. The main settlements adjacent to the existing A421, between the M1 and Bedford, include Brogborough, Marston Moretaine² and Stewartby to the south of the A421 and Wootton and Kempston to the north (DD13, Figs. 1.3.1 and 1.3.2).
- 2.3 The land, to the west of the urban fringes of Bedford is predominantly agricultural in nature with areas of well vegetated woodland, established hedgerows and trees. A legacy of extensive clay extraction and brickwork manufacture has led to the formation of a number of landfill sites adjacent to the Scheme, most notably at Brogborough and at Stewartby. Areas of derelict land and water filled pits also remain, as a result of these industries, predominantly on the southern side of the existing A421 and most notably at Brogborough Lake and at Stewartby Lake (DD13, Figs. 1.3.1 and 1.3.2).
- 2.4 Nevertheless, the area has also been well developed in places with newer industries, including large distribution centres close to the existing A421 and to the M1. The IRP occupies an area near to Bedford, just to the north of the Scheme and to the west of the B530 Link (DD13, Fig. 4.1.10). There has been infill housing development, particularly at existing settlements. New highway projects are underway: the Ridgmont Bypass which would connect with the western end of the Scheme close to M1 Junction 13, and the Bedford Western Bypass which would connect with the Scheme at the Marsh Leys Junction, close to the eastern end of the Scheme (DD13, Fig. 5.2.1 and 5.2.2). There are also extensive warehousing and distribution developments to the west of M1 Junction 13 on the eastern side of Milton Keynes (DD13, Fig. 12.2).

¹ For ease of reference and because it is so described in the Environmental Statement ("ES"), hereinafter the Scheme will be described as running in a west to east direction.

² Marston Moretaine and Marston Moreteyne are the two commonly used spellings for the settlement approximately mid-way between the M1 and Bedford. Only the Marston Moretaine spelling will be used in this report.

3.0 LEGAL SUBMISSION

- 3.1 The HA submitted that case law has established, in Hall v First Secretary of State [2007] EWCA 612 (ID/HA/159), that the two separate criteria whereby, according to ODPM Circular 06/2004, a CPO can be made are in fact one and the same criterion. The criteria as set out in the Circular and identified at the PIM (ID/1) are:
- that there is a compelling case for acquisition in the public interest (para. 17); and
 - that this justifies interfering with the human rights of those with an interest in the land affected, having regard, in particular, to the provisions of Article 1 of the First Protocol to the European Convention on Human Rights and, in the case of a dwelling, to Article 8 of the Convention (para. 17).

4.0 THE CASE FOR THE HIGHWAYS AGENCY

The material points were:

Statement of case

National planning policy

- 4.1 Securing the Future: Delivering the UK Sustainable Development Strategy, published in 2005 (DD90) and Planning Policy Statement 1 ("PPS") 1, Delivering Sustainable Development (DD102) set out Government's planning policy for sustainability. PPS1 stresses the importance of a strong, stable and productive economy and requires that planning authorities should ensure that the necessary infrastructure is provided to support existing and new economic development and housing.
- 4.2 Sustainable Development in Rural Areas, PPS7 (DD105) requires that all development in rural areas should be well designed and inclusive, be in keeping and scale with its location and that it should be sensitive to the character of the countryside and local distinctiveness. PPS7 also requires that planning authorities should ensure that the quality and character of the wider countryside is protected and where possible enhanced, having particular regard to statutorily designated sites. PPS7 further requires that the presence of the best and most versatile agricultural land should be taken into account.
- 4.3 Additional national planning policies and Planning Policy Guidance ("PPG") are contained in a series of further PPSs and PPGs (HA/P7, paras. 4.4–4.20).

Regional planning policy

- 4.4 The emerging Regional Spatial Strategies ("RSSs") form part of the plan led system, as amended by the Planning and Compulsory Purchase Act 2004 (DD20) and will replace existing Structure Plans in due course. At present, regional guidance is contained within Regional Planning Guidance ("RPG") 9: South East (2001) (DD91). However, since the publication of RPG9, Bedfordshire and Luton have been re-categorised

from the South-East Region into the East of England Region. They will therefore be covered by the RSS for the East of England, i.e. the East of England Plan ("EoEP"). The SoS has proposed modifications to the draft Plan, and the consultation period regarding these proposed modifications has expired. The Plan is expected to be published shortly. However, until such time as the EoEP is published, RPG9 will remain the relevant regional guidance, although regard should be given to the draft EoEP published in December 2004 (DD244a) and (ID/HA/27 and 28).

- 4.5 The Milton Keynes and South Midlands Sub-Regional Strategy ("MKSMSRS") published in March 2005 (DD241) identifies the general area of the Scheme as one of four potential major growth areas in the wider South-East. It sets out a spatial strategy for the key growth locations, which include Bedford/Kempston/Marston Vale (HA/P7, paras. 4.21-4.30). The MKSMSRS, the EoEP and the South East of England Plan ("SEoEP")³, all require significant new growth in and around Bedford and Milton Keynes.

Local planning policy

- 4.6 The Planning and Compulsory Purchase Act 2004 (DD20) also introduced a new system for Plan preparation, based on the production of Local Development Frameworks ("LDFs"). The Act allowed for existing adopted plans to be saved for a period of three years. These changes to the local plan system have inevitably had implications for local planning policy within Bedfordshire. Only a limited number of policies from the Bedfordshire and Luton Structure Plan have been saved beyond September 2007. However, the majority of policies within the Bedford Borough Local Plan have been saved beyond 2007. The Mid-Bedfordshire Local Plan First Review was adopted after September 2004 and remains in force in its entirety until December 2008 (HA/P7, paras. 4.31-4.33).
- 4.7 Local planning policy is currently contained within the:
- Bedfordshire and Luton Structure Plan (saved policies)-2011 (DD240);
 - Bedfordshire and Luton Minerals and Waste Local Plan 2000-2015 (DD242);
 - Bedford Borough Local Plan (saved policies)-2002 (DD237); and
 - Mid-Bedfordshire Local Plan First Review-2011 (DD238).
- 4.8 There is direct support for the Scheme in the Mid-Bedfordshire Local Plan First Review and although the Scheme is not specifically mentioned in the Bedfordshire and Luton Structure Plan, it lies within Marston Vale, which is designated as a strategic growth corridor and an area in need of economic and environmental regeneration (HA/P7, paras. 4.25–4.27). Local Plan policies mean that the A421 improvements would be necessary to support planned developments (HA/P7, para. 4.51).

³ Hereinafter the abbreviations EoEP and SEoEP will mean the relative stages that these plans are at in their evolution.

National transport policy

- 4.9 Under the Highways Act 1980, the SoS has a statutory obligation to review the strategic road network within England and Wales. The trunk road programme has been developed within the policy framework set out in the July 1998 White Paper: A New Deal for Transport, Better for Everyone. The Government's long term strategy for the transport network is set out in the July 2004 White Paper: The Future of Transport: a Network for 2030 (DD74). A New Deal for Trunk Roads in England (DD76), a sister document to the 1998 Transport White Paper, sets out Government Policy specifically in relation to trunk roads. This includes the results of a strategic review of all the trunk road schemes, which were originally in the national programme, and which established the Targeted Programme of Improvements ("TPI") in order to address the most serious problems on the strategic road network. The Programme of Major Schemes replaced the TPI following the Nichols Report in 2007 (DD87 and HA/P1, chapter 3).
- 4.10 With the exception of carbon emissions, the Scheme would comply (ID/HA/26) with the October 2007 White Paper: Towards a Sustainable Transport System (DD23).

Regional transport policy

- 4.11 The Regional Transport Strategy ("RTS") requires that, in order to meet overall objectives, transport policy should seek to:
- improve opportunities for all to access jobs, services and leisure/tourist facilities;
 - enable infrastructure programmes;
 - reduce the need to travel;
 - minimise the environmental impact of transport provision and travel; and
 - improve safety and security.
- 4.12 The RTS recognises that difficulties in achieving structural changes have held back economic growth in Bedfordshire and that there is a need to improve transport infrastructure, including east-west links, a need to diversify local economies, attract new economic sectors and to protect environmental assets of regional interest, including in Marston Vale. The RTS identifies strategic transport infrastructure priorities in the Milton Keynes and South Midlands ("MKSM") area and including the Scheme which is indicated as being committed (HA/P7, paras. 4.24–4.26).

Local transport policy

- 4.13 The Bedfordshire and Luton Structure Plan (DD240) no longer contain any policies of particular relevance to improvements to the strategic road network. No specific mention of the Scheme is made in the Bedford Borough Local Plan, although Policy T1 supports improvements to the strategic road network within the Borough. It is assumed that the Scheme was not identified in the Bedford Borough Local Plan, as it was not within the HA's TPI at the time the Plan was prepared. The Mid-Bedfordshire Local Plan First Review (DD238, paras. 16.7.18-16.7.22)

does however refer to the Scheme and supports the need for improvements to the A421, viewing these as being vital in order to enable development and the environmental improvements sought in Marston Vale. The Scheme is identified in the Bedfordshire Transport Plan 2006 (DD236) as a Priority Major Scheme within the Plan period (HA/P7, paras. 4.34–4.36).

Scheme history

- 4.14 Options for improving the A421 were outlined in 2002 in the A421 Dualling and M1 J13/13A Improvements Stage 1 Report (DD119). This report provided information to inform the London to South Midlands Multi-Modal Study ("LSMMMS") (DD84), which was published in February 2003. This study concluded that the A421/A428 corridor would become more important for long-distance, east-west movements requiring improvement to existing roads.
- 4.15 Further scheme developments were included in the Technical Appraisal Report (DD120) and the Stage 2 Scheme Assessment Report (DD121), both issued in March 2004. Following a review of issues raised during a public consultation and an exhibition held in Marston Moretaine in 2004, further studies were undertaken. Alternative route alignments were considered before announcement of the preferred route and these are described in the Post-Public Consultation Options Assessment Report (DD122), which followed in November 2004. The preferred route announcement was made in December 2004 (DD126 and 127) and a further public exhibition was held in Marston Moretaine during that month.
- 4.16 Since the appointment of the Contractor in November 2005, the Scheme has been subject to regular reviews. A Value Management Workshop was held in March 2006 to which Stakeholders were invited. This workshop entailed a re-examination of the mainline and the development of junction and side road options. The results of the workshop were provided in the Value Management Report (DD158).
- 4.17 Consultations have also taken place with statutory consultees, stakeholders and landowners throughout the period of the Scheme development (ID/HA/10 and 57). A NMU workshop was held on 20 February 2006.
- 4.18 The design of the Scheme has been an iterative process undertaken by a team of engineers, landscape architects and other environmental specialists continually refining the design in the light of the landscape and visual impacts identified. Extensive measures are described in the ES to integrate the Scheme into the landscape and to assist in minimising the likely adverse landscape and visual effects identified (HA/P1, chapter 5).

The A421 in its regional and local context

- 4.19 The length of A421 to be improved is located entirely within Bedfordshire and lies mainly within Marston Vale. It forms part of the strategic Oxford-Milton Keynes–Bedford-Cambridge route corridor, which is an important route for freight and commuters. It links small villages as well as

providing access to some properties fronting on to it. It comprises mostly single carriageway with a short length of dual carriageway at Marston Moretaine (DD13, Figs. 1.3.1 and 1.3.2).

The need for the Scheme

- 4.20 Some lengths of the existing A421 are below current standards for cross-section, forward visibility and horizontal and vertical alignment. Both the horizontal and vertical alignments follow the topography and generally consist of tight curves. Whilst the width of the existing carriageway is approximately 7.3m, the verges in some locations are narrow. High traffic volumes result in over capacity for long periods leading to severe congestion at certain times of the day on the single carriageway sections and at junctions. Limited overtaking opportunities and high volumes of heavy goods vehicle ("HGV") traffic contribute to congestion, causing rat-running, which has a detrimental effect on adjacent villages. No specific study has been done on rat-running, although the fact that it does occur is widely acknowledged by residents in the communities adjoining the Scheme.
- 4.21 The high traffic flows, which vary according to location between 25,977 and 34,553 Annual Average Daily Traffic ("AADT") (ID/HA/108), result in a poor accident record, with accidents occurring predominantly at priority junctions. Turns onto the A421 from the many side roads, as well as private and commercial properties along the route, can be difficult and dangerous. The high traffic volume has an adverse impact on NMUs using the route and causes community severance. The existing A421 has an accident record (ID/HA/58) higher than the national average (ID/HA/96). Between 1996 and 2005 there were 311 personal injury accidents ("PIAs"), of which 7 were fatal (ID/HA/9, para. 5).
- 4.22 The existing M1 Junction 13 consists of a bridge over the M1 motorway and to the west of the bridge a roundabout serves traffic from the M1 north-bound off-slip, the A507, the A421 to Milton Keynes and the M1 north-bound on-slip. To the east of the bridge are the existing A421 and the M1 south-bound off and on-slip roads, which are controlled by traffic signals. The junction has insufficient capacity for the conflicting A421 and M1 related traffic movements and results in heavy congestion, which can be severe during peak hours. Approximately 40% of the traffic using this junction passes through it, rather than accessing the M1 (HA/P1, chapter 4).
- 4.23 The SoS has specified that the Scheme should deliver one of the trunk road improvements identified by the LSMMS and improve journey time reliability and safety, without causing significant adverse environmental impacts.

The draft Orders

- 4.24 On 22 March 2007, the SoS published draft Line and Detrunking Orders, draft SROs and draft CPOs for the Scheme (DD01-DD09). The draft Orders were divided into three areas relating to works on the M1 Motorway and its slip roads, the area adjacent to M1 Junction 13, and the A421. The draft Order publication methodology avoids conflict with draft

Orders published concurrently for the M1 Junctions 10 to 13 widening project. However, if either the M1 or the A421 Improvements was not to proceed, the Orders, as published, would be sufficient to cover the separate needs of each scheme.

- 4.25 Modifications are proposed to the draft SROs and to the draft CPOs (ID/HA/6a, 7a, 7b and 7c). These arise principally on account of agreements made with landowners and better definition of temporary working requirements since the draft Order publication. If the draft Orders were to be made, errors in the signatory blocks in the draft Orders which currently read "Signed by the Secretary of State for Transport, Local Government and the Regions" would be changed to read "Signed by the Secretary of State for Transport" (ID/HA/29) There is no statutory obstacle to making these changes (ID/HA/158, para. 143).

Scheme funding and cost

- 4.26 The July 2004 White Paper, The Future Transport Network for 2030 (DD74) sets out revised spending figures for the Department for Transport ("DfT") up to 2008/09 and longer term funding guidelines up to 2014/15. Considerable weight can be given to the fact that the Scheme appears in the HA's Business Plan 2007-2008, Annex E, Programme of Major Schemes (Regional) as being in the development phase (DD81). This affords the Scheme a high priority in the HA's "pecking order". Confirmation that the Scheme had been given "approved status" was announced by the DfT on 6 July 2006 (ID/HA/18). The total budget for delivering the Scheme at quarter 1, 2005 prices, is £187.6M (HA/P1/S, para. 5.4).

Appraisal Summary Table

- 4.27 The original Appraisal Summary Table ("AST") (DD131) has been updated principally on account of the changes to the traffic flows used as the base for assessment (ID/HA/4). The base now used is the average hourly flow within the weekday inter-peak period, derived from Version V2 of the SATURN model. As a consequence the environmental impacts of the Scheme from noise and on air quality have been reduced (ID/HA/117).

The statutory criteria

- 4.28 There are a number of statutory criteria underpinning the draft Orders to ensure full compliance with the Highways Act 1980. The list of criteria issued as part of the PIM meeting notes (ID/1) is accepted (ID/HA/158) and the Scheme would comply with these criteria (HA/P1, chapter 8).

Engineering

Design

- 4.29 The Scheme has been designed to conform to current design standards and advice notes contained in the Design Manual for Roads and Bridges ("DMRB") (DD35). It is illustrated at 1:2500 scale on the Scheme Layout Drawings (DD118). An updated version of Design Standard TD 16/93 Geometric Design of Roundabouts was published in August 2007, TD 16/07 Geometric Design of Roundabouts (DMRB Volume 6, Section 2,

Part 3) (DD49), and the Scheme would be checked for compliance with this new standard during detailed design.

- 4.30 Departures from design standards are permitted where justified by special circumstances. Some 18 departures have been approved by the HA's Technical Approval Authority to reduce landtake and/or cost in constrained areas, where these departures could be made without reducing road safety. The design of the Scheme has been subject to an independent Stage 1 Road Safety Audit carried out in accordance with Design Standard HD 19/03: Road Safety Audits (DMRB Volume 5, Section 2, Part 2) (DD62). Where design problems have been identified during the audit and where recommendations have been made, these have all been considered, and the design has been adjusted wherever appropriate (HA/P2, paras. 3.37–3.58).
- 4.31 The topography of the area, physical constraints and the need to connect into the existing road network at M1 Junction 13, Marston Junction and Marsh Leys Junction has influenced the horizontal alignment of the Scheme. Where possible the alignment has sought to reuse existing lengths of dual carriageway. The vertical alignment has been kept as low as possible to reduce the visual impact of the Scheme. Sufficient land either side of each carriageway would be acquired to provide landscaping to help integrate the road into the existing landscape (HA/P2, para. 3.74).
- 4.32 The existing B530 Link from the A421 to the IRP Roundabout would be stopped up. This is due to safety concerns, as there would be inadequate weaving length on the three lane carriageway between Marsh Leys Roundabout and the A421/A6 Interchange. Traffic on the Scheme would be signed to IRP via the A421/A6 Interchange, the A6 and Cowbridge Roundabout.
- 4.33 The Scheme is considered to provide a practical balanced design avoiding any unreasonable cost implications or environmental impacts.

Non-motorised users

- 4.34 NMUs may be categorised under the following headings:
- cycling-is used for gaining access to facilities up to a range of about 3km, as a leisure activity over longer distances and for commuting, in combination with other forms of transport;
 - walking-is used for gaining access to facilities up to a range of about 1.2km, as a leisure activity over longer distances and for commuting, in combination with public transport;
 - horse riding and carriage driving-is undertaken by a range of users, mainly for recreational purposes and journeys normally involve a circuit of about 5km; and
 - disabled people-the term covers people having a range of physical, sensory or mental impairments. Under the Disability Discrimination Act 1995, where possible, accessibility for disabled people should be equal to that of other NMUs.

- 4.35 There would be approximately 35 PRoW in the vicinity of the Scheme, of which 12 would cross the proposed route. Facilities for pedestrians, cyclists and horse-riders would be provided along various footpath and bridleway diversions and along sections of the detrunked lengths of the existing A421. No provision would be included for NMUs adjacent to the main carriageways of the new A421 or at M1 Junction 13. The Scheme would result in the creation of more than 5km of additional footpaths, bridleways, cycleways and byways.
- 4.36 Due to safety concerns and anticipated traffic flows, the Scheme would not provide for at-grade crossings of the new dual carriageway by NMUs. Grade-separated crossing points would be provided to remove the conflict between NMUs and vehicular traffic. At locations where no crossings of the Scheme would be provided, footpaths and bridleways would be diverted to a grade-separated crossing.
- 4.37 The existing A421 would be downgraded to a local distributor road between the intersection of the existing A421 with Ridgmont Bypass and Marsh Leys Junction. A complete schedule showing the impact of the Scheme on highways and private means of access to be stopped up is provided as part of the SRO documentation (DD03, DD06, DD09 and ID/HA/6a). This downgrading would increase the NMu route network in the vicinity of the Scheme. It would also improve safety for pedestrians and cyclists in the vicinity of Brogborough and the residential communities at Marston Moretaine and Lower Shelton (HA/P2, paras. 3.59–3.64).

Traffic and economics

The Scheme traffic model

- 4.38 The Scheme traffic model is the A421 SATURN model. This is a regional model and it has been subject to ongoing development (HA/P3, chapter 5) and it is related to the East of England traffic model which is considered to be a national model (ID/HA/111). The A421 model has three versions, V1, V2 and V3. Model Versions V1 and V2 have the same input data. Because Version V1 of the model appeared to produce unusual traffic patterns outside the am and pm peaks, Version V2 of the model was produced to derive average hourly flows within the week-day inter-peak period. Revised PoEs covering noise, vibration and air quality have been submitted, based on these average inter-peak hour flows (ID/HA/4). Version V3, the latest version of the model, varies only in respect of peak am and pm flows at the eastern end of the Scheme.
- 4.39 Data has been gathered from the existing transport network (HA/P3, chapter 6) to produce a base year transport model. The model has been calibrated, validated and approved for am and pm peak hour flows and for the average hourly flows within the week-day inter-peak period, in accordance with DBRB criteria (HA/P3, chapter 4) and (HA/P3, paras. 7.28–7.47). Version V2 of the model has been approved by the Traffic Appraisal, Modelling and Economics (“TAME”) division of the HA, which is independent of the team developing the Scheme (ID/HA/62 and 62a–62e).

Future year models

- 4.40 Traffic models have been produced for the Do-Minimum ("DM") scenario, assuming that the Scheme would not be constructed and for the Do-Something ("DS") scenario, assuming that the Scheme would be constructed (HA/P3, paras. 3.6–3.8) and for three future years, namely 2011 (the opening year for the Scheme), 2018 and 2026. Four different growth scenarios have been assessed: Most Likely ("ML"), Reduced Land Development ("RLD"), Increased Land Development ("ILD") and the Trip End Model Programme ("TEMPRO") (HA/P3, paras. 8.4–8.15). The ML growth scenario is a recently adopted term for the description of growth, but it is not unique. It falls between what previously would have been described as High and Low growth scenarios.
- 4.41 Forecasts for the ILD and RLD growth scenarios have been effectively used as sensitivity tests to check the potential impact of different growth assumptions. The TEMPRO growth scenario generally gives rise to lower traffic forecasts than the ML growth scenario. Therefore TEMPRO has been used for the appraisal of the impact of accidents and the economic appraisal of the Scheme because it gives rise to a more conservative estimate of benefits.

Network assumptions

- 4.42 The traffic model networks have been developed in consultation with BCC and have assumed construction of planned highway developments that would be likely to influence traffic in the study area during the period 2005 to 2026 (HA/P3, paras. 8.20–8.31). The Milton Keynes Roundabout bypass lane, although it would be built as part of the Scheme, would only become operational when the A421 to Milton Keynes is dualled.
- 4.43 Funding for the A421 dualling would be provided by DfT through the Regional Funding Allowance ("RFA"), but the prioritisation of schemes would be determined by the East of England Regional Assembly (ID/HA/18). The A421 dualling was indicated on 6 July 2006 as being in the category "*Schemes which do not yet have approval (i.e. not accepted into the programme)*". However, the DfT confirmed on 15 November 2007 that RFA funding is likely to be available for the dualling in 2013 (ID/HA/17).

Forecast journey times

- 4.44 The Scheme would be subject to the national speed limit with light vehicles being able to travel in free-flow conditions and reach speeds of 70mph (113kph). The peak hour average speed of cars would increase from the currently observed average of 40-45mph to around 57mph in 2026. In the opening year, the average journey times during either the weekday am or pm peak hours would reduce by about 12 minutes in each direction over the length of the Scheme. By 2026, these average time savings would increase to about 13 minutes east-bound and 19 minutes west-bound (HA/P3, paras. 9.55–9.58).

Junction modelling

- 4.45 The five junctions within the Scheme (M1 Junction 13, Marston Junction, Fields Road Junction, Marsh Leys Junction and the A421/A6 Interchange) have been modelled in accordance with current guidance (HA/P3, para.

11.4) for both the weekday am and pm peak periods for 2011, 2018 and 2026. The traffic forecast outputs from Version V2 of the A421 traffic model have been used as inputs to the junction modelling, and in turn the junction modelling outputs have been used to inform the engineering design of each of these junctions. Some of these junctions would be signalised (ID/HA/25).

- 4.46 Macro-simulation models have been used to analyse each individual junction within a cluster of junctions. These models have been used for junction design for many years. Priority junctions have been modelled using ARCADY. Signal controlled junctions have been modelled using TRANSYT in the case of signalled roundabouts and compound junctions, or LINSIG in the case of simpler, signal controlled single-node junctions.
- 4.47 Some of the junctions within the Scheme would be fairly complex with more than one component and these groups of junctions have been analysed using the micro-simulation PARAMICS software package (ID/HA/123). PARAMICS has been successfully used elsewhere in the UK to model the interactions between the different components of complex junctions (ID/HA/115). However, the PARAMICS modelling used at M1 Junction 13 has not been subject to any reality checks, because the proposed junction layout differs fundamentally from the existing layout.

Analysis of junction modelling results

- 4.48 Essentially, a three stage process has been used to evaluate the performance of each junction as follows (HA/P3, paras. 11.28–11.30):
- each junction, comprising several components, has been modelled using micro-simulation software and traffic behaviour, queue build up and decay have been observed;
 - each component of the junction has been modelled using macro-simulation software and the standard outputs from the models have been recorded; and
 - the relevant queues from the micro and macro-simulation outputs have been compared to check the extent of agreement.
- 4.49 These evaluations have demonstrated that the junctions within the Scheme would operate satisfactorily (HA/P3, para. 17.4). However, the dualling of the A421 to Milton Keynes and the associated operation of the roundabout by-pass lane on the A421 terminal roundabout have been shown to become increasingly critical, as time goes on, to the satisfactory operation of the A507 and the A421 Roundabouts.

Traffic impacts in the Cowbridge area

- 4.50 Traffic flows on the A6 between the A421/A6 Interchange and the Cowbridge Junction would not vary significantly between the DM and DS scenarios. The main reason for this is that this stretch of road would be approaching its capacity in each direction in 2011 (HA/P3, paras. 18.6 and 18.7), which would cause many travellers to seek alternative routes.
- 4.51 The greatest flows along the A6 are those in the pm peak hour on the south-bound section, south of the roundabout leading to the Park and

Ride ("P&R") facility, which would be 1,000 vehicles per hour ("vph") (DM) and 1,310vph (DS) (HA/P3/A, Figs. 18.2, 18.3 and 18.4).

- 4.52 The A421 SATURN traffic model seeks to find equilibrium, whereby all travellers minimise their generalised cost of travel. As such, it assumes that travellers would have knowledge of and adopt alternative routes to achieve this end when congestion is encountered (HA/P3, para. 18.7). Traffic, that currently uses the roundabout on the A421 between the Marsh Leys Junction and the A421/A6 Interchange to access IRP, would have several alternative routes available when the B530 Link is stopped up. Although the signed route would be via the A421/A6 Interchange, the A6 and Cowbridge Roundabout, other routes would also be available through the local road network (P1/2, DHY8). The Bedford Western Bypass, which is planned for implementation before the Scheme is complete, would also provide traffic, travelling on a north/south axis, with an alternative route and would alter travel patterns in the area in its own right.
- 4.53 Travel times, both to and from the IRP, in the weekday am and pm peak hours would reduce rather than increase. This is because the Scheme would provide a faster route to the A421/A6 Interchange from the west, and would provide relief to several other roads that are currently used to travel to and from the IRP (HA/P3, paras. 18.12–18.14).
- 4.54 The traffic flows between the IRP Roundabout and Cowbridge Roundabout would increase following the opening of the Scheme and accidents would increase proportionally. However, this increase would be balanced by reductions in accidents elsewhere within the local road network (HA/P3, para. 18.16).

Induced traffic

- 4.55 Induced mileage is any additional vehicle mileage arising from the response of travellers to a new highway or to a highway improvement (ID/HA/131). The difference in the total travel distance between the DM and DS scenarios in 2011 would be:
- 6,247 passenger car units ("pcu")-km in the am peak hour;
 - 6,208 pcu-km in the average inter-peak hour; and
 - 5.130 pcu-km in the pm peak hour (ID/HA/142).
- 4.56 Moreover, in the opening year, there would be between 300 and 400 additional trips in either peak hour across the whole study area, as a result of the Scheme. This would represent approximately 0.5% of the total number of trips within the study area in either peak hour. This would not represent a large increase in long-distance commuting (ID/HA/81, para. 3.2).

Accidents

- 4.57 DMRB Volume 13, Section 1 provides guidance for the Cost Benefit Analysis ("COBA") programme, which is used to assess accident savings. DMRB Volume 14, Section 1 provides a guide for the Queues and Delays at Roadworks programme, which is used to assess the accidents arising

during the construction period.

- 4.58 An appraisal of the impact of the Scheme on accidents (DD167), based on forecasts from the A421 SATURN model has been approved by TAME (ID/HA/62).
- 4.59 The Scheme would reduce PIAs by 1,731 over the 60 year appraisal period. Casualties would reduce by 47 fatal, 331 serious and 2,131 slight accidents over the same period.
- 4.60 The HA is targeting decreases in casualties on the motorway and trunk road network every year from 2007 to 2010, as follows:
- a reduction of between 93 and 94 killed and seriously injured ("KSI") casualties;
 - a reduction of between 0.15 and 0.16 slight casualties per 100M vehicle-km; and
 - a reduction of between 7 and 8 child casualties.
- 4.61 On the assumption that similar criteria would be set for 2011, the Scheme would contribute positively towards each of the above prospective targets (HA/P3, chapters 20 and 21).

Economics

- 4.62 The Scheme would provide good value for money in relation to impacts on public accounts. The estimated Total Present Value of Costs associated with the Scheme is £136.4M. The Scheme would produce a Net Present Value ("NPV") of £1,469.2M over a 60 year period.
- 4.63 The estimated NPV of Benefits of the Scheme (£1,605.7M) is approximately 12 times its NPV of Costs for the same period, resulting in a Benefit to Cost Ratio ("BCR") of 11.77. In contrast, the BCR in the Economics Assessment Report produced using forecasts from V1 of the traffic model is 7.81. The increase arises from the additional benefits computed in respect of inter-peak hour traffic flows. A BCR of above 2 is generally considered acceptable by the DfT for a scheme to receive Government funding.
- 4.64 The Scheme would improve transport economic efficiency. Positive Net Benefits are estimated for both consumer users (£586.9M) and business users (£911.4M). There would be no impacts on private sector providers and there would be no developer contributions. Hence the Present Value of Transport Economic Efficiency Benefits is estimated at £1,498.3M.
- 4.65 In addition to the calculated values, positive benefits would also be likely during night-time and at weekends. Hence the results from this updated economic appraisal would probably err on the conservative side of a true assessment (HA/P3, chapter 23).

Construction

Early Contractor Involvement

- 4.66 The advantages of the HA's Early Contractor Involvement ("ECI") process

are:

- buildability issues can be fully addressed in the design before draft Orders are published;
- more reliable cost estimates;
- a better understanding of construction issues at an early stage;
- a better understanding of environmental impacts during the construction stage; and
- earlier delivery of the project.

Design development

- 4.67 The involvement of the Contractor at an early stage in the design development has provided an opportunity for construction preferences, sequencing, programming and the safety of techniques and methodology to be considered and integrated within the design process.
- 4.68 A comprehensive risk management strategy has been developed to ensure that all key risks have been identified and reduced. Sub-contractors for such elements as earthworks, piling and bridge steelwork and key suppliers have also been involved to ensure that optimal construction solutions have been adopted.

Temporary land

- 4.69 The temporary working space and areas for the construction compounds required outside the permanent landtake, which have been incorporated within the draft CPOs, have sought to minimise environmental impact, whilst at the same time ensuring that the Scheme could be built cost effectively. It would be in the public interest that land for the main construction compound should be included in the CPO (ID/HA/59).

The Scheme programme

- 4.70 The programme (DD136) has assumed that the public inquiry would result in a recommendation being made to the SoS, that the draft Orders should be made and that the Scheme would be given approval in September 2008.
- 4.71 Advanced works would commence in autumn 2008 before main construction. These would include site clearance, habitat translocation, soil investigation, archaeological investigations at specified archaeological sites, some statutory undertakers' plant diversions and the establishment of site accesses and construction plant crossings. Main construction works would commence in January 2009 and would last approximately 2 years with the Scheme opening in December 2010. Maintenance of the Scheme and associated landscaping would continue for a period of 5 years after the completion of the works.
- 4.72 The main risks to the programme would be that a very substantial amount of earthworks, approx 2.5M cubic metres would have to be moved in one earthworks' season. This would require favourable weather conditions. Some 75,000-100,000 cubic metres would have to cross the existing A421 by means of two traffic light controlled crossings, which

would be some three to four miles apart. Another major risk would be if the Scheme was not given approval early enough, the environmental mitigation works could not then take place in Autumn 2008 and, as a consequence, the whole Scheme would have been delayed by one year.

Working hours

- 4.73 Working hours for normal construction activities would be from 7.00am to 7.00pm Monday to Friday and 7.00am to 1.00pm on Saturday. Earthworks' summer hours would extend to 8.00pm Monday to Saturday. Some limited night-time working would be required at M1 Junction 13 and at the railway bridge at Marsh Leys. There normally would be no working on Sundays or bank holidays. Any exceptions to normal working hours would be agreed with the local Environmental Health Officer (HA/P6, paras. 5.2-5.3).

Footpaths, bridleways and private means of access

- 4.74 During construction, private means of access ("PMA") and PRoW that cross the Scheme would be kept open where practicable with designated crossing points. Construction is not anticipated to have a major impact on pedestrians or community facilities at settlements along the Scheme. However, there would be a need for long and short-term temporary closures of a small number of footpaths and bridleways for public safety and construction practicality (HA/P6, paras. 5.34 and 5.36).

Traffic management

- 4.75 Construction of the Scheme would directly affect the existing M1 at Junction 13, the existing A421 at Marston Moretaine, and between Marsh Leys Roundabout and the A421/A6 Interchange (HA/P6, paras. 6.16–6.19). It would also affect associated side roads where they meet the new A421. Disruption would be minimised through the provision of traffic management schemes. Trained operatives, overseen by a Traffic and Safety Control Officer, would carry out installation, maintenance and removal of these schemes. In addition, regular meetings, consultations and joint inspections would be held with the HA's Traffic Officer and the Bedfordshire Police.

Construction Environmental Management Plan

- 4.76 The Construction Environmental Management Plan ("CEMP") (DD134) would be updated prior to the start of construction works. It would comply with the requirements of ISO 14001. The CEMP would dictate how environmental management would be achieved during the construction phase, so as to minimise the impact of all activities on the surrounding environment. The CEMP would describe how the contract's environmental requirements, any public inquiry environmental commitments and all the environmental legal requirements, standards and guidelines would be met (HA/P6, paras. 7.11–7.26).

Community relations

- 4.77 Even with all the environmental controls and traffic control measures that would be implemented for the Scheme, it is inevitable that there would be some inconvenience and disruption to residents, travellers and the

local community. It would therefore be very important to ensure that there would be procedures and channels of communication in place to keep all stakeholders informed of activities and to quickly address any complaints or queries in a fair and timely manner.

- 4.78 Prior to construction, the Contractor would register with the national Considerate Constructors' Scheme and establish a forum to disseminate construction information to the statutory authorities, advisory bodies, landowners, local interest groups and the general public. An experienced Public Liaison Officer would be appointed and would be responsible for these specific tasks (HA/P6, para. 7.29)

Landscape

Landscape and visual assessment

- 4.79 It is usual to draw a clear distinction between landscape character and views for the purposes of environmental assessment. The Scheme would incorporate a range of measures designed not only to reduce adverse landscape and visual effects, but also to mitigate other environmental effects. The ES identifies residual landscape and visual effects in 2026, as being those that cannot practicably be further reduced through mitigation. Landscape-specific terminology is also defined in the ES (DD11, Volume 2, para. 8.2.1).
- 4.80 Several meetings have been held with the Forest of Marston Vale Trust to discuss the Scheme in relation to the Forest Plan. These meetings have helped the emerging landscape design and have resulted in a better understanding of how the landscape could develop over the coming years, in particular how the expanding Forest would affect the character of the landscape in the vicinity of the A421 corridor.

Methodology

- 4.81 The methodology for undertaking the landscape and visual assessment is set out in detail in Section 8.2 of the ES (DD11, chapter 8); it is based on the guidance in the DMRB (DD35, Volume 11, Section 3, Part 5). Further guidance has been derived from the Landscape Institute and Institute of Environmental Management and Assessment (2002), Guidelines for Landscape and Visual Impact Assessment 2nd Edition (DD180); and the Countryside Agency (2002), Landscape Character Assessment – Guidance for England and Scotland (DD181) (HA/P4, paras. 3.7–3.9).

Topography and vegetation

- 4.82 The topography within the study area varies between low-lying broad valleys to steep-faced ridges (HA/P4, paras. 4.14–4.18). There are no significant rivers, although there are a number of small streams and ditches. However, there are a significant number of lakes formed from redundant clay pits.
- 4.83 The study area contains a number of semi-natural and plantation woodland types (HA/P4, paras. 4.19–4.21). A number of large woodland blocks form the north-western limit of the visual envelope, including Holcot Wood, Marston Thrift and Wootton Wood. On the eastern side of the Vale, the Greensand Ridge is also well-wooded (including extensive

coniferous planting), particularly around the Millbrook vehicle proving ground.

- 4.84 With the continued expansion of the Forest of Marston Vale, considerable tracts of land have recently been planted with woodland, most of which are publicly accessible. The Forest of Marston Vale Trust continues to seek land within the Vale to plant new woodland and its 40 year vision includes reclamation of some of the land previously used for brickworks to contribute towards the extensive area of woodland for recreation.

Roads and railways

- 4.85 Transport networks visually dominate parts of the study area, particularly to the west in the vicinity of M1 Junction 13, and in the east around the Marsh Leys Junction. The M1 corridor is both visually and audibly intrusive around the settlements of Aspley Guise and Brogborough, affecting the tranquillity of the landscape. The railway line between Milton Keynes and Bedford follows a route roughly parallel to the A421, with stations at Stewartby, Lidlington and Aspley Guise. The London/Bedford line is further east. Whilst these lines result in physical severance, they are not as prominent as the road corridors.

Recreation

- 4.86 The study area contains a number of recreational sites including the Forest of Marston Vale Forest Centre and Country Park near Marston Moretaine, which has a purpose-built visitor centre. The 250ha Country Park includes a wetland nature reserve, cycle and horse trails and a variety of newly created wildlife habitats. There is an extensive network of PRoW throughout the area. Brogborough Lake, a former clay extraction pit to the east of Brogborough Hill, is now used for water sports such as windsurfing and fishing. Other lakes, including Stewartby, are now managed for nature conservation and recreation (HA/P4, paras. 4.31–4.33).

Lighting

- 4.87 Parts of the landscape within the study area are highly illuminated at night with numerous sources of artificial light (HA/P4, paras. 4.34–4.36).

Landscape character

- 4.88 The study area is covered by two Countryside Agency Landscape Character Areas ("LCAs"). These are the Bedfordshire and Cambridgeshire Claylands, within which the whole of the site area lies, and the Bedfordshire Greensand Ridge, to the south of the Scheme corridor, which covers the area around Lidlington (DD182, Volume 6). In conjunction with BCC, Landscape Character Assessments have been undertaken for each of the Districts in the County (DD184 and 185). In order to assess landscape character at a level of detail appropriate to the proposed Scheme, five distinct LCAs have been identified by BCC (HA/P4, paras. 4.37-4.51).

Views

- 4.89 Views of the existing A421 currently affect many visual receptors within

the defined visual envelope. The baseline conditions of each visual receptor have been taken into account in the ES when determining the visual impact of the Scheme and arriving at appropriate mitigation measures at each location (HA/P4, paras. 4.53-4.55).

Landscape mitigation design

- 4.90 The extent of existing landscape features affected by the road proposal is shown in the ES (DD13, Figs. 8.8.1-8.8.10) and the landscape mitigation proposals are shown in the ES (DD13, Figs. 8.9.1-8.9.10). The overall objective of the landscape design would be to integrate the Scheme into its landscape setting, whilst at the same time minimising as far as practicable the adverse landscape and visual effects (HA/P4, paras. 5.5 and 5.6). Some 44ha of woodland would be planted, while some 16ha of woodland and plantation would be removed, resulting in a net increase in woodland of 28ha.

Proposed landscape treatment

- 4.91 The soft landscape proposals would assist in integrating the Scheme into its surroundings in a way which would reflect the characteristic features of the local landscape and would reduce the Scheme's visual impact on people likely to be affected by it. The planting plan has been designed to filter or screen views of the Scheme through the appropriate use of tree and hedgerow planting. However, where the likely visual impact of the road would be less significant, openings have been planned along the road corridor, to provide visual diversity for vehicle travellers (HA/P4, paras. 5.11-5.38).

Operational effects on landscape

- 4.92 The levels of the effects on landscape character of introducing new features would vary locally, depending on the proposals for particular stretches and the existing baseline. Effects would be more significant where the proposed road alignment is off-line (HA/P4, paras. 6.6-6.32). By way of an overall assessment, the effect of the Scheme on the local landscape character in 2011 would generally be slight to moderate adverse.
- 4.93 In terms of its residual effect, the Scheme would inevitably cause permanent changes to the character of the landscape. However, a very substantial landscape mitigation scheme has been proposed as an integral part of the project. In the context of the baseline of the existing A421 corridor, the levels of effects of the anticipated changes to landscape character by 2026 would vary from slight to moderate adverse, which would produce an overall negligible to slight adverse impact.

Operational effects on views

- 4.94 Generally the severity of the visual effects of the Scheme would decline at an inverse proportion to the growth of the mitigation planting as it becomes increasingly mature over time. This effect is demonstrated in the ES (DD11, Tables 8.14, 8.15, 8.16 and 8.18), which shows the numbers and percentages of receptors likely to experience negative and beneficial effects during construction of the Scheme and in 2011 and

2026 (HA/P4, paras. 6.27–6.32).

Effects of lighting

- 4.95 The majority of new lighting columns would be at M1 Junction 13, Marston Junction, Fields Road Junction and Marsh Leys Junction, which are already illuminated. However, in some cases new lighting would be more extensive and columns would be higher because of the layouts of junctions. Additional lighting around the Beancroft Road Junction would also affect residential properties on the north-western edge of Marston Moretaine to the south and Beancroft Farm to the north. Conversely, at Brogborough it is likely that the Scheme would result in a reduction of lighting levels experienced by residents (due to vehicle headlights), because the new road would be further away and would be in cutting (HA/P4, paras. 6.33–6.39).
- 4.96 Vehicles would be the other main source of light, but since the proposed road would be either on-line or broadly parallel to the old A421, the effect of vehicle lights would be similar to that which is described in the baseline conditions. Through Marston Moretaine and Lower Shelton, where the proposed and existing roads would be in close proximity, anti-glare barriers would be provided to screen headlights between the two roads. By Year 15, planting should have matured to an extent that it would provide screening to reduce the amount of light spill by diffusing and containing light both from fixed sources and from moving vehicles.

Summary

- 4.97 Overall, the impact of the Scheme on the landscape character and visual amenity of the local environment would be acceptable, with the landscape proposals resulting in benefits to the landscape in some areas. The landscape scheme would be appropriate to its context, reflecting local character and would achieve an appropriate level of mitigation.

Noise and vibration

Methodology

- 4.98 The Calculation of Road Traffic Noise (“CRTN”) (DD189) and DMRB Volume 11, Section 3, Part 7: Traffic Noise and Vibration (DD35) provide advice and a methodology for the assessment of noise and vibration impacts from road schemes.

The Noise Insulation Regulations

- 4.99 The Noise Insulation Regulations (“NIR”) 1975 (amended 1988) (DD28 and 29) allows for the statutory provision of noise insulation to habitable rooms of residential properties and allows for discretionary provision to residential properties adversely affected by construction noise (HA/P5, para. 4.20).

Construction noise and vibration

- 4.100 Construction noise predictions have been based on the methodology outlined in British Standard 5228. Construction noise levels have been predicted as an equivalent continuous noise level averaged over a one-hour period. The construction vibration impact has been determined by

calculating the vibrations due to piling and other activities at a selection of the closest sensitive receptors to the proposed construction works (HA/P5, paras. 8.1–8.26).

Operational noise

- 4.101 Employing the CRTN methodology, traffic noise levels have been calculated at properties for different bands and the results of the traffic noise impact assessment have been used to determine if any properties within the Scheme corridor would meet the criteria set out in the NIR.

Operational vibration

- 4.102 The significance of the predicted traffic vibration impact has been assessed by consideration of the difference in nuisance levels between the DM and DS scenarios experienced by residents in the long term (HA/P5, paras. 5.29-5.32).

Baseline conditions

- 4.103 The relevant local authority environmental health departments have been consulted prior to determining baseline noise monitoring and monitoring locations. The detailed monitoring procedure, measurements and results are presented in the Baseline Noise Monitoring Report. The results obtained are those that would be expected for the types of locations where monitoring was carried out (DD135). The study area consisted of a 300m corridor either side of the Scheme and 300m corridors either side of all significant adjoining road links (ID/HA/30, Fig. 12.2A).
- 4.104 Noise levels at all relevant properties within the study area have been calculated for the 2005 baseline and the number of affected properties has been determined (HA/P5/A, Tables C2 and C3). Noise contour plots have also been undertaken at a height of 4m above ground level (ID/HA/30, Figs. 12.3.1A-12.3.4A).

Opening year (2011)

- 4.105 Noise levels at all relevant properties within the study area have been calculated for the 2011 DM scenario and the number of affected properties has been determined (HA/P5/A, Tables C4 and C5). Noise contour plots have also been undertaken at a height of 4m above ground level (ID/HA/30, Figs. 12.4.1A-12.4.4A).

Assessment year (2026)

- 4.106 Noise levels at all relevant properties within the study area have been calculated for the 2026 DM scenario and the number of affected properties has been determined (HA/P5/A, Tables C6 and C7). Noise contour plots have also been undertaken at a height of 4m above ground level (ID/HA/30, Figs. 12.5.1A-12.5.4A).

Scheme design and mitigation

- 4.107 Good practice, as outlined in the CEMP, would be adopted in order to mitigate construction noise and vibration (DD134) and (HA/P5, paras. 7.1 and 7.2). Noise mitigation would be provided where calculations indicate that road traffic noise levels at properties along the route of the

Scheme would be increased to exceed the criterion level for entitlement under the NIR. Additionally, bunding or noise fences would be provided where as a result of the Scheme, estimated noise increases have been shown to be substantial, although below this criterion.

- 4.108 There are no plans to resurface the A421 with low noise surfacing when it becomes detrunked in 2011. Some lengths of the A421 in the vicinity of Marston Moretaine already have low noise surfacing, but in the noise assessments all of the retained parts of the A421 have been assumed not to have low noise surfacing up to 2026.
- 4.109 The proximity of the Scheme to residential properties has been a primary factor affecting the Scheme's horizontal and vertical alignment. As with any road scheme, the greater the distance between the road and residential properties, the lower the noise and airborne vibration levels experienced by residents. Natural barriers, such as earth banks, cuttings and landscaping features may restrict the line of sight from the road to the receptor and provide useful noise attenuation. Specific features have been included in the Scheme design to attenuate noise (HA/P5, paras. 7.5–7.8) and noise barriers proposed for the Scheme would have a life of 40 years, with a life to first maintenance of 20 years (ID/HA/63).

Effects of the Scheme: construction noise

- 4.110 Construction noise levels have been calculated at 21 receptors along the Scheme (HA/P5/A, Table D1.), chosen to reflect their proximity to the mainline, the cut and embankment regions, and the various junctions and overbridges. The calculations have been based upon the indicative construction programme and information detailed in the CEMP (DD134). Noise levels have been calculated at the receptor locations for the works of site clearance, earthworks, drainage, roadworks, finishings, and the main structural works of foundations, substructures and superstructures (HA/P5, paras. 8.3–8.20).
- 4.111 The resulting predicted noise levels would be acceptable for the proposed day-time working hours. Works proposed for Sundays, bank holidays and night-time would need to be established, by prior agreement, with the local authority and would require liaison with residents affected by the construction of the Scheme. The significance of the effect of construction noise at sensitive receptors has been assessed as moderate adverse, taking into account the estimated noise levels and the short-term nature of the work.

Effects of the Scheme: construction vibration

- 4.112 It would be unlikely that vibration from construction of the Scheme would give rise to the onset of any cosmetic building damage or justifiable vibration complaints at residential properties. Overall, the significance of construction vibration has been rated as negligible (HA/P5, paras. 8.22–8.25).

Operational noise and vibration levels: opening year (2011)

- 4.113 Noise levels at all properties within the study area have been calculated for the 2011 DS scenario and the number of affected properties has been

determined (HA/P5/A, Table E1 and E2). Noise contour plots, at a height of 4m above ground level, have also been undertaken for the 2011 DS scenario (ID/HA/30, Figs. 12.6.1A-12.6.4A).

Operational noise and vibration levels: assessment year (2026)

- 4.114 Noise levels at all properties within the study area have been calculated for the 2026 DS scenario and the number of affected properties has been determined (HA/P5/A, Tables E3 and E4). Noise contour plots, at a height of 4m above ground level, have also been undertaken for the 2025 DS scenario (ID/HA/30, Figs. 12.7.1A-12.7.4A).
- 4.115 Some individual and small groups of properties would experience significant noise increases as a result of the Scheme, whilst others would experience significant decreases. Relatively large residential areas in Brogborough, Lower Shelton and Marston Moretaine would experience significant decreases in noise level (HA/P5/A, Tables E1–E14). One property, 'Llanberis' in Salford Road, Hulcote may qualify for treatment under the NIR as a result of the Scheme, and this would be subject to further assessment during detailed design.

Agriculture

Methodology

- 4.116 The impact of the Scheme upon agricultural and soil resources in the area has been assessed in accordance with the DMRB, Volume 11, Section 3, Part 6: Land Use; and Part 10: Geology and Soils (DD35). The ES sets out the methodologies used in the agricultural impact assessment (DD11, Volume 2, Sections 6 and 10).
- 4.117 The quality of agricultural land affected by the Scheme has been determined by a detailed soil and agricultural land classification ("ALC") survey carried out in 2006. The survey has been conducted and analysed according to the previously named Ministry of Agriculture, Fisheries and Food, now the Department of Environment, Food and Rural Affairs ("DEFRA") publication: Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land (1988) (DD204). This latter publication requires an examination of published geological, topographical, soil and climatic information, and a detailed field survey, which involved observations from 159 auger borings and five soil observation pits, has been undertaken.

Baseline conditions

- 4.118 The ALC and Soil Resource survey has identified that agricultural land along the Scheme alignment is primarily of moderate quality, but with smaller areas of good quality land, found particularly at the western end of the route around M1 Junction 13 and Brogborough Hill and at the eastern end around Elm Farm (DD13, Figs. 10.5.1–10.5.4). Some 19 holdings would be affected by the Scheme (DD13, Figs. 6.2.1-6.2.4), 15 of these are conventional farm holdings; 4 comprise small horse paddocks at Marston Moretaine and a smallholding at Brogborough. About two-thirds of the land occupied by the affected holdings is in arable use (HA/P8/App. A, paras. 5.1–5.12).

Scheme design and mitigation

- 4.119 Action has been taken to minimise land-take and the impacts upon natural and undisturbed agricultural land resources. Most of the land that would be required temporarily for construction of the Scheme or for works compounds would be restored following the completion of the works. Where such land would be restored for agricultural purposes, it would be restored to an ALC grade of at least the same as the original grade of land affected. A central aim would be to reuse topsoil stockpiles generated by the Scheme on-site (HA/P8/App. A, paras. 6.1–6.7).

Effects of the Scheme

- 4.120 The Scheme would result in the permanent loss of 113ha of agricultural land of which 17ha (15%) is classified as being amongst the best and most versatile (DD13, Table 6.6). Within the context of the overall landtake of the Scheme, the loss of 17ha is not considered to be a significant. It is below the threshold at which the DMRB and the General Development Procedure Order 1995 indicates that consultation would be required with DEFRA (HA/P8/App. A, paras. 8.1–8.9). Within the wider context this loss of land would occur within a County with a significantly higher proportion of Grade 1 and 2 land than the national average.
- 4.121 Of the 19 farm holdings affected, it is anticipated that the Scheme would have a moderate adverse impact upon nine holdings, a minor adverse impact upon four holdings and a neutral impact upon six holdings (HA/P8/App. A, paras. 7.4–7.9).

Built heritage

Methodology

- 4.122 The assessment of the Scheme effects on built heritage (DD11, chapter 7) has been carried out in accordance with the guidance provided in the DMRB (DD35, Volume 11, Section 3, Part 2). The assessment has also been undertaken in line with the guidance contained in PPG15 (DD111, paras. 3.5 and 3.6).

Baseline conditions

- 4.123 The baseline assessment has identified 27 historic buildings, within the study area, which range in date from the medieval period to the 19th century. Of these, 17 are designated as listed buildings (HA/P8/App. B, paras. 4.3–4.29). No conservation areas are present within the study area (DD13, Figs. 7.1.1–7.1.44).

Scheme design and mitigation

- 4.124 The Scheme would avoid any key built heritage receptors and landscape mitigation has been included to reduce impacts upon historic buildings. Views towards the Scheme, particularly those towards junctions and overbridges, would be screened and integrated within the landscape through the use of hedgerows, shrub and tree planting.

Effects of the Scheme

- 4.125 Apart from the demolition of Charity Farm (west), the Scheme would

only have neutral or slightly adverse effects. No buildings of great importance would experience an adverse effect (HA/P8/App. B, paras. 6.1-6.16).

Archaeology and historic landscape

Methodology

- 4.126 An assessment of the effects of the Scheme on Archaeology and Historic Landscape has been undertaken in accordance with DMRB (DD35, Volumes 10 and 11).

Baseline conditions

- 4.127 The assessment has identified 97 archaeological sites, monuments and findspots within the study area (HA/P8/App. C, paras. 4.2–4.7). Desk-studies and surveys have defined that the Scheme would impact upon nine site areas within the corridor. A Historic Landscape assessment has identified eight discrete character areas for the Scheme study area (DD13, Fig. 7.3).

Scheme design and mitigation

- 4.128 Mitigation measures, intended to reduce or avoid adverse impacts on archaeology, have been incorporated (DD11, paras. 7.7.83-7.7.107). In order to minimise the effects of construction, an archaeological mitigation strategy has been formulated to undertake recording works where it would be impossible to mitigate impacts by preservation in-situ (HA/P8/App. C, paras. 5.2–5.3). Procedures would be adopted in the CEMP to ensure that archaeological areas and sites would be protected during construction.
- 4.129 Mitigation by design would be the principal means of mitigating impacts on the historic landscape character. Sensitive planting schemes have been formulated, in conjunction with the ecology and landscape teams, to reinforce historic boundaries, blend intrusive features with the historic landscape and minimise visual impacts (HA/P8/App. C, paras. 5.5 and 5.6).

Effects of the Scheme

- 4.130 The effects of the Scheme on archaeology and historic landscape would be neutral to slight adverse.

Ecology

Methodology

- 4.131 The methodology (HA/P8/App. D, para. 3.1) followed guidance provided in the DMRB (DD35, Volume 11, Section 3, Part 4) and in the Transport Analysis Guidance (DD83).

Baseline conditions

- 4.132 A desk study of existing information has been undertaken. This included seeking data and advice from a range of statutory and non-statutory organisations (HA/P8/App. D, para. 3.3). The desk study has been supplemented by additional fieldwork (HA/P8/App. D, paras. 3.4–3.6).

Impacts and effects

- 4.133 An appraisal of the likely effects of the proposed works has been undertaken and the significance of any potential identified effects has been categorised according to the quality of the site and the magnitude of the impact (HA/P8/App. D, paras. 3.7 and 3.8).
- 4.134 There are no European Union Council ("EU") designated sites under the Habitats and Birds Directives (DD225) for their international importance for nature conservation within the study area. There are no Sites of Special Scientific Interest lying either within the footprint of the Scheme or immediately adjacent to it. The nearest such site, Marston Thrift lies some 700m north-west of the Scheme. There is only one non-statutory site of local significance for nature conservation within or immediately adjacent to the route corridor, namely Brogborough Lake County Wildlife Site.

Habitats

- 4.135 Habitats within the Scheme corridor are predominantly arable land and improved grassland of relatively little nature conservation significance. Many of the fields are bordered by hedgerows, most of which are species-poor. There are large areas of recent woodland planting forming part of the Forest of Marston Vale, but mature woodland is scarce within and around the Scheme corridor, with the largest block being Brogborough Road Spinney. However, the most interesting ecological area of grassland is found in the northern part of Brogborough Lake County Wildlife Site, where species-rich grassland interspersed with scattered hawthorn scrub has developed on previously disturbed industrial land.

Species

- 4.136 Nine species afforded special protection, by inclusion in Schedule 5 of the Wildlife and Countryside Act 1981 and subsequent amendments, were recorded during the surveys (HA/P8/App. D, paras. 4.7–4.13).

Scheme design and mitigation

- 4.137 Mitigation has been proposed to reduce the significance of predicted ecological effects (HA/P8/App. D, paras. 5.3-5.5). With the mitigation measures described in the ES, the significance of most adverse effects has been reduced (HA/P8/App. D, paras. 6.1–6.6).

Water environment

Methodology

- 4.138 The assessment has been undertaken in accordance with DMRB, Volume 11, Section 3, Part 10 (DD35) and HA 216: Road Drainage and the Water Environment (DD210).

Baseline conditions

- 4.139 The Scheme would lie wholly within the catchment of the Great Ouse River and specifically two of its tributaries, Broughton Brook and Elstow Brook. Agreement in principle for the Scheme and its drainage has been

reached with the local Internal Drainage Board (“IDB”). The Environment Agency (“EA”) has also been consulted and has raised no engineering objections to any of the proposals (HA/P8/App. F, chapter 4).

Scheme design and mitigation

- 4.140 Generally all existing watercourses crossed by the Scheme would be culverted on line. In a few locations there would be local diversions, either to reduce the number of culverts or where the road alignment is too low, to allow a crossing on line. Broughton Brook would require to be diverted for about 600m of its length. Elstow Brook is crossed by the A421 and the Race Meadow Culvert would be extended (HA/P8/App. F, chapter 5).

Air quality

Air quality assessment

- 4.141 The construction and operation of the Scheme have the potential to generate emissions of air pollutants, such that sensitive receptors would be exposed to airborne concentrations of particulate matter and gaseous substances at concentrations differing from those that the receptors currently experience.
- 4.142 The impacts of road traffic exhaust emissions have been assessed (HA/P8/App. G, paras. 3.2–3.4) in accordance with DMRB Volume 11, Section 3, Part 1 (DD35) and Interim Advice Note 61/05 (DD45). The air quality assessment has also had regard to the recently published Simple Assessment Level methods described in HA 207/07 (DD201), for the assessment of local air quality and regional impacts (HA/P8/App. G, para. 3.4).

Construction phase

- 4.143 The ES identifies that approximately 150 properties could be affected within 100m of the Scheme, depending upon the weather conditions experienced during the construction. A range of mitigation measures for particulate matter control has been incorporated into the Scheme CEMP (DD134). It is highly unlikely that the works would generate sufficient emissions of fine particulate matter to cause a breach of the EU limit at any receptor (HA/P8/App. G, paras. 4.3–4.7).

Road traffic exhaust emissions

- 4.144 The existing air quality within the Scheme corridor and the wider study area has been reviewed by the respective local authorities (DD 198 and 200). The mean concentrations of nitrogen dioxide, fine particulate matter, carbon monoxide, benzene and butadiene would be unlikely to exceed the relevant national air quality objectives or EU limit values by the respective target dates.
- 4.145 Within the air quality study area, residents of 63% of properties would experience some improvement in air quality with 37% experiencing some adverse effect. However, as the majority of these properties are either located more than 100m from an affected link or are located near to a minor road, the beneficial or adverse effect would be negligible

(HA/P8/App. G, paras. 5.1–5.18).

Responses from the statutory consultees to the ES

- 4.146 When the ES was issued for consultation there were only three responses received from the statutory consultees (ID/HA/10, sheet 6). English Heritage (Rep_040_001) had no overall objection to the Scheme. The EA (S18/1), apart from some comments on the engineering design of culverts, expressed support for the Scheme. BCC PRow (Rep_030_001), other than commenting on points of detail, had no overall objection to the Scheme.

5.0 THE CASES FOR THE SUPPORTERS

The material points were:

Mr V M Christensen, S-1

Mr P Smith, S-2

Mr P Sayer, S-3

Mr D J Green, S-4

Mr A Richards, S-5

A G and D M Shaw, S-6

M R T Matthews, S-7

Hulcote and Salford Parish Council, S-8

Brogborough Parish Council, S-9

Husborne Crawley Parish Council, S-10

Stuart Michael Associates, S-11

Ms L Lindsay, S-21

- 5.1 The existing A421 needs up-grading and the Scheme would bring great benefits from the reduction in air pollution arising from queuing vehicles (S1/1), (S2/1), (S4/1), (S5/1), (S6/1), (S7/1), (S9/1) and (S10/1) and improved safety (S8/1) and (S21/2). The Scheme would reduce the current rat-running in Lower Shelton Road (S3/1) and the area generally (S7/1) and (S11/1). The detrunked A421 would be beneficial in serving the communities in Marston Vale (S11/1).

Mr M Jarvis, S-12

Praedium Property, S-13

Barretts of Aspley, S-14

WRG, S-15

- 5.2 The Scheme is supported (S12/1), (S13/1 and 2), (S14/1 and 2) and (S15/1).

Mr M Starkness, S-16

- 5.3 The Scheme is generally supported but concern remains as to what BCC, as the local highway authority ("LHA"), would do about the safety on adjacent minor roads (S16/1).

The Environment Agency, S-18

- 5.4 The Scheme is generally supported, but the EA's requirements with regard to culvert invert levels would have to be taken on board during detailed design (S18/2).

The Royal Society for the Protection of Birds, S-87

- 5.5 The Scheme is supported and it is believed that any negative impacts could be successfully mitigated (S87/1).

Dr R Chatham, S-20

- 5.6 The existing A421 is an exceedingly busy road and traffic congestion causes long delays in journey times, which gives rise to rat-running around adjacent minor roads that are unsuitable for such use. Pulling out from or entering into houses and premises adjoining the A421 is extremely hazardous and many minor accidents occur as a consequence. The Scheme would greatly improve matters for these householders (S20/1).

Other Supporters

- 5.7 In addition to the Supporters reported above, there was general support for the Scheme from the majority of the parties. Objections, where made, were in respect of particular aspects of the Scheme.

6.0 THE CASES FOR THE OBJECTORS

The material points were⁴:

Objection: the inadequacy and the inappropriateness of the proposed cluster of junctions at M1 Junction 13 and the urgent need for dualling the A421 from M1 Junction 13 to Milton Keynes

Bedfordshire County Council, WSO⁵-73⁶

- 6.1 Whilst the A421 SATURN traffic model is regarded as being sufficiently robust to provide justification of the Scheme as a whole, there is concern

⁴ *The gist of the cases of each Objector has been derived from the exchange of correspondence described in footnote 6, and, where provided, from the Objector's Statement of Case, Proof of Evidence and from evidence and cross examination at the inquiry.*

⁵ *In the text of the report:*

Statutory Objectors who appeared at the inquiry are denoted as SO;

Statutory Objectors who objected in writing are denoted as WSO;

Non-statutory Objectors who appeared at the inquiry are denoted as O; and

Non-statutory Objectors who objected in writing are denoted as WO.

⁶ *The HA has included in its response to each Objector an appendix which contains copies of all the correspondence between the Objector and the HA since the date of publication of the draft Orders. For ease of reference the HA's response to each Objector, together with the Objector's statement of case and proof of evidence, if provided by the Objector, is included in a separate file identified with the Objector's name and number, in the batch of documents accompanying this report. Each document in the appendix and its HA reference number is listed under the relevant Objector number in Part 6 of Appendix B to this report. The HA document number referencing has been adopted because the HA's responses refer specifically to these documents and the HA reference number allocated to them.*

as to how reliable the model is to support operational junction analysis. It is by no means clear that the model is producing realistic detailed flow/performance outputs to inform debate about impacts at either end of the Scheme (ID/O73/X, page 1).

- 6.2 The design of the cluster of junctions at the interface of the Scheme with the M1 has not yet been proven to be adequate in accommodating the land utilisation proposed for the area (ID/O73/X, page 1). Notwithstanding this, it is abundantly clear that dualling of the A421 to Milton Keynes is of paramount importance (ID/O73/X, page 2).

Milton Keynes Council, WSO-85
The Milton Keynes Partnership, WO-90

- 6.3 Whilst the Scheme is supported, the local road network, west of the M1, could not cope with the anticipated volume of traffic delivered on to it from M1 Junction 13. This lack of capacity could have an impact on the efficient working of the junction. (REP_027_001) and (SC/13).

Mr J Jones, WO-2

- 6.4 The existing A421 operates satisfactorily apart from traffic tailing back from M1 Junction 13. What is required is a new M1 Junction 13A or a more substantial upgrade of the existing M1 Junction 13 (OBJ_002_005).

Mr M Brookes, WO-18

- 6.5 The Scheme is generally supported but the proposed M1 Junction 13 layout is unsatisfactory and an alternative arrangement would be more appropriate (OBJ_018_001).

Mr K Revill, WO-66

- 6.6 The M1 Junction 13 is complex and would affect Aspley Guise. In addition insufficient screening and landscaping has been proposed around this junction (REP_012_003).

Mrs R Persaud, WO-69

- 6.7 M1 Junction 13 would be unsatisfactory unless the A421 to Milton Keynes is dualled; otherwise traffic would continue to "rat-run" through villages such as Cranfield. Traffic, leaving the Ridgmont Roundabout to travel in an easterly direction and wishing to turn right on to the Ridgmont Bypass, would find the merging from two lanes to one lane hazardous. The Scheme would need to make suitable provision for emergencies (REP_019_001).

Mr J Barrett, WO-94

- 6.8 The proposed layout at M1 Junction 13 is very complicated and the installation of traffic lights would urbanise what is a rural area. Two temporary construction compounds should not be located within the Hulcote and Salford Parish Council area (LREP_002_001).

Objection: the lack of provision at M1 Junction 13 for non-motorised users

Bedfordshire County Council, WSO-73

- 6.9 The arrangement for cyclists at the M1 end of the Scheme is inadequate. The alternative route proposed by the HA is unrealistic and no serious attempt has been made to investigate how the verges of the existing M1 bridge could be modified to accommodate cyclists. The argument, that enhancements of NMU routes elsewhere in the Scheme relieves the HA of responsibility at the M1, is unacceptable. The HA have embraced the provision of cycle crossing routes of the M1 on the new overbridge proposed at the M1 Junction 12 at Toddington. To have a radically different approach at M1 junction 13 is indefensible (ID/O73/X, page 2).

The Cycling Touring Club Right to Ride Network, O-67

- 6.10 The Cycling Touring Club Right to Ride Network ("CTCRRN") was founded in 1878 and is the national cyclists' organisation. It has some 60,000 members, of whom 550 live in Bedfordshire. The organisation is managed by a director and a full time professional team based in Guilford. With continuing growth in motorised traffic, the CTCRRN is heavily focussed on the provision of a safe cycling network (P4/1, page 1).
- 6.11 Bedfordshire has a wonderful network of country lanes and minor roads but access to these is reduced by severance caused by major roads. This is exemplified by the situation on parts of the existing A421 and the M1. The Scheme would reduce the A421 problems but the M1 severance issue would remain.
- 6.12 Typical of the M1 problems is the situation where workers, at the Amazon depot on the industrial estate close to Ridgmont Station, who live on the west side of the M1 and who would wish to cycle to work cannot do so because of having to negotiate M1 Junction 13. The existing M1 Junction 13 is completely unsuitable for cyclists (P4/1, page 2). A possible alternative route via Husborne Crawley and the new Ridgmont Bypass would not only be circuitous but also dangerous on account of the amount of HGVs that would use it.
- 6.13 The detrunked A421 would be suitable for cyclists but this would only extend westwards as far as Ridgmont Junction. The proposed new arrangement for M1 Junction 13 would be even more difficult for cyclists to negotiate than the existing, thus providing no relief to the M1 severance problem (P4/1, page 3).
- 6.14 There appears to have been little cooperation between the various promoters of highway and other developments in the area and no-one has taken the initiative to promote a safe cycling corridor. BCC Cycle Forum has recognised this and has supported the case for a properly designed cycle crossing of the M1 as part of the A421 Scheme (P4/1, pages 4 and 5).

Objection: insufficient and unsatisfactory landscaping provision and noise mitigation in the area of Lower Shelton Road

Marston Moretaine Parish Council, SO-20 (SC11)

- 6.15 There is a "pinch point" where the Scheme passes between Lower Shelton Road and Marston Moretaine. Through part of the length of this "pinch point" there is a gap in the vegetation between properties on the north-eastern fringe of Marston Moretaine and the existing A421, in the vicinity of the underpass. The "pinch point" would be further emphasised because the west-bound carriageway of the existing A421 would be retained as a single carriageway local distributor road.
- 6.16 The effect of squeezing a new dual carriageway and a single carriageway local distributor road between these existing settlements means that environmental amelioration measures have been compromised. With the large earth moving operations that would be part of the Scheme, noise and landscaping bunds could have been easily provided, but there is no space to do so. Instead, 3m high noise barriers have been proposed and these would provide a convenient surface for the application of graffiti. The areas at each end of the extended underpass may also provide the potential for other types of anti-social behaviour. The lack of space also means that there would be insufficient landscape screening of these barriers.
- 6.17 The use of alternative attractive, eco-friendly and sustainable types of noise barrier, such as an "acoustic green barrier", should be considered. This type of barrier would be 440mm wide with a solid core of 240mm and would be faced with either living willow rods or woven willow panels. The barrier could be up to 3.5m high (ID/O20/4).
- 6.18 Vehicles in this location would pass closer to a larger number of dwellings than elsewhere on the Scheme and the HA needs to demonstrate that full consideration has been given to their noise predictions and associated proposed mitigation. Questions remain about the allowances that have been made for excessive traffic speeds, gradients, maintenance of low noise surfacing, noise emissions from high level exhausts, assumed proportions of HGVs and the life expectancy of the proposed noise barriers.

Mrs B Jackson, O-45 (SC/10, P3/1 and ID/O45/1)

- 6.19 The Scheme is unusual in that it would pass through a village; other HA projects usually seek to bypass communities. The HA maintains that the Scheme is an "improvement", but for the residents of Lower Shelton Road and Marston Moretaine there would be no perceptible improvement in the noise climate that they would experience. No amelioration has been proposed by the HA to mitigate the effects of the noise that would be generated by vehicles using Marston Junction, at a level much higher than the A421 carriageway. Earth bunds could be utilised to provide noise barriers around this junction and Beancroft Road Bridge could have a solid parapet.
- 6.20 The World Health Organisation ("WHO") recommends that dwellings should not be subjected to more than 55 decibels ("dB(A)") and states that sleep is likely to be disturbed where noise levels exceed 30dB(A). This does not square with the HA's view that the predicted level of 55-57dB(A) at No. 95 Lower Shelton Road would be acceptable. It is very difficult to accept that current noise levels would be reduced by 1dB(A)

by some 400m of 3m high noise barrier. Noise can sometimes seem to be enhanced as it travels across open space and it would leak around the ends of these barriers. The proposed noise barriers are fairly crude and particularly, where they face communities, they would need to be softened by planting with such species as evergreen honeysuckle and cotoneaster.

- 6.21 No noise calculations have been undertaken for the period between midnight and 6.00am. It has been assumed that vehicles would not exceed the speed limit and that noise would not be emitted from high level exhausts on HGVs. Moreover, it has been assumed that tyre noise is the only source of noise emission and that vehicles standing still emit no noise. All this throws doubt on the HA's assessment.
- 6.22 Discretionary powers, available to the HA, would allow it to provide additional bunding or extended lengths of noise barrier to that already proposed on the side of the A421 in the area of Lower Shelton Road. The additional cost of this would be minimal in relation to the total cost of the Scheme. Something more should be done, even by way of a research project, to improve the current state of knowledge or as a gesture of goodwill to mitigate the impact of the Scheme in this area.

Ms M Ball, WO-21
Mrs C Delafuente, WO-55
Mr M and Mrs C Hawkes, WO-56
M Blake, WO-57
Mr A J and Mrs N F Yeowell, WO-61
The Occupiers of 2 Horseshoe Close, WO-62
Mr S Lonsdale, WO-63
Mr Tong Lee, WO-95

- 6.23 The amount of environmental amelioration proposed north and south of the Scheme between Lower Shelton Road and Marston Moretaine, the "pinch point", is unsuitable and insufficient (OBJ_021_001), (OBJ_055_001), (OBJ_056_001), (OBJ_057_001), (OBJ_061_001), (OBJ_062_001), (OBJ_063_001) and (OBJ_095_001).

Objection: a reasonably convenient alternative means of access would not be provided to the IRP Roundabout when the B530 Link from the A421 is stopped up

Kleinwort Benson (Jersey) Trustees Ltd.; Kleinwort Benson (Channel Islands) Corporate Services; Standard Life Investment Funds, O-19, the IRP owners

The statutory test

- 6.24 Section 14 (6) of the Highways Act 1980 is a stand alone test. It is not a wider test of whether overall it is reasonable to stop up the highway, nor is it a test of whether the overall Scheme would be beneficial, even if there would be overall time savings. It is a test that has to be applied looking through the eyes of the traveller who is currently able to use that stretch of the B530 Link and who would no longer be able to do so. The question is whether or not the alternative routes proposed by the HA would be reasonably convenient; reasonableness is brought to bear on

the question of the convenience of the alternative (ID/O19/6 and 10).

- 6.25 It is not suggested that the existing roundabout on the A421 should be retained or that any form of east-bound slip off the A421 to IRP Roundabout should be provided. Although, stopping up of the direct access to IRP Roundabout from the A421 via the B530 Link would mean an additional 300m journey via the A6 Interchange and Cowbridge Roundabout, this in itself would not be a major inconvenience (P1/1, paras. 2.2.9 and 3.1.1).
- 6.26 The problem arises from the fact that Cowbridge Roundabout already has a significant level of congestion during peak hours and, without its improvement, any additional traffic would cause unreasonable inconvenience (P1/1, para. 2.2.3).
- 6.27 It is not acceptable for the HA to say that any improvements to the A6 or to Cowbridge Roundabout should await the A6 corridor study, planned by BCC. Any delay in providing a reasonably convenient alternative route to IRP Roundabout, as a result of the proposed stopping up, would cause the statutory test under Section 14 (6) of the Highways Act 1980 to fail (ID/O19/6, para. 3).

Possible alternative routes proposed by the HA

- 6.28 Traffic seeking to avoid congestion on the A6 and at Cowbridge Roundabout would not use any of the five possible alternative routes suggested by the HA (P1/2, DHY8). These routes are, for the most part, single carriageways with on-street parking, bus stops, private driveways, multiple side-road junctions and roundabouts; some have speed cushions (P1/1, paras. 4.1.7 and 4.1.10). If indeed these routes were suitable and if they provided comparable journey times, they would be currently used as alternative routes as Cowbridge Roundabout is already congested (P1/1, para. 4.1.8).
- 6.29 Traffic travelling from the west on the improved A421 would be unlikely to leave it at the new Marsh Leys Roundabout to travel along Woburn Road and Elstow Road to join the A6 at another congested roundabout, before turning south to reach Cowbridge Roundabout. Similarly, traffic travelling along the A421 from the east would be unlikely to exit it some two miles before the A421/A6 Interchange and use, as an alternative route, a single carriageway road with some six roundabouts along its length (P1/1, paras. 4.1.9 and 4.1.10).

The HA's SATURN traffic modelling

- 6.30 The HA's November 2006 SATURN model did not forecast that all of the traffic diverted from the stopped up B530 Link, heading either into Bedford or into IRP, would re-route on to the A6 and use Cowbridge Roundabout. The reasons for this were investigated during 2007 and anomalies were identified regarding the A6 limiting link capacity used by the HA and its signalisation assumptions on parts of the A421/A6 Interchange (P1/4, paras. 1.11. and 1.12).
- 6.31 This section of road, between the A421/A6 Interchange and Cowbridge Roundabout is effectively a single carriageway with one lane in each

direction. On the north-bound lane there is a long slip road for access into the P&R site. An exit lane from the P&R site, between the P&R Roundabout and the Cowbridge Roundabout is dedicated for the use of buses and taxis (P1/2, DHY3). This section of road would have a theoretical maximum capacity of 2,915pcus per hour (P1/1, paras. 4.1.25 and 4.1.26).

- 6.32 Following further communication with the HA, these anomalies were eventually resolved and the SATURN model was re-run by the HA to include a sensitivity test, as a separate component (P1/1, para. 3.1.38). This sensitivity test modelled a by-pass link for left turning traffic from the A6 at Cowbridge Roundabout into the B530 Link to the IRP Roundabout, effectively overcoming any possible Cowbridge bottleneck (P1/1, para. 3.1.25). This sensitivity test forecasts traffic flows more in keeping with what would be expected (P1/1, para. 3.1.39).
- 6.33 Further modelling was carried out by the HA using agreed revised speed flow curves for the A6 and a final version of the SATURN model (V3) was produced for the 2011 DM scenario, the 2011 DS scenario and the 2011 DS (sensitivity) scenario (ID/O19/1, para. 1). The HA's SATURN modelling does not apply speed flow curves to any of the routes that it has suggested would be used as alternatives to the A6 to Cowbridge Roundabout route.

The HA's junction modelling

- 6.34 The HA's ARCADY analysis of Cowbridge Roundabout does not use the O-DTab methodology to establish peak flows within a peak period as recommended by the ARCADY manual (ID/O19/2 and 3). Traffic surveys and the fact that there is no down stream blockage do not warrant adoption of a flat flow profile. The entry widths and flare lengths into roundabouts used in the ARCADY modelling do not reflect the situation on the ground where, for example, on the A6 south-bound approach into Cowbridge Roundabout only two lanes of traffic operate, although three approach lanes of traffic are marked on the carriageway. Moreover, on the A6 north-bound approach to Cowbridge Roundabout very little use is made of the nearside lane (P1/2, DHY5). Accordingly, a maximum entry width of 8m, providing two lanes, should be used to model the A6 south-bound entry and a flare length of only 5m should be used to model the A6 north-bound entry into Cowbridge Roundabout (ID/O19/1, paras. 8-14).
- 6.35 ARCADY analyses, separate to the ARCADY runs undertaken by the HA, have been carried out on the Cowbridge Roundabout, taking on board the above geometric adjustments (ID/O19/5). However, after these separate ARCADY runs had been undertaken, it was discovered that they had mistakenly included a 10% HGV proportion. In addition, the turn-in rate to the P&R site, off the A6, used in the HA's ARCADY runs was considered to be too high (HA/P3, para. 8.30). Following consultation with BCC a revised turn in figure of 10% was adopted rather than the 29% assumed by the HA (ID/O19/1, paras. 16-21). Further separate ARCADY analyses were run taking account of these corrections to test two possible alternative layouts options for Cowbridge Roundabout

(ID/O19/9).

Possible mitigation measures

- 6.36 Two possible mitigation schemes are proposed: Option A, an enlarged roundabout and Option B, a signalised junction (P1/2, DHY 9 and 10). The signalised mitigation scheme, Option B, would operate satisfactorily in both the 2011 am and pm peaks. It would also provide safer routes for cyclists and pedestrians and would incorporate a better bus priority arrangement; a "hurry call" facility could help improve the P&R service. A further advantage would be that a signalised junction would better control traffic flows through the junction, particularly if BCC signalised the adjacent Elstow Roundabout (P1/1, paras. 5.1.12–5.18). Option B would be preferred by BCC (P1/4, para. 1.8) and its estimated cost would be in the order of £1M-£2M.

Summary

- 6.37 Separate ARCADY assessments of the Cowbridge Roundabout indicate that the junction would have insufficient capacity and that it would need to be improved. It is for the HA to determine how that should be achieved, who should pay and in what proportions the costs should be shared. Until there is a legally binding commitment to provide adequate capacity at Cowbridge Roundabout, before the highway is stopped up, the draft Order should not be made (ID/O19/10, paras. 17-18).

Further evidence following issue of Inspector's note (ID/3) to the HA, IRP owners, BCC and Elstow Parish Council on 11 January 2008

- 6.38 The HA has adduced that the route from the A421 to the IRP Roundabout, via the A6 and Cowbridge Roundabout and some five other possible routes, would be reasonably convenient alternatives to the stopped up length of the B530 Link from the A421 to the IRP Roundabout.
- 6.39 Notwithstanding this position, the HA and BCC, under their Memorandum of Understanding ("MoU"), will be working together to consider the benefits of a broader improvement scheme in the vicinity of the Cowbridge Roundabout. However, Section 14(6) of the Highways Act 1980 demands satisfaction of the statutory test as to whether or not these broader improvements would provide another reasonably convenient alternative route to that originally proposed by the HA, before the B530 is stopped up (ID/O19/15).
- 6.40 Paras. a) and b) of the MoU incorrectly state that it would be for the HA, in conjunction with BCC, to determine the need for and suitability of works at the Cowbridge Roundabout to provide another reasonably convenient alternative route. It is only the SoS who can determine the adequacy or otherwise of any other reasonably convenient alternative route that might be proposed (ID/O19/15).
- 6.41 If the Inspector is concerned about the reasonable convenience of the alternative route originally proposed by the HA, then he cannot recommend that the SROs be made, unless or until the SoS has before her a binding commitment to define mitigation works at Cowbridge

Roundabout. These works must provide another reasonably convenient alternative route by the time the stopping up is implemented. Such proposals for any other reasonably convenient alternative route must be made available for representations to be made to the SoS by the IRP owners and other interested parties and, if necessary, must be tested in evidence (ID/O19/15).

- 6.42 The IRP owners are concerned that, notwithstanding the fact that the nature of its objection has not materially changed, it appears that the HA intends to collect further data with a view to undertaking further traffic modelling in the area of the Cowbridge Roundabout following the closure of the inquiry (ID/O19/16). Further modelling work may prove to be inconsistent with previous work undertaken by the HA or, indeed, with separate modelling work undertaken by the IRP owners. As such, any further modelling would need to be tested in evidence before a re-convened Inquiry.
- 6.43 It is the IRP owners' firm position that they should not be subjected to any expense associated with the production of further modelling, additional evidence or the attendance of their representative at meetings, convened by the HA under a MoU, to which the IRP owners are not a party, nor to which they were invited to be a party. The inquiry was the appropriate forum to test the proposals and modelling associated with the Scheme. The IRP owners would, of course, consider any other reasonably convenient alternative route options that the HA may develop, in conjunction with BCC. Thereafter, as necessary, the IRP owners will prepare representations to the SoS (ID/O19/16).

TK Maxx, WO-8

SCS Property Development, WO-39

Matalan plc, WO-43

Pets At Home Ltd., WO-53

Staples, WO-59

Brantano (UK) Ltd., WO-60

Fujifilm UK Ltd., WO-80

Alderforce Ltd., (KFC and Burger King), WO-96

Mothercare, WO-98

- 6.44 As a consequence of the proposed stopping up of the B530 Link, which provides access off the existing A421 to IRP Roundabout, a reasonably convenient alternative means of access would not be available and this would have an adverse impact on IRP businesses (OBJ_008_001), (OBJ_039_001), (OBJ_043_001), (OBJ_053_001), (OBJ_059_001), (OBJ_060_001), (OBJ_080_001), (LOBJ_096_001) and (LOBJ_098_001).

Objection: the Scheme would increase congestion on the A6 corridor generally and on the Cowbridge Roundabout in particular

Elstow Parish Council, SO-97⁷

⁷ Mr A C Hare originally appeared at the inquiry on 13 December 2007, representing Elstow Parish Council and presented its statement of case. He deferred further evidence until the case of the IRP owners had been heard. He

- 6.45 The Scheme is supported. However, the stopping up of the B530 Link to the IRP Roundabout would greatly increase congestion at Cowbridge Roundabout with the risk of increased accidents and increased rat-running through Elstow. The situation would be exacerbated with the additional developments coming on stream at Nirah, Wixhams and additional housing to the south-west of Bedford (ID/O97/4).

Bedfordshire County Council, WSO-073

- 6.46 On the basis that agreement has been reached with the HA (ID/HA/129) to seek to identify mitigation works at Cowbridge Roundabout as a direct result of the impact of the Scheme on the A6 and on the Cowbridge area, BCC's objection to the Scheme, at its eastern end, is withdrawn. BCC is willing to consult with the owners of IRP during the further study to be undertaken with the HA (ID/O73/3).

Mr P and Mrs G Baird, O-44

- 6.47 Closing the B530 Link off the A421 to IRP Roundabout would cause serious congestion in the roads around Kempston and in particular on Amphill Road with unfortunate consequences for the access of emergency services' vehicles (OBJ_044_001).

Objection: insufficient consideration has been given to the impacts from the changed traffic conditions on adjacent side roads when the Scheme would become operational

Mr A Talbot, O-64 (REP_O23_001)

- 6.48 The increase in traffic that would take place on Beancroft Road and the greater risk of accidents as a consequence would, in part, be as a direct result of the Scheme. The blind hill in the vicinity of Hill Farm would be of particular concern as there has been a recent fatal accident at this location. It is not acceptable for the HA to argue that responsibility for providing a solution to this problem rests with BCC, as the LHA. The HA needs to recommend to BCC that, upon the opening of the Scheme, a 30mph speed limit should be introduced on Beancroft Road. This would be similar to the circumstances pertaining at Marston Hill and Upper Shelton. A minimal intervention policy by the HA is unacceptable.
- 6.49 An alternative road layout in the area, previously considered by the HA proposed the stopping-up of Beancroft Road and this would have resulted in less traffic. There appears to be no logic in reversing this rationale, as traffic coming off the new A421 would become used to travelling more quickly than it currently does on the existing A421. Actual speeds on side roads would therefore be greater than they are at present. With the present situation Beancroft Road is already dangerous enough.

was due to appear on 30 January but withdrew that morning. The gist of Elstow Parish Council's case has been derived from its statement. However, Elstow Parish Council is recorded in Appendix A to this report as having appeared at the Inquiry.

- 6.50 Another factor is that any lengths of newly constructed Beancroft Road would have low noise surfacing. The HA should seek a commitment from BCC that the remaining length of Beancroft Road would be re-surfaced with low noise surfacing.

Ms C McArthur, WO-83

Mr P H Vintner, WO-84

Mr P O'Neill, WO-87

- 6.51 The Scheme would have an adverse effect on safety on Beancroft Road (REP_025_001), (REP_026_001) and (REP_031_001).

Objection: the Scheme should be routed further away from existing settlements

Mr A Evans and Son, SO-38

- 6.52 The alignment of the Scheme should be moved further south. As proposed, it would impact adversely on Hoo Lane Farm and, also on Hoo Lane and the land adjoining it (O38/1). The length of stopping up of Hoo Lane should be revised, by agreement with the HA, to reflect the situation where land adjoining Hoo Lane is in the ownership of the Owen family (SC/14, paras. 2.1–2.3). This would avoid the potential problem of fly tipping on the remaining section of highway. To achieve these revisions, the ownership situation would have to be confirmed, over and above the land ownership confirmed already (ID/O38/3). Agreement would have to be obtained from those emergency services and statutory undertakers, who have not already confirmed that they are amenable to the proposed alternative stopping up position. If an additional length of Hoo Lane could be stopped up, Mr Evans would not object to the proposed bridleway over this length (SC/14, para. 2.9).

Ms R Buckley, WO-26

Mr E Dudose, WO-27

Marston Car Accident Repairs, WO-28

M J Motors, WO-29

Mr C Seamark, WO-30

The Occupier, Rose Cottage 1, WO-34

Mr A Macrae, WO-35

The Occupier, Rose Cottage 2, WO-36

- 6.53 The A421 needs to be re-aligned but the route of the Scheme should be moved further away from Wood End, closer to the existing A421 (OBJ_026_001), (OBJ_027_001), (OBJ_028_001), (OBJ_029_001), (OBJ_030_001), (OBJ_034_001), (OBJ_035_001) and (OBJ_036_001).

Objection: the extent of the CPOs and access arrangements relating to individual properties

Marston Moretaine Parish Council as Trustees of land managed by Marston Moretaine Playing Field Management Committee, SO-9 (SC/8)

- 6.54 The Parish Council, as trustees of charity land managed by Marston Moretaine Playing Field Management Committee objects to the loss of land as a result of the Scheme.

Mrs S G Cook, WSO-1

- 6.55 The impact of the Scheme on Manor Farm Cottages would be unacceptable in terms of the amount of land to be acquired (OBJ_001_001).

Mr D J Patterson, WSO-10

Mr A Parrish, WSO-11

- 6.56 Although the Scheme would be of public benefit, the extent of land acquisition proposed at Highfield Farm would be unnecessary and would have an adverse impact on the beneficial use of the retained land (OBJ_010_001) and (OBJ_011_001).

Mrs M M E L Poole, WSO-16

- 6.57 The Scheme would have an unacceptable impact on the quiet enjoyment of 'Omega', Salford Road and the amount of land that is proposed to be acquired is unnecessary (OBJ_016_001).

Mr A Owen, WSO-17 (SC/9)

- 6.58 Although the Scheme is supported it should not swing into open countryside to the north-west of Marston Moretaine. Good agricultural land should not be compulsorily acquired from Beancroft Farm, in the ownership of the Owen family, for the purposes of landscaping and the like (SC/9, paras. 1.4 and 2.1). The amount of land to be acquired for the Scheme should be kept to a minimum and alternatives to the proposed landscaping and access arrangements should be explored (SC/9, page 4).

St. John the Baptist College, WSO-58

- 6.59 The need for the Scheme is understood but it would have adverse impacts on Hayfield Farm in respect of access, proximity of walkers, noise and light pollution (OBJ_058_001).

Whitbread Harrowden Settlement, WSO-65

- 6.60 Although the Scheme is generally supported, land should not be compulsorily purchased for temporary topsoil storage (REP_004_001 and 004).

Ms L MacKenzie and Mr M Goode, WSO-70

- 6.61 There is concern over some aspects of the proposed stopping up of Salford Road (REP_037_001).

The Trustees of Husbone Crawley Charities, WSO-71

- 6.62 Although there is no objection to the Scheme in principle, there is concern over drainage, access and residual land arrangements (REP_011_001).

Mr and Mrs R Weston, WSO-75

- 6.63 The bridge providing access to Manor Farm, Brogborough should be sufficient in width and strength for all farming purposes (REP_006_001).

Mr C Le Boutillier, WSO-76

- 6.64 There is no objection to the Scheme provided land in front of 'The Woodland', Wood End would be offered to the occupiers for recreational purposes on an exclusive basis (REP_007_001).

The Woodland Trust, WSO-88

- 6.65 The Trust would wish to hold the freehold of its access over land owned by St. James Property (REP_032_001).

Mr K Burke, O-68

- 6.66 The noise attenuation and landscape amelioration proposed at Brooke Farm is inadequate (P5/1).

Mr T and Mrs L Smith, WO-77

- 6.67 The extent of the CPO at 'Llanberis', Salford Road is disputed (REP_008_001).

Objection: unsatisfactory provision of PRowS

Lidlington Parish Council, SO-46

- 6.68 During the last century Lidlington's PRow network was devastated by industrial exploitation at Lidlington No.1 pit, the Millbrook Proving Ground and Brogborough tip (P2/2). The erasure of rights at the Millbrook Proving Ground left a gap in the PRow network which was promised to be re-established as part of a restoration scheme when tipping finished. The improper handling of PRow issues mandates such restoration. The HA should provide a suitable PRow along the southern toe of the Scheme embankment adjacent to the scrubland around the northern shore of Brogborough Lake (SC/6). This would provide an excellent vista over the lake and would be a better alternative than the proposed arrangements (ID/HA/64).

Bedfordshire Rights of Way Association, WSO-72

Bedfordshire County Council Rights of Way, WSO-86

- 6.69 The Scheme satisfactorily accommodates the existing PRow network. However, the proposed widths of the PRow need to be identified in the draft Orders (SC/4) and (REP_030_001).

The Ramblers Association, WSO-81

- 6.70 The Scheme is supported subject to PRow being given legal widths (REP_020_001).

The British Horse Society, WSO-92

- 6.71 A number of issues have not yet been unconditionally agreed between the British Horse Society and the HA (REP_039_001).

Mr A Pibworth, WO-6

- 6.72 A pedestrian/cycleway should be provided across the Scheme at Fields Road, Wootton (OBJ_006_001).

Other objections

National Grid (Electricity), WSO-3

National Grid (Gas), WSO-4

- 6.73 National Grid (Electricity) and National Grid (Gas) have concerns that the Scheme could have an adverse effect on their apparatus and request the HA to enter into agreements to have any necessary diversions undertaken (SC/1 and SC/2).

Anglian Water Services Ltd., WSO-89

- 6.74 Anglian Water Services requires the HA to comply with its conditions where any of its assets would be affected by the Scheme (REP_033_001).

English Heritage, WSO-93

- 6.75 Care needs to be taken to minimise the impact of the Scheme on two scheduled ancient monuments in the area and the different historic landscape character areas (REP_040_001).

Miss F Longmuir, WO-7

- 6.76 The Scheme should not be built as it would increase noise and pollution (OBJ_007_001).

Mr D Cheseldine, WO-12

- 6.77 Alternatives to the Scheme, such as demand management, have not been fully explored (SC/17).

Bedford and Milton Keynes Waterway Trust, WO-15

- 6.78 The Scheme underpass near Stewartby Lake is not wide enough to accommodate the proposed Bedford to Milton Keynes Waterway (REP_005_001).

Miss D M J Smith, WO-74

- 6.79 The A421 needs improvement but the Scheme should be delayed until other major developments in the area have been brought forward (LOBJ_002_001).

Atkins Telecoms, R-19

- 6.80 Atkins Telecoms has plant in the vicinity of the Scheme that may need to be diverted (ID/R19/01).

7.0 THE RESPONSES OF THE HIGHWAYS AGENCY

The material points of the response⁸ to the Objectors by the HA were:

Objection: the inadequacy and the inappropriateness of the proposed cluster of junctions at M1 Junction 13 and the urgent need for dualling the A421 from M1 Junction 13 to Milton Keynes

Bedfordshire County Council, WSO-73, (ID/HA/128)

Milton Keynes Council, WSO-85, (ID/HA/122)

Mr J Jones, WO-2, (ID/HA/105)

Mr M Brookes, WO-18

The Milton Keynes Partnership, WO-90, (ID/HA/121)

Mr K Revill, WO-66, (ID/HA/102)

Mrs R Persaud, WO-69, (ID/HA/106)

Mr J Barrett, WO-94, (ID/HA/101)

Sensitivity testing

Modelling

- 7.1 A series of sensitivity tests, as reported in TN23 (ID/HA/110), TN25 (ID/HA/133), TN29 (ID/HA/147) and TN33 (ID/HA/152), have been carried out on the M1 Junction 13 cluster of junctions for various land use growth scenarios identified in the MKSMSRS, the EoEP and the SEoEP. These sensitivity tests, reported in TN25, TN29 and TN33 have used the so-called SATURN "core assessment" methodology, rather than the PARAMICS methodology adopted in the production of TN23. This core assessment methodology is technically the best approach (ID/HA/133, chapter 3.5).
- 7.2 Following consultation with Milton Keynes Council ("MKC"), the original SATURN model V2, as used in the production of TN23 and TN25, has been updated by importing network files from the Milton Keynes traffic model to reflect network changes at, what previously was the western limit of the A421 model. TAME has been advised of the model modifications, but it did not wish to be formally consulted, as the model re-runs were only being used for sensitivity testing purposes.

Changes in housing growth assumptions

- 7.3 The starting point, with regard to the housing assumptions used in TN33, was the core assessment of M1 Junction 13 consistent with MKSMSRS and the EoEP but not the SEoEP, as described in TN29 (ID/HA/147, chapter 3). The housing deficit discussed in Section 4.1 of TN29 was added to this start position. In addition the detailed allocation of housing to zones for the MKSMSRS and EoEP cases was included (ID/HA/152, chapter 2 and Table 2.1). Although some 4,500 houses have been added for the purpose of the sensitivity test, the HA does not believe that it is correct to include this entire housing deficit in the analysis.

Changes in network assumptions

⁸ The reference to the HA's response to each objection is stated after each Objector's name.

- 7.4 Changes to the road network in the area that have attained “approved” status, since the original PoEs were submitted to the inquiry, have been identified (ID/HA/152, chapter 3). These consist of improvements at M1 Junction 14 and changes at Kingston Roundabout on the A421 to Milton Keynes. The SEoEP outlines major developments along the A421 between Kingston Roundabout and M1 Junction 13 and further developments are planned south of A421 in the Aspley Guise triangle. A spine road which should be in place by 2022 is proposed through these developments south of the A421, connecting to the A5130 Newport Road. Primary accesses to these developments are proposed from the A421. This would result in four junctions on the A421 between Kingston Roundabout and M1 Junction 13, one of which is already constructed.
- 7.5 If these new junctions are not to impede the traffic flow they would need to have high levels of capacity. Consequently, they have been modelled as roundabouts with higher than standard saturation flows. The side roads have been modelled as single carriageways with saturation flows of 1,800pcus per hour. This modelling allows traffic to pass through these junctions relatively unimpeded, which ensures that M1 Junction 13 carries a potentially higher than expected traffic flow. This represents a ‘worst case’ situation for junction assessment purposes (ID/HA/152, Fig. 3.1 and App. B).
- 7.6 During consultation MKC acknowledged the possibility of down-grading the A5130, but it was unable to confirm its status. The Milton Keynes traffic model information was used as a basis for reducing the modelled capacity of the A5130 by about 25%. In addition, some of the previously used traffic zones have been split to enhance the model’s representation of traffic access onto the network (ID/HA/152, chapter 3).

Junction assessment thresholds

- 7.7 Signalised junctions have been modelled using TRANSYT and PARAMICS. With TRANSYT, traffic signals have been optimised at each junction so as to achieve, as far as possible, equal degrees of saturation on each approach. With PARAMICS, assessment has sought to achieve equal queue lengths on the junction approaches. However, this was subject to ensuring that queues at all stop-lines within the Salford Road junction and the two signalled roundabouts were not excessive (ID/HA/152, para. 1.2.1).
- 7.8 A 90% degree of saturation is commonly accepted as the threshold above which the junction would have zero “practical reserve capacity”. Degrees of saturation close to and below 90% would be acceptable, but should be treated with caution if the maximum queues appear excessive. The term “excessive queue” is used when a risk arises that an upstream junction could be affected by a queue, or where a queue would be persistently long (HA/P3, para. 11.28).
- 7.9 A similar exercise has been undertaken to determine whether or not the uncontrolled Ridgmont Roundabout would have sufficient capacity. With ARCADY, it is standard practice to use a flow/capacity ratio of 0.85 as the threshold above which a roundabout is likely to have capacity problems. The average queue lengths also need to be taken into account in

determining whether or not capacity mitigation measures might be required (ID/HA/152, paras. 1.2.2 and 1.2.3).

Anticipated changes in the Scheme design and microprocessor optimised vehicle actuation ("MOVA") and traffic signal maintenance

- 7.10 The scheme would undergo two minor layout changes between 2011 and 2026. The A421 Milton Keynes Roundabout bypass lane would open concurrently with the A421 dualling, and additional capacity would be provided at Salford Road eastbound through Salford Road junction. Since both these changes are already catered for in the Scheme design, requiring only minimal works for their implementation, they are not considered to be a mitigation measure (ID/HA/152, paras. 4.10 and 4.18).
- 7.11 There would also be periodic reviews of traffic signal timings in response to changing traffic demands. MOVA is able to dynamically adjust signal timings according to demand, but MOVA configuration settings would need to be periodically adjusted. Since these processes would be a normal part of traffic signal maintenance, which is carried out at all signal-controlled junctions, they are also not considered to be mitigation measures. MOVA could deliver up to a 13% reduction in junction delays (ID/HA/156 and 157).

M1 Junction 13 in 2018, consistent with MKSMSRS and the EoEP, with the A421 remaining as a single carriageway

- 7.12 With the modelled network changes, the M1 Junction 13 would perform adequately in 2018 (ID/HA/133, chapter 8).

M1 Junction 13 in 2026, consistent with the MKSMSRS and the EoEP, but not the SEoEP, without mitigation measures

- 7.13 All of the sub-junctions comprising M1 Junction 13 would perform satisfactorily except for the Salford Road Junction. The A421 off-slip left turn on to Salford Road would have to operate as a give-way to allow two pass-through lanes on Salford Road. In addition, the left turn lane from Salford Road on to the A421 on-slip would have a 93% degree of saturation in the pm peak hour (ID/HA/152, chapter 5).

M1 Junction 13 in 2026, consistent with the MKSMSRS and the EoEP, with possible mitigation measures

- 7.14 This 93% degree of saturation could be reduced by removing the splitter island between the Salford Road ahead and left turn movements, and implementing a shared, three-lane signalled stop-line for both movements (ID/HA/154). Lane 1 would be for left-turn traffic only, lane 2 would be for left-turn and straight ahead traffic and lane 3 would be for straight ahead traffic only. This mitigation measure was tested using both TRANSYT and PARAMICS. TRANSYT predicted that the junction would operate with adequate spare capacity in 2026 with the proposed mitigation measure (ID/HA/152, chapter 6). The HA would not be concerned if the SoS was to direct that this mitigation measure be incorporated into the Scheme at the outset as it could be accommodated without modification to the draft Orders and it would have no impact on the Scheme budget.

Traffic flows on and around the A421 to Milton Keynes

- 7.15 The two-way flows along Bedford Road in Aspley Guise would be 1,300vph in the am peak and 970vph in the pm peak. Much of the local network in this area would be over capacity. The Kingston Roundabout would operate over capacity and there would be significant queuing with average delays possibly exceeding 10 minutes per vehicle. This would effectively limit the flow along the A421 in both directions (ID/HA/152, Figs. 5.1 and 5.2).

M1 Junction 13 in 2026, consistent with the MKSMSRS, the EoEP and the SEoEP, without mitigation measures

- 7.16 All of the sub-junctions comprising M1 Junction 13 would perform satisfactorily, except for again the left turn to the A421 on-slip from Salford Road, which would have a 96% degree of saturation in the pm peak hour (ID/HA/152, chapter 7).

M1 Junction 13 in 2026, consistent with the MKSMSRS, the EoEP and the SEoEP, with possible mitigation measures

- 7.17 The same mitigation measure, outlined in para. 7.14 above would reduce the degree of saturation on this leg to well below 90%. The traffic flows would be slightly higher than those without the SEoEP, but the changes would not be as great as might be expected. (ID/HA/152, chapter 8).

Traffic flows on and around the A421 to Milton Keynes in 2026

- 7.18 The two-way flows along Bedford Road in Aspley Guise would be 1,210vph in the am peak and 960vph in the pm peak. The reductions in traffic flows through Aspley Guise (with the SEoEP) arise from small changes in the behaviour of drivers on long distance journeys. With the additional housing introduced into south-east Milton Keynes with SEoEP, conditions at the Kingston Roundabout would deteriorate and it would remain the single most congested point in the local network (ID/HA/152, Figs. 7.1 and 7.2).

Differences between the 'with' and 'without' SEoEP scenarios

- 7.19 Without mitigation the traffic flows in the 'with' SEoEP scenario would only be slightly higher than those 'without' the SEoEP. This is because much of the local road network already would be over-capacity without the SEoEP. Hence, the local network would be unable to support some of the additional trips in south-east Milton Keynes, which would be generated as a result of SEoEP. Flow reductions would occur on some links. These reductions can be explained by changing trip patterns, but the general trend would be for a small increase (ID/HA/152, Figs. 9.1 and 9.2).
- 7.20 These small differences are supported by comparing capacity matrices for M1 Junction 13 with the results presented in the original PoEs, TN29 and TN33. These show that the capacity would only increase by some 4.4% (ID/HA/155). Moreover, it is likely that M1 Junction 14 would relieve M1 Junction 13 to a greater degree than was at first thought.
- 7.21 Planned land uses extend over the period of the MKSMSRS, the EoEP and the SEoEP. However, planning of road network improvements in Milton

Keynes only extends to 2016. In reality, road improvements would be carried out broadly in line with development. Significant developments are planned between 2018 and 2026 and these have been reflected within the sensitivity tests that have been undertaken. Therefore it is not surprising that by 2026 demand for road capacity would have outstripped supply (ID/HA/152, para. 9.9.a).

- 7.22 The sensitivity tests that have been undertaken have only made use of the highway trip generation, highway trip distribution and highway assignment models within the overall A421 SATURN model. There has not been any modelling of the impacts of the additional housing or the relatively modest network changes on travel demand. In reality, if demand was to outstrip supply, as described above, there would be substantial impacts on travel demand through responses such as changes in the time of travel, change of travel mode, where this would be a viable alternative, and/or trip suppression (ID/HA/152, para. 9.9.a)
- 7.23 TN33 therefore represents very much a worst case scenario in terms of the quantity of traffic that would reach M1 Junction 13. At all junctions, except at the A507 approach to the A507 Roundabout, queues at the time of the opening of the Scheme would be lower than are currently experienced at comparable locations, such as at the M1 off-slips. Travellers would therefore, for the most part, experience an improvement in their journey times (ID/HA/148).

Possible additional mitigation works

- 7.24 If additional pressure was put on M1 Junction 13 then further mitigation works, which would be possible in engineering terms, could be carried out in the future within the existing draft Orders (ID/HA/153 and 154).

Responses to Objectors other than matters related to the sensitivity testing

Mr J Jones, WO-2, (ID/HA/105)

- 7.25 A Junction 13A was investigated during the initial development of the Scheme and was rejected on the grounds of severance, loss of agricultural land, major adverse environmental impact, cost and landtake. Traffic assessments also indicated that, although congestion would be reduced at the existing M1 Junction 13, the problem would be transferred to the point where the link road would tie into the existing A421. The provision of flyovers or a free flow A421 over the M1 has also been investigated but these alternatives were also rejected due to increased costs, land take and greater environmental impact.

Mr M Brookes, WO-18, (ID/HA/79)

- 7.26 The alternative layout proposed by Mr Brookes would require additional structures and would result in greater landtake and greater visual impact. It would mean that traffic from the Scheme, wishing to travel north on the M1, would have to negotiate both the Ridgmont and the A507 Roundabouts. This traffic would conflict, at the A507 Roundabout, with traffic leaving the M1 north-bound wishing to travel east on the A421, and would also conflict at Ridgmont Roundabout with traffic

leaving the M1 south-bound. The proposed alternative would not offer any operational advantages over the Scheme layout.

Mr K Revill, WO-66, (ID/HA/102)

- 7.27 M1 Junction 13 has been the subject of a long and detailed development process to arrive at the optimum design. Many factors have been assessed when considering potential design options. These have included junction operation and capacity for the predicted traffic flows, environmental impact, impact on residential and commercial property, requirement to purchase additional land and cost. The use of a "more straight forward and elegant single roundabout solution" was considered at an early stage but was rejected following analysis, which proved that the large traffic movement from Bedford to Milton Keynes would cause severe congestion on all approaches to the roundabout.
- 7.28 Although the layout of M1 Junction 13 appears slightly unusual, the underlying objective is that A421 (Bedford to Milton Keynes) traffic would be separated from M1 traffic, which would avoid conflict by having traffic movements avoiding meeting at any one roundabout within the junction. Traffic volumes on the existing M1 overbridge would reduce from 2780vph (2011 am peak hour DM scenario) to 1820vph (2011 am peak hour DS scenario)(HA/P3/A, Figs. 9.2 and 9.3). Destinations would be clearly signed on the approach to the junction providing adequate advance warning to motorists.
- 7.29 The new Milton Keynes Roundabout and the re-aligned section of the A421 Milton Keynes link would be on embankment, as would the reconstructed A507 Roundabout south-west of the M1. To mitigate the environmental impact the embankments would be planted with native trees and shrubs, which would form a substantial visual screen within approximately eight to ten years from completion of construction.
- 7.30 Some parts of the Scheme would be visually more evident from a number of locations south-west of the M1 until the proposed landscape planting matures. Once matured, the screening would be significantly better than the limited screening currently provided.
- 7.31 Because of the topography of the area, there are few residential properties and other sensitive visual receptors from which the Scheme would be viewed and the majority of these, including that small part of Aspley Guise within the visual envelope, are over 1km distant. It would not be possible for the Scheme to be constructed with absolutely no negative effects, as there must be a balance between the cost of providing potential mitigation and significance of effect.

Mrs R Persaud, WO-69, (ID/HA/106)

- 7.32 There would not be a congestion problem for traffic travelling in an easterly direction, wishing to turn right on to the Ridgmont Bypass. The length over which the lane reduction takes place complies with current design standards and makes suitable provision for traffic to merge safely and effectively. The Bypass has been developed by BCC and has been designed to accommodate future traffic growth in the area.

- 7.33 A number of measures have been incorporated into the Scheme to aid traffic movements in the event of a major incident. Traffic could be re-routed to a contra-flow arrangement on to the opposite carriageway. This carriageway, which would become a single lane in either direction. Emergency crossing points would be included to enable such traffic diversions to operate. The existing A421, between M1 Junction 13 and Marsh Leys, would also remain and although this parallel route is primarily intended as a distributor road for local traffic, it could also be used in an emergency.

Mr J Barrett, WO-94, (ID/HA/101)

- 7.34 Although there are two works compounds proposed for the Scheme, only one of these would be within Hulcote and Salford parish. This compound would be in the M1 Junction 13 area and would be temporary. The Contractor would be required to comply with strict criteria regarding working times, haulage routes and construction methodology. This approach would ensure that any potentially disruptive activities would be controlled and that any disruption to the travelling public would be minimised. A Public Liaison Officer would be available to deal with residents' complaints and to ensure that rapid and satisfactory responses would be achieved.
- 7.35 There are several highway development schemes scheduled for construction in the Bedfordshire area over the next decade. There has been consultation with all the relevant highway authorities and every effort is being made to ensure that interfaces between respective schemes would be as well coordinated as possible.

Objection: the lack of provision at M1 Junction 13 for non-motorised users

Bedfordshire County Council, WSO-73, (ID/HA/128)

The Cycling Touring Club Right to Ride Network, O-67, (ID/HA/32)

- 7.36 The reduction in traffic on the existing A421 would provide an opportunity for its use by NMUs. Because there would continue to be heavy traffic flows at M1 Junction 13, there is not expected to be a large increase in demand from cyclists wishing to use this junction. Moreover, it would not be appropriate to promote a cycle route through a junction of this nature where traffic would conflict with cyclists; roundabouts and cyclists are not compatible, DfT Cycling Infrastructure Design Note (ID/HA/104). However, cyclists wishing to use the junction and the existing M1 overbridge would not be prohibited.
- 7.37 A provision for cyclists would be wholly dependent on incorporating facilities into the existing overbridge at M1 Junction 13. Safety barriers, installed in both the 1.53m wide verges to protect the substandard parapets on the structure, currently prevent the use of the verges by pedestrians or cyclists.
- 7.38 Upgrading of the substandard parapets would give some scope to include the provision of a dedicated footway. However, the maintenance and upgrading of the existing bridge does not form part of the Scheme. The HA's Traffic Operations Directorate and Area 8 Managing Agent and

Contractor are responsible for routine and major maintenance and have a rolling programme for parapet replacement. Subject to available funding, these parapets would be replaced during the financial year following completion of the Scheme.

- 7.39 An alternative route for NMUs could be available via an existing accommodation bridge that lies 880m north of the existing M1 Junction 13 overbridge. This could be reached via Salford Road and the current Footpath FP6. However, Footpath FP6 would require reclassification as a bridleway and the surface would need to be upgraded to accommodate cyclists. This alternative would provide a safer and more attractive route, particularly for leisure purposes and could also provide benefits for equestrians. The diversion length would be approximately 3km. The HA would support BCC if it promoted this change to its PROW network.
- 7.40 Enhancements to the cycle networks have been provided throughout the rest of the Scheme, incorporating specific requests made by the CTCRRN and BCC and these enhancements are adequate.

Objection: insufficient and unsatisfactory landscaping provision and noise mitigation in the area of Lower Shelton Road

Marston Moretaine Parish Council, SO-20 (ID/HA/19)

- 7.41 Because of its proximity to residential housing, the Scheme would include noise barriers and antiglare fences where it passes between Lower Shelton and Marston Moretaine, the "pinch point". There would be a belt of trees on the northern side of the Scheme to screen it visually from houses on Lower Shelton Road. In addition the Scheme would include the planting of shrubs on the "non-Scheme" side of the noise barriers. These would be 3m high timber absorptive noise barriers, which are used on most of the highway network in the UK. The noise barriers would be continuous over the underpass close to Lower Shelton Road and thus would screen both underpass entrances from A421 traffic noise.
- 7.42 A detailed computer model of the A421 Scheme has been developed in accordance with CRTN. The model takes into account:
- traffic on the Scheme and on all other roads in the area, including slip roads and junctions (traffic flows, number of HGVs and speed);
 - gradients;
 - the vertical and horizontal alignments of all roads and junctions (including elevated sections and sections in cutting);
 - road surface type;
 - the ground topography over the area; and
 - any barriers, either specified noise fencing or natural ground features or buildings which may provide shielding.
- 7.43 Noise from road traffic is generated both by vehicles' engines and the interaction of tyres with the road surface. There is currently no requirement to assess the proportion of noise emitted from high level exhaust systems on HGVs; noise is assumed to be generated at 0.5m above the road surface. A road speed of 112km/hr has been assumed for noise calculation

purposes; if the assumed speed was increased to 137km/hr, noise levels would increase by 1.8dB(A) (ID/HA/60). The modelling represents a worst case scenario and assumes a moderate wind blowing from the noise source to the receptor. However, in practice on a windy day, the noise of the wind itself can mask traffic noise. Night-time noise is generally accepted as being some 10dB(A) below day-time levels.

- 7.44 It is not practical for noise barriers and other structures to be designed such that they are completely immune from the application of graffiti. Planting would go some way to discouraging graffiti as would the proximity of the barriers to high-speed traffic. If this and other forms of antisocial behaviour occurred, it would be a matter for the police.
- 7.45 The Scheme would have a low noise surfacing. This would provide a reduction of 3.5dB(A) compared to a standard hot rolled asphalt surface for speeds of 75km/hour and above. The 3.5dB(A) reduction is an average over the life of the carriageway surface. As the surface wears, there would be a slight deterioration of approximately 1dB(A) in the performance of the surface over its lifetime.
- 7.46 Some parts of the existing A421 west-bound lane, which would become a local distributor in this area, have low noise surfacing. However, for the purposes of the noise assessment, the A421 has been assumed to have normal surfacing throughout. There is no provision in the Scheme to resurface the parts of the existing A421 that would be retained. The maintenance of the detrunked A421 would be the responsibility of BCC and it is understood that the retained A421 would be resurfaced before 2026.
- 7.47 Willow fence noise barriers would be inappropriate in the vicinity of Lower Shelton Road because:
- the typical width of the noise barrier proposed for use in the Scheme would be 0.15m. It would not be possible to accommodate the 2-3m width required for a willow noise barrier in the location suggested because of physical constraints. Only the minimum amount of land required for the Scheme can be acquired in the CPO;
 - willow noise barriers would require intensive maintenance throughout their life cycle. High-speed growth of willows is driven by water, and drip irrigation would be required throughout the summer months. Regular maintenance by way of trimming, cultivation, and regular inspection to control diseases and pests would be required; and
 - sufficient space would be needed for operatives to access both sides of the willow barrier with equipment. This would involve installing temporary traffic management and restricting the new dual carriageway to a single lane in each direction, to protect the workforce. This work would be carried out during day-light hours and would cause congestion and delays.

Mrs B Jackson, O-45, (ID/HA/20)

- 7.48 Had the Scheme not been designed to pass between Lower Shelton Road and Marston Moretaine, the overall environmental impact, the amount of land acquisition and construction cost would have been much greater. In

this area the Scheme would be constructed on the line of the existing A421 which already separates Lower Shelton from Marston Moretaine.

- 7.49 Marston Junction has been included in the noise model and has been assessed in accordance with CRTN. Only traffic joining and leaving the mainline and local traffic would negotiate this junction. Acceleration and deceleration noise from the Scheme would be no worse than that which currently emanates from the existing Beancroft Road Junction. With respect to traffic on the overbridge at Marston Junction, the contribution of noise from this source at Lower Shelton would be minimal compared to that from traffic on the mainline, which runs past the southern boundary of the village. No commitment was ever given and no drawings were ever produced for the construction of noise bunds at Marston Junction.
- 7.50 In 1980, the WHO published Environmental Health Criteria which became established as an authoritative guide to acceptable noise levels in a wide variety of circumstances (DD187). This work was updated in 2000 as Guidelines for Community Noise. The WHO approach is cautionary and the guideline levels are set lower than the level at which a given adverse effect is likely to become an issue (HA/P5/A, Table B1). Some 55% of people in the UK are exposed to day-time noise levels in excess of 55dB(A) and some 68% are exposed to noise levels in excess of 45dB(A) (ID/HA/61). It is generally accepted that WHO guideline levels cannot be achieved close to major sources of noise, such as major highways.
- 7.51 The Scheme would be subject to evaluation studies, one year and five years after it has opened to traffic. These studies would include an assessment of whether actual traffic flows are close to those predicted. Unless the traffic predictions for the Scheme are drastically wrong, the actual noise levels along the Scheme should be comparable to those predicted.
- 7.52 With the proposed mitigation in place, noise levels across the southern part of Lower Shelton would be lower in the DS scenario than in the DM scenario. The remainder of Lower Shelton would experience generally negligible changes in noise levels.
- 7.53 Areas of planting would screen the road from surrounding properties. In addition shrubs would be planted on the side of the barriers away from the road to enhance their appearance. However, the maintenance of any such planting, in the longer term would be the responsibility of BCC. Further consideration would be given, during the detailed design stage, as to how the 3m noise barriers would be terminated.

Ms M Ball, WO-21, (ID/HA/40)

Mrs C Delafuente, WO-55, (ID/HA/39)

Mr M and Mrs C Hawkes, WO-56, (ID/HA/38)

M Blake, WO-57, (ID/HA/37)

Mr A J and Mrs N F Yeowell, WO-61, (ID/HA/36)

The Occupiers of 2 Horseshoe Close, WO-62, (ID/HA/35)

Mr S Lonsdale, WO-63, (ID/HA/34)

- 7.54 The material points of the HA's responses to the above objections are covered by the responses given to objections O-20 (ID/HA/19), O-45

(ID/HA/20) and O-95 (ID/HA/23).

Mr Tong Lee, WO-95, (ID/HA/23)

- 7.55 The calculation of the effects of roadside noise barriers takes into account the frequency content of road traffic noise. Improvements in vehicle and tyre technology would indicate that the CRTN methodology does not underestimate the noise contribution of HGVs.
- 7.56 Absorptive barriers, which reduce reflected noise, would provide noise mitigation to Marston Moretaine and Lower Shelton, where the Scheme passes near residential properties. Those properties, closest to the Scheme, would experience noise decreases in excess of 3dB(A), which would be a direct result of the noise barriers. Thin belts of trees and foliage would not provide significant noise attenuation. It is generally accepted that a 30m to 50m wide belt of trees would be required to provide any useful reduction in noise.

Objection: a reasonably convenient alternative means of access would not be provided to the IRP Roundabout when the B530 Link from the A421 is stopped up

Kleinwort Benson (Jersey) Trustees Ltd.; Kleinwort Benson (Channel Islands) Corporate Services; Standard Life Investment Funds, O-19, the IRP owners (ID/HA/83)

The statutory test

- 7.57 Section 14(6) of the Highways Act 1980 is a stand alone test (ID/HA/158, para. 91). There is no scope in the Act for balancing the wider benefits of the Scheme against the loss of the existing right of way. The route via the A421/A6 Interchange, the A6 and Cowbridge Roundabout would be a reasonably convenient alternative for traffic that currently uses the B530 Link from the A421 to the IRP. In addition, other reasonably convenient alternative routes would be available via the local road network (ID/HA/158, para. 92).
- 7.58 However, what is a "reasonably convenient" alternative is a matter of judgment. Significantly, there is no requirement that the alternative should be as convenient as the route which would be stopped up. In making this judgment it is appropriate to look, not only at the distance travelled, but also at the time taken. An alternative may be "reasonably convenient" even if, in terms of distance, it is longer. No-one begins or ends their journey at the B530 Link Roundabout on the A421 and the Scheme would produce considerable time savings for people wishing travel to and from Bedford and/or the IRP, who currently use the B530 Link (ID/HA/158, paras. 93-101).

Possible alternative routes

- 7.59 The traffic modelling assumes that each vehicle driver would choose a route to ensure the most efficient use of the whole road network. It is acknowledged that this assumption would be invalid in the short term. Hence, on the first day of the Scheme opening, drivers would be unlikely to have the knowledge of alternatives to the A6 and Cowbridge

Roundabout route to minimise their journey cost. As time goes by drivers would adopt alternative routes, however unsuitable these may appear to be.

- 7.60 It is not only the traffic that currently uses the B530 Link to the IRP Roundabout that would consider using alternative routes. Other traffic, that currently uses the A6 to destinations beyond the Cowbridge Roundabout, would also consider alternative routes. Selection of such alternative routes would vary considerably depending on the trip origin and destination. It is quite likely that this A6 traffic would have a greater range of alternative routes and would, to a large extent, be displaced from the A6 (north of the A421) by the traffic that would be directly affected by the stopping up of the B530 Link (ID/HA/83, para. 3.2.9).
- 7.61 If the IRP owners are correct in their separate analyses, traffic would surely divert to the local network routes, as it is unrealistic to assume that queues of 159 or 399 vehicles would accumulate on the A6 at Cowbridge Roundabout (ID/O19/5, Tables 4 and 5).

The SATURN modelling

- 7.62 The SATURN program is the industry standard software for the implementation of highway assignment models. Version V3 of the SATURN model (ID/HA/83, chapters 8 and 9) indicates that, in the 2011 DM scenario, the Cowbridge Roundabout would be approaching capacity. However, the queues on the A6 south-bound arm would not be excessive. In the pm peak, the B530 east-bound arm would be at, or over, capacity with fairly long queues. In the 2011 DS scenario the Cowbridge Roundabout would be over capacity in the am peak at the A6 south-bound arm and the A5134 west-bound arm, which would have the longest queues. In the pm peak, it would be substantially over capacity on the B530 east-bound arm with very long queues.
- 7.63 The link characteristics of the various alternative local network routes have been faithfully represented within the SATURN model (ID/HA/83, chapter 7) and there has been no challenge as to the accuracy of this coding. Version V3 of the SATURN model has used the speed flow curve for a single 7.3m (good) rural road for the length of the A6 between the A421/A6 Interchange and Cowbridge Roundabout.
- 7.64 Comparison of the queue lengths at the Cowbridge Roundabout forecast by the SATURN model with those forecast by ARCADY showed fundamental inconsistencies, in that the queues forecast by SATURN were considerably shorter than those forecast by ARCADY. An iterative approach was adopted by seeking to achieve comparable queues between those forecast by ARCADY and by SATURN. The separate ARCADY modelling work undertaken by the IRP owners does not adopt this iteration process.

Junction modelling

- 7.65 There is no observed queue data available for either the 2005 am or pm peak hours, against which to compare the ARCADY base year model results. Observations in the 2007 am and pm peak periods would suggest

that modelled A6 north-bound queues of two vehicles at Cowbridge Roundabout are too short (ID/HA/83, para. 8.2.10 and Table 8.4).

- 7.66 Use of the O-DTab function is appropriate in the 2005 base year. However, by 2011, the flow profile would generally be flat over the peak hour periods. Therefore, use of flat demand profiles rather than the O-DTab function is more appropriate for the 2011, and later years. The geometry of the Cowbridge Roundabout was measured from a scale drawing, in accordance with the ARCADY User Guide. There were three main areas where these geometric parameters differed significantly from those used by the IRP owners in their separate ARCADY analyses: namely conflict entry angles, effective flare lengths and the width of the approach lane to Cowbridge Roundabout from the P&R Roundabout (ID/HA/83, chapter 8).
- 7.67 The effects of varying these parameters have been reviewed (ID/HA/83, Table 8.2). Although a direct comparison between the degree of influence of each geometric parameter change is not a simple matter, the road half-width, the entry width and flare length changes tend to have a greater impact on ARCADY outputs than changes to the entry radius and conflict entry angle.

Possible mitigation measures

- 7.68 SATURN Model Version V3 and ARCADY have been used to assess two possible mitigation options: (a) signalisation of the A421/A6 Interchange and (b) implementation of a flare on the B530 east-bound arm of the Cowbridge Roundabout. The same SATURN model and TRANSYT were used to carry out an assessment of mitigation options: (c) (the IRP owners' Option A), a revised Cowbridge Roundabout and (d) (the IRP owners' Option B), a signalised junction to replace the Cowbridge Roundabout.
- 7.69 Option (a). Signalisation of the A421/A6 Interchange could help to meter north-bound traffic towards the Cowbridge Roundabout, but only slight mitigation would be provided. A preliminary estimate is that the cost would be approximately £250,000. However, this signalisation is likely to be provided as a condition of the NIRAH planning permission. On the other hand, if the NIRAH development does not proceed, the traffic flows in the DS scenario would reduce because the NIRAH development traffic has been included in the DS scenario (ID/HA/83, paras. 12.2.1-12.2.6).
- 7.70 Option (b). The longest queues identified in the 2011 DS assessment would be on the B530 east-bound entry to Cowbridge Roundabout. Hence, a plausible mitigation option would be to provide a 60m long entry flare. The left hand lane would be used for the left turning traffic into the A6 towards Bedford. The right hand lane would be used for traffic proceeding towards the A5134 east-bound, or turning right into the A6 south-bound. This option would provide considerable mitigation in respect of the B530 east-bound arm, although it would have no impact on the other arms. A preliminary estimate is that the cost of this option would be approximately £200,000 (ID/HA/83, paras. 12.2.7-12.2.11).
- 7.71 Option (c), the IRP owner's Option (A). The performance of Cowbridge

Roundabout would be considerably improved by this option and in 2011 would be within capacity. However, a preliminary estimate is that the cost would be in the region of £2M (ID/HA/83, paras. 12.2.12-12.2.17).

- 7.72 Option (d), the IRP owner's Option (B). The results for the am peak hour suggest that the junction would have severe capacity problems on the left turn from the A5134. However, an improved performance for this movement could be achieved if the intercept value was increased in the TRANSYT model. Leaving aside this link, the am peak generally predicts a larger reserve capacity compared with the IRP owners' model. A preliminary estimate is that the cost of this option would be in the region of £2M (ID/HA/83, paras. 12.2.18-12.2.23)

Summary

- 7.73 The Cowbridge Roundabout would have to be very badly congested before it "ate up" the 12-13 minute saving, which would be experienced by vehicles travelling to or from the western end of the scheme. This is not to say that the Cowbridge Roundabout could not or should not be improved. All the land required for any of the improvement options is highway land and therefore it would be possible to implement any improvements without amendment to the draft Orders.
- 7.74 Both parties agree that there are ways in which it could be improved, which would, to varying degrees, improve its capacity. The A6 and Cowbridge Roundabout should be considered in the context of the impacts on the wider local network, not only from the Scheme, but also from the Wixams development, from the potential NIRAH development and from possible measures to increase usage of the nearby P&R site. However, the A6 and Cowbridge Roundabout are the responsibility of BCC and the choice of any mitigation measures should await the outcome of the A6 Corridor Study commissioned by BCC.

Further evidence following issue of Inspector's note (ID/3) to the HA, IRP owners, BCC and Elstow Parish Council on 11 January 2008

- 7.75 To reinforce the HA's position that any necessary improvements to Cowbridge Roundabout could be undertaken within highway land and without modification to the draft Orders, meetings have been held with BCC and the IRP owners. The HA has reached agreement with BCC to work together to seek to determine the need for mitigation works at Cowbridge Roundabout, as a direct result of the Scheme. If, following an analysis of the outputs of an agreed version of the HA's traffic model, mitigation works are proven necessary, the HA and BCC together would determine the extent, timing, cost and apportionment of the cost of implementation of these works (ID/HA/129). This task would be completed by the end of June 2008 and the owners of the IRP would be consulted and kept informed of developments.
- 7.76 Until such time as this task has been completed and in particular the cost determined, the HA cannot commit to undertaking mitigation works. If, however, agreement was reached between all the parties (the HA, BCC and IRP owners) that an acceptable solution had been found, and that this solution could be funded by the HA and BCC, in such proportion as

they might agree, the parties would so inform the SoS directly by the end of June 2008.

- 7.77 If the SoS decided that the alternative route/routes to IRP, currently proposed by the HA, were not reasonably convenient, she would be in possession of an agreement entered into between the HA and BCC under Section 4 of the Highways Act 1980 to cover mitigation works at Cowbridge Roundabout, which would provide another reasonably convenient alternative route. If the SoS was also informed directly by the IRP owners that this other alternative route was acceptable to them, there would be no obstacle to her making the draft Orders.
- 7.78 The HA would use its best endeavours to implement the totality of any mitigation works before the Scheme would open, and any partial mitigation, on account of IRP stopping up, before the B530 Link was stopped up. If any solution arrived at with BCC was substantially different to the IRP owner's Options A or B the more important it would be to try to obtain their approval of it, so as to avoid the need to re-open the inquiry. If the IRP owners are sincere in their overall support for the Scheme, they should give proper consideration to any mitigation proposals that might arise out of the work to be undertaken with BCC. In the event that the HA and BCC failed to reach agreement or the HA and BCC together reached agreement, but the IRP owners did not agree with them, the SoS would also be informed directly by the end of June 2008.

TK Maxx, WO-8, (ID/HA/87)
SCS Property Development, WO-39, (ID/HA/86)
Matalan plc, WO-43, (ID/HA/85)
Pets At Home Ltd., WO-53, (ID/HA/84)
Staples, WO-59, (ID/HA/90)
Brantano (UK) Ltd., WO-60, (ID/HA/88)
Fujifilm UK Ltd., WO-80, (ID/HA/89)
Alderforce Ltd., (KFC and Burger King), WO-96, (ID/HA/91)
Mothercare, WO-98, (ID/HA/120)

- 7.79 The material points of the HA's responses to the above objections are covered by the responses given to O-19 (ID/HA/83).

Objection: the Scheme would increase congestion on the A6 corridor generally and on the Cowbridge Roundabout in particular

Elstow Parish Council, SO-97, (ID/HA/124)

- 7.80 The material points of the HA's response to the above objection, in relation to the stopping up of the B530 link to the IRP Roundabout, are covered by the response given to O-19 (ID/HA/83).
- 7.81 Traffic generated by the NIRAH development has been taken into account in the A421 traffic model. As a condition of the planning permission, the developers of NIRAH are required to fund the signalisation of the A421/A6 Interchange. Arrangements for car parking and the routing of visitor shuttle buses are an issue for BCC and as such, are not a matter for this inquiry.
- 7.82 Traffic generated by the Wixams development has also been taken into

account in the A421 traffic model. The Wixams development masterplan does not make provision for a link road from the IRP Roundabout to the proposed Wixams Parkway Railway Station. The station car park is currently planned to have 600 parking spaces, and is being designed to cater for local rather than regional demand. Any car parking facility at the station would require planning permission, which has not yet been granted.

- 7.83 Advanced and local direction signs would direct traffic via the A421 and A6 as the most appropriate strategic route to the north and west of Bedford. However, other roads would still be available for those motorists with local knowledge. The Bedford Western Bypass, currently under construction, would provide further route options for travellers.

Mr P and Mrs G Baird, O-44 (ID/HA/54)

- 7.84 The material points of the HA's response to the above objection in relation to congestion are covered by the responses given to O-19 (ID/HA/83) and O-97 (ID/HA/124).
- 7.85 The roundabout on the A421, which was completed in 1996, was not intended to provide a direct access to the IRP, but rather it was intended to be a means of providing a safe transition between the Bedford Southern Bypass dual carriageway and the single carriageway of the existing A421. The roundabout was only ever intended to be a temporary measure that would be removed upon the improvement of the A421.
- 7.86 Retail and leisure developments, such as the IRP, often generate a significant volume of trips at weekends and at bank holidays. This may result in traffic flows in excess of a typical weekday peak. However, weekend traffic counts indicate that the maximum traffic flows in the Cowbridge area are no greater than those experienced during the weekday am and pm peak hours.
- 7.87 Consultations with the emergency services have confirmed that, in their view, stopping up of the B530 Link to IRP Roundabout would not present a risk to their IRP emergency access arrangements (ID/HA/112).

Objection: insufficient consideration has been given to the impacts from the changed traffic conditions on adjacent side roads when the Scheme would become operational

Mr A Talbot, O-64 (ID/HA/51)

- 7.88 Following public consultation, the current proposals were adopted for Marston Junction and Beancroft Road. In the DS scenario, the flow on Beancroft Road would increase by around 3,100 vehicles per day, which is a result of Marston Junction attracting traffic that would have local trip origins or destinations.
- 7.89 Beancroft Road re-alignment has been carried out to an appropriate design standard for the speed of the road and the design has been accepted by BCC, as the LHA. There is no suggestion by BCC that the increase in numbers of vehicles using Beancroft Road would lead to an increase in accidents.

- 7.90 The national speed limit, which is 60mph for single carriageway roads, applies to Beancroft Road, Marston Hill, Bedford Road and Roxhill Road. These speed limits change to 30mph approaching Cranfield on Marston Hill and on the approach to Upper Shelton on Bedford Road. Full consultations have been conducted with BCC, as the LHA, and it is satisfied with the Scheme proposals in this area. However, the concerns of residents have been passed on to BCC, as it prepares to undertake a county-wide review of speed limits.
- 7.91 The Scheme does not directly impact on any existing bridleway crossings of Beancroft Road; neither does it include any proposals for alteration of the bridleway network north of the proposed junction at Marston. As such, equestrian usage is likely to remain as it is at present.
- 7.92 The noise assessment shows an increase in noise levels of between 1dB(A) and 3dB(A) in 2011 on Beancroft as a result of the Scheme. This level of change, although perceptible, would only be of slight significance. There are not expected to be any perceptible increases in traffic noise along Roxhill Road, Marston Hill and Bedford Road.
- 7.93 The re-aligned section of Beancroft Road would be surfaced with low noise surfacing, but beyond the Scheme, the type of surfacing would be a matter for BCC, as the LHA, as part of ongoing and future maintenance considerations.

Ms C McArthur, WO-83, (ID/HA/72),

Mr P H Vinter, WO-84, (ID/HA/70)

Mr P O'Neill, WO-87, (ID/HA/71)

- 7.94 The material points of the HA's responses to the above objections are covered by the response given to O-64 (ID/HA/55).

Objection: the Scheme should be routed further away from existing settlement

Mr A Evans and Son, SO-38, (ID/HA/22)

- 7.95 The stopping up point proposed in Hoo Lane is convenient, allowing access to all the land on both sides of the lane and to the Evans' cottages. As such, the alternative stopping up point proposed would result in an amendment to the draft Order. However, there is no objection in principle to relocating the stopping-up point in Hoo Lane to its junction with Cranfield Road, provided there are no other objections.
- 7.96 Accordingly, if Mr Evans is able to demonstrate before the close of the inquiry that he has the consent of all the relevant parties, modifications could be proposed to the draft SROs (ID/HA/141). These would show the lane recreated as a bridleway and PMA for the Evans, their tenants and any statutory authorities. Otherwise, in this particular regard, the draft Orders should not be modified.
- 7.97 Hoo Lane is not included in the draft CPO, because land, which is not required for the Scheme, cannot be compulsorily purchased from one owner and passed on to another landowner. In addition, access rights to Hoo Lane via the bridleway track would be required by the tenants and

landowner of a severed plot of land (CPO plots 14BA, 14BB and 14BH of Sheet 6). No other access would be available to this plot.

Mr A Owen, WSO-17 (ID/HA/56)

7.98 During the preparation of the Scheme, several alternative routes were evaluated in the Wood End area. The A421 on-line option was rejected for the following reasons:

- widening of the existing A421 through Marston Moretaine would result in a considerable adverse impact on many residential properties fronting the existing A421;
- the re-aligned Beancroft Road would pass over the A421 and this would have a significant environmental impact;
- traffic disruption along the existing A421 during construction would be severe;
- the alignment of the main line would be below the standard required for a strategic modern dual carriageway road; and
- accesses would be required for residential and commercial properties and agricultural land. At-grade junctions would not be acceptable for safety reasons and therefore parallel access/service roads would be necessary. These would increase landtake and environmental impact.

7.99 Whilst the Scheme would have an adverse impact at Wood End, every effort has been made to mitigate that impact and provide a new landscape that would ultimately integrate the road into the existing landscape. Care has been taken to provide a route that would affect as few properties as possible, which is why the route chosen lies to the north-west of Moretaine Farm.

Ms R Buckley, WO-26, (ID/HA/51)

Mr E Dudose, WO-27, (ID/HA/44)

Marston Car Accident Repairs, WO-28, (ID/HA/43)

M J Motors, WO-29, (ID/HA/45)

Mr C Seamark, WO-30, (ID/HA/46)

The Occupier, Rose Cottage 1, WO-34, (ID/HA/50)

Mr A Macrae, WO-35, (ID/HA/48)

The Occupier, Rose Cottage 2, WO-36, (ID/HA/49)

7.100 The material points of the HA's responses to the above objections are covered by the response given to O-17 (ID/HA/56).

Objection: the extent of the CPOs and access arrangements relating to individual properties

Marston Moretaine Parish Council as Trustees of land managed by Marston Moretaine Playing Field Management Committee, SO-9, (ID/HA/21)

7.101 In the event that the CPO is confirmed, compensation would be payable to the Parish Council as the relevant landowner in the usual way. The Playing Field Management Committee maintains it is prevented from making use of compensation funds under the terms of its Trust

constitution. These matters do not form grounds for a valid objection to the Scheme.

- 7.102 The Parish Council's statement of case presents for the first time a claim that the land being taken by the Scheme is public open space. The land is not registered as public open space; the public has no right of access to the land, nor is it available to the public for recreational use.
- 7.103 It appears that the site was previously part of a wider area which was in use as playing fields up until 1986, when the length of the A421 was upgraded to dual-carriageway. However, it is clear that the land, which is the subject of the CPO, ceased to be used as public open space when the A421 was improved.
- 7.104 Two important consequences flow from this. The site is no longer in use as public open space, and the loss of the site as public open space has been compensated through the exchange lands already provided. As the land being taken for the Scheme is no longer public open space, there is no obligation to provide exchange land.

Mrs S G Cook, WSO-1, (ID/HA/42)

- 7.105 Modifications have been proposed to the draft SROs and draft CPOs which satisfactorily address Mrs Cook's concerns (ID/HA/42, paras. 3.1-3.6).

Mr D J Patterson, WSO-10, (ID/HA/66)

- 7.106 All land to be permanently acquired is for the construction of the Scheme or for the mitigation of adverse effects. Loss of land would be compensated through the District Valuer. The Scheme includes a noise bund and planting adjacent to Mr Patterson's property. There would only be minor reductions in the predicted noise levels as a result of increasing the height of the noise bund.
- 7.107 The alignment of the Scheme has been subject to detailed development and the assessment of various alternative routes. The published alignment has been chosen to provide the optimum solution in terms of engineering requirements, landtake, environmental impact and cost. The acquisition of alternative land would not be beneficial.

Mr A Parrish, WSO-11, (ID/HA/94)

- 7.108 The material points of the HA's responses to the above objection are substantially covered by the response given to O-10 (ID/HA/66).
- 7.109 The Scheme would allow access for Mr Parrish and his agricultural equipment. Discussions have taken place with Mr Parrish regarding a possible re-alignment of a watercourse in land parcel 14AQ that may permit more efficient farming practices to be adopted. This diversion would require additional landtake from land tenanted by, but not owned by, Mr Parrish. It therefore would require the consent of the owners, Quickfire 7. Consent has not been obtained and it is therefore not possible for the additional land to be included within the CPO.

Mrs M M E L Poole, WSO–16, (ID/HA/82)

- 7.110 Mrs Poole would be aware of the construction work at M1 Junction 13 throughout the construction period, and of the activities at the neighbouring temporary construction compound in Salford Road. Although the belt of proposed planting at ground level would in time provide some visual mitigation between 'Omega' and the slip road, and soften the outline of the dual carriageway, the proximity of the new road would make a visual impact, but not to the extent of making occupation of the property intolerable. Changes in noise levels at 'Omega' would be less than 1dB(A), a negligible change and, in the garden, would rise by between 1 and 3dB(A), a slight adverse effect.
- 7.111 The re-alignment of Salford Road would lead to the removal of passing traffic in front of the property. This re-alignment would be complete before the Scheme opens and, apart from peak time traffic at the compound, and occasional farm access, there would be benefit from less traffic passing directly outside 'Omega'.
- 7.112 Plot 5B would be taken under temporary licence for use as a secondary construction compound during the works period. Once construction of the Scheme has been completed, this land would be restored to its original condition, and returned.
- 7.113 There is no requirement for the Scheme to take land at 'Omega' identified as Plot 36A. This plot had been included in the draft Orders in error and correction is included in the proposed modifications to the draft CPOs.

St. John the Baptist College, WSO–58, (ID/HA/65)

- 7.114 Objections relating to access and light pollution have been withdrawn. Proposed modifications to the SROs address the Objector's concern regarding proximity of walkers. The primary contributor to noise is traffic on the M1. The difference in noise levels in the opening year, between the DM and DS scenarios would be less than 1dB(A), which would be barely perceptible.

Whitbread Harrowden Settlement, WSO–65, (ID/HA/100)

- 7.115 Areas contained within the CPO for topsoil storage would be temporarily acquired under licence for the duration of the works only; the freehold would not be acquired. It might not be possible for the Contractor to obtain alternative plots on the open market. Such alternative plots may be remote from the site resulting in increased haulage costs and the addition of a significant number of heavy goods vehicles on the local road network, which would have an environmental and disruption impact.

Ms L MacKenzie and Mr M Goode, WSO–70, (ID/HA/92)

- 7.116 The draft CPO plots 6A-6C are required for the construction of the Scheme. Plot 6B is required under licence only to facilitate future maintenance work to be carried out on a watercourse. Provision has been made in the draft Orders for Ms Mackenzie and Mr Goode to retain vehicular access rights to their property.

The Trustees of Husborne Crawley Charities, WSO-71, (ID/HA/68)

- 7.117 Broughton Brook would be diverted through a newly constructed channel, which would be wider than the existing watercourse. This would include a flood berm to ensure that high flows would be contained within the watercourse, to reduce the risk of flooding. This area of land was purposely left out of the draft CPO following discussions with the Trustee's tenant, in order to leave access to an existing watercourse crossing. Access to retained land is provided from the new Salford Road and is included in the draft SRO.

Mr and Mrs R Weston, WSO-75, (ID/HA/97)

- 7.118 The permanent access to Brogborough Manor Farm would be via a PMA from Salford Road. The freehold of the land, over which the PMA would cross, would remain with the current landowner. Various other parties, including the owners and tenants of the residential property at Brogborough Manor Farm, would use the proposed PMA.
- 7.119 Temporary vehicular access to the existing A421, via North Common Farm Underpass, would be provided for the owners and tenants Brogborough Manor Farm during construction of the works. Following completion of the works, part of the temporary access adjacent to Manor Farm Cottages would be removed and the ground restored to its original condition. The remaining section of access would remain as an access track for the Woodland Trust.
- 7.120 The proposed North Common Farm Underpass would be a replacement PMA for that which currently serves North Common Farm. Those parties with rights of access over the existing PMA would have those rights replicated over the new PMA. Appropriate signing or gates, to identify the PMA as being a private drive, would be agreed during detailed design as part of the accommodation works package.
- 7.121 The proposed Brogborough Manor Farm bridleway bridge would be replaced with an accommodation bridge, allowing vehicular access from the existing A421. Bridleway rights would still be provided over the revised structure. The proposed PMA from Salford Road would not be required if vehicular access is provided via an accommodation bridge. Accordingly, modifications have been proposed to the draft SROs and CPOs.

Mr C Le Boutillier, WSO-76, (ID/HA/53)

- 7.122 Raising or lengthening the bund in front of 'The Woodland' would only have a small impact on noise levels. Planting on the bund would be expected to produce an effective screen within six to eight years. The land would be classed as highway land, and would be open to the public.

The Woodland Trust, WSO-88, (ID/HA/98)

- 7.123 Two lay-bys, which would be constructed at the southern end of Manor Farm bridleway bridge would enable visitors to park and walk into Reynolds Wood. The Trust would have exclusive use of the vehicle access track gated at the eastern end and the draft SROs and CPOs are proposed to be modified to reflect this.

- 7.124 A footpath would be provided between Manor Farm overbridge and Reynolds Wood, and this is identified within the CPO. This is a proposed modification to the original Scheme design (ID/HA/98, App. B). In addition, it is proposed that the proposed Brogborough Manor Farm bridleway bridge would be replaced with an accommodation bridge, allowing a vehicle access from the existing A421. Bridleway rights would still be provided over the revised structure. The draft SROs are proposed to be modified accordingly.
- 7.125 Instead of purchasing the land required for the vehicle access track, a licence for PMA would be negotiated and agreed with the owners, subject to the agreement of the Woodland Trust. Should this not be possible, then the land would be purchased under the existing CPO, giving the Trust rights of access in perpetuity. The footpath would be sited on highway land and rights of access by the highway authority would be retained. Control of access to the Woodland Trust land by members of the public would be in the hands of the Trust. This would provide the Trust with the security of access which it requires. It would not be appropriate to compulsory purchase land from one landowner in order to convey it to another.
- Mr K Burke, O-68, (ID/HA/14)***
- 7.126 The elevated section of the Scheme, approaching the M1 junction, has been designed to provide clearance to the re-aligned Salford Road and the existing M1 motorway below. This effectively fixes the elevation of the proposed carriageway.
- 7.127 Noise assessments assume that the M1 would be resurfaced with low noise surfacing. Even so, noise levels at Brooke Farm would not rise by a discernible amount as a result of the Scheme. This would be because the noise from the Scheme would be "drowned out" by the noise from the M1.
- 7.128 The ground floor and garden of Brooke Farm are well screened by existing vegetation, including a substantial hedge along the south-eastern boundary. However, from the first floor south-east facing windows, distant views of the existing A421 are evident, though these are partly screened by trees on Mr Burke's land. The existing M1 Junction 13 traffic can also be seen approximately 840m away. There are also interrupted views of Salford Road. Implementation of the Scheme would mean that there would be traffic on the proposed A421, which would be elevated and approximately 480m from the property. The re-aligned Salford Road would also be more visible.
- 7.129 Land can only be compulsorily purchased for essential mitigation of adverse effects. The significance of the remaining visual effect of the Scheme on the property are not such as to require essential mitigation. Therefore the land adjacent to the property, which Mr Burke suggests as being suitable for planting, cannot be purchased for this purpose.
- 7.130 The Scheme includes extensive environmental mitigation in terms of landscape planting and screening. Tree planting beside the A421 would substantially screen the road and traffic from Brooke Farm; although it

would take a number of years for the planting to become fully established. In addition, it is proposed to plant a linear belt of trees and shrubs along the south-west side of the re-aligned Salford Road, which would, also after some time, partially screen the re-aligned road. However, there would be a part of the new bridge over the M1, some 510m distant that would not be screened by planting, other than partly by the vegetation that already exists on Mr Burke's land.

- 7.131 A temporary site compound is proposed to the north of the existing Salford Road, adjacent to the proposed A421 east-bound on-slip road. A further temporary working and soil storage area would be temporarily required. The Contractor would be willing to discuss with Mr Burke the arrangement of temporary topsoil storage tips to mitigate as far as possible the impacts of any temporary compound arrangements on Brooke Farm.

Mr T and Mrs L Smith, WO-77, (ID/HA/99)

- 7.132 Modifications are proposed to the draft CPO to remove land at 'Llanberis', which was previously included in error.

Objection: unsatisfactory provision of PRowS

Lidlington Parish Council, SO-46, (ID/HA/16)

- 7.133 Although there are no PRow improvements proposed in the draft Orders, some 980m of new footpath and 1022m of new bridleway would be provided by the Scheme. These include diversions to maintain continuity of those lengths that would be stopped up, as well as a number of additional stretches.
- 7.134 There is no existing PRow on the definitive map affected by the Scheme, between the re-aligned A421 and Lidlington Lake, so there is no obligation to replace it and is not intended to do so as part of the Scheme. If the Parish Council considers that there was a previous PRow which was stopped up in 1938 as a result of mineral extraction, and that this should now be reopened, then this is a matter which the Council should pursue with BCC, as the mineral planning authority and LHA.
- 7.135 Because of the poor ground conditions beside the lake, special measures would be necessary for the construction of the road over it. This should be taken into account if it is planned to also provide a public footpath in this location. It should be noted however, that, even without such provision, pedestrians would have a right to use the verges alongside the detrunked A421.
- 7.136 The Scheme proposes to link the existing and proposed rights of way to the south of the A421 with the landfill site perimeter bridleway that is proposed by BCC (ID/HA/64). The proposal has been included at the request of the BCC Rights of Way Officer. All other proposed PRow changes proposed as part of the Scheme have been developed in consultation with the BCC Rights of Way Officer.

Bedfordshire Rights of Way Association, WSO-72, (ID/HA/24)

- 7.137 It would be inappropriate to state widths of PRoWs in the schedule to the SROs, as site conditions may necessitate localised variation in widths at gates, accesses and pinch points. It is not legally required to record the widths of the new PRoW in the schedules to the draft SROs. If widths were to be stated, variations may present grounds for legal challenge to the Orders, if the described widths were not achieved.
- 7.138 Detailed design drawings would be issued to Bedfordshire Rights of Way Association ("BRWA"), which would give actual dimensions of PRoW. BRWA would also be supplied with copies of as-built drawings as a record for future maintenance purposes. The design would adhere to DMRB guidance on the provision, design and layout of facilities for all NMUs. Only the minimum amount of land necessary to construct the Scheme can be acquired and therefore only widths that comply with the DMRB can be justified.

Bedfordshire County Council Rights of Way, WSO-86, (ID/HA/93)

- 7.139 Most of the recommendations made by BCC have been accepted and appropriate modifications have been proposed to the draft SROs. The material points of the HA's response to the above objection regarding the need to state footpath widths is covered by the response given to O-72 (ID/HA/24).

The Ramblers Association, WSO-81, (ID/HA/74)

- 7.140 The Ramblers Association has indicated its acceptance that modifications proposed to the draft Orders accommodate its observations. The material points of the HA's response to the above objection regarding the need to state footpath widths is covered by the response given to O-72 (ID/HA/24).

The British Horse Society, WSO-92, (ID/HA/69)

- 7.141 Bridleways would be constructed in accordance with the Rights of Way Act 1990, DMRB and design guidance TA90/05. Bridleways would be 3m wide adjacent to field boundaries or where horses are expected to pass each other.
- 7.142 Bridleway overbridges would be provided at Manor Farm, Vale Farm, Wood End and Manor Road. In each case, provision has been made for 1.8m high parapets, with an infill panel at the bottom of each parapet. Suitable headroom has been provided at the North Common Farm and Berry Farm underpasses to accommodate ridden and led horses respectively. The proposed Manor Farm road bridge would be 4m wide between kerbs and 6.6m wide between 1.8m high parapets.
- 7.143 The provision of Pegasus crossings would be investigated during detailed design, in accordance with TA57/87, at Manor Farm overbridge, Vale Farm Bridleway 31 overbridge, at the junction of bridleway BW31 and the existing A421, Green Lane, and Manor Road overbridge. This is provided such crossings can be constructed within the landtake currently proposed in the CPO.

- 7.144 The track, between Salford Road and Manor Farm at Brogborough, would

be a bridleway shared with the landowner for field access only. Appropriate modifications are proposed to the draft SROs and CPOs.

- 7.145 The bridleway proposed along the access track between North Common Farm Underpass and Manor Farm would be re-positioned. Appropriate modifications are proposed to the draft SROs and CPOs. A bridleway is proposed adjacent to the re-aligned existing A421 between North Common Farm and Manor Farm. There would be a 0.5m wide verge between the bridleway and the fence on either side and this would result in an overall width of 4m between fences.
- 7.146 An uncontrolled crossing point at Sheeptick End is unwarranted, and it would be potentially unsafe. The request of the British Horse Society in this regard is not accepted.
- 7.147 Wooden fencing is proposed adjacent to the cutting slope at Brogborough. The British Horse Society would be consulted about safety issues during detailed design.

Mr A Pibworth, WO-6, (ID/HA/33)

- 7.148 The Scheme includes a footpath for pedestrian use passing via the new Fields Road bridges over the proposed A421 and the existing A421. Cyclists would be able to use the new re-aligned Fields Road to pass over the proposed and existing A421 highway. The new Fields Road would be a local road carrying low levels of traffic appropriate for such use.

Other Objections

National Grid (Electricity), WSO-3, (ID/HA/78)

National Grid (Gas), WSO-4, (ID/HA/77)

- 7.149 During the further detailed development of the Scheme, any measures or diversions required by National Grid (Gas) and National Grid (Electricity) would be agreed to protect their statutory rights, obligations and interests. Agreements are not normally entered into before the Notice to Proceed with the Works has been given by the SoS. However, if provided by National Grid the HA would enter into an appropriately worded MoU.

Anglian Water Services Ltd., WSO-89, (ID/HA/95)

- 7.150 The HA agrees to comply with Anglian Water Services conditions regarding access to its plant, where affected by the Scheme.

English Heritage, WSO-93, (ID/HA/31)

- 7.151 English Heritage would continue to be consulted throughout the design and construction of the Scheme to minimise the impact on all heritage sites, scheduled ancient monuments and historic landscape character areas.

Miss F Longmuir, WO-7, (ID/HA/76)

- 7.152 Traffic noise levels would reduce in the Roberts Drive locality because of mitigation measures and the distance from the Scheme. In addition the Scheme would improve journey times which can be an advantage to house sales. However, land values are not a factor in deciding how a

major road scheme is progressed. In this case, traffic would be further away from Roberts Drive than the existing dual carriageway, with absorbent noise fencing between the new and existing carriageways.

Mr D Cheseldine, WO-12, (ID/HA/81)

- 7.153 Demand management, in the form of road user charging, is not currently Government Policy. However, the Scheme is based on one of the recommendations of the LSMMMS, which was set up to examine the future transport needs over its study area.
- 7.154 The analysis provided a framework for considering future transport investment decisions. The recommended strategy included enhancements to the strategic road network to tackle congestion alongside measures to improve public transport, manage future growth in travel demand, and provide balanced choices for transport users. The study also recommended the introduction of "area wide road user charging" after 2016, following planned major highway investment. If road user charging becomes Government policy, it would no doubt be considered on relevant schemes.
- 7.155 The A421 traffic model, in conjunction with the East of England traffic model, forecasts the additional trips generated by the Scheme within the A421 study area. In the am and pm peak periods the majority of the trips would be commuter trips. In the opening year, there would be between 300 and 400 additional trips, in either peak hour across the whole study area, as a result of the Scheme. This represents approximately 0.5% of the total number of trips within the study area in either peak hour. This does not represent a large increase in long-distance commuting.

Bedford and Milton Keynes Waterway Trust, WO-15, (ID/HA/41)

- 7.156 It has not been possible to design the Scheme to avoid possible future conflicts with the Waterway. The Waterway is in the design phase, and as yet, there are no detailed plans for its construction. Planning applications have yet to be made and no funding is in place. As such, there is no basis to accede to the Trust's request to construct an underpass at Berry Farm, which would also accommodate the waterway.

Miss D M J Smith, WO-74, (ID/HA/75)

- 7.157 The Scheme would cater for all committed and strategic developments identified in local authority development plans up to 15 years after opening of the Scheme. There has been liaison throughout the Scheme development with all appropriate parish, borough and county councils and planning authorities.

Atkins Telecoms, R-19

- 7.158 Atkins Telecoms made late representation to the inquiry on 3 January 2008 on behalf of Cable and Wireless UK, regarding apparatus in the area of the Scheme. C4 enquiries were issued on 21 January 2008. Should it become clear that Cable and Wireless apparatus is present in the Scheme area, the HA would honour its obligations under the New Roads and Street Works Act and Town and Country Planning Act.

8.0 CONCLUSIONS

- 8.1 Having regard to the foregoing, I have reached the following conclusions, reference being given in square brackets [] to earlier paragraphs of this report where appropriate.

Legal submission

- 8.2 Whether or not the HA's submission regarding CPO criteria is correct [3.1] is clearly a matter of law, but in my view it has little, if any, bearing on the conclusions that I will reach regarding the CPO objections.

The subsisting objections and representations (topic related)

- 8.3 I first of all consider the subsisting objections. As some of the issues raised are common to more than one Objector, I do this initially in a "topic related" fashion, dealing with each objection topic in turn.

Objection: the inadequacy and the inappropriateness of the proposed cluster of junctions at M1 Junction 13 and the urgent need for dualling the A421 from M1 Junction 13 to Milton Keynes

Bedfordshire County Council, WSO-73

Milton Keynes Council, WSO-85

Mr J Jones, WO-2

The Milton Keynes Partnership, WO-90

Mr K Revill, WO-66

Mrs R Persaud, WO-69

Mr J Barrett, WO-94

- 8.4 I am satisfied that the design of M1 Junction 13 is both adequate and appropriate. However, the HA's initial evidence [4.46–4.49], as supplemented by its further evidence on the M1 Junction 13 sensitivity testing [7.1–7.24], has identified a number of matters that I consider are pertinent in relation to integrated land use and transport infrastructure planning in the general area of the Scheme.
- 8.5 There is no doubt in my mind that, in order to increase the operational efficiency of the road network around M1 Junction 13, the dualling of the A421 west of the M1 should not be unduly delayed. The DfT has confirmed that funding for this scheme should be available in 2013, through the RFA process [4.43]. Furthermore, in its White Paper: Towards a Sustainable Transport System [4.10], Government has indicated that significant funding would be allocated through the RFA process in the period between 2009 and 2014 to provide local schemes, that the regions identify would best further their wider priorities. I therefore conclude that, although the funding for the A421 dualling has not already been approved, this should not be an obstacle to me in arriving at my recommendation as to whether the draft Orders should be made or not made.
- 8.6 Analysis of the cluster of junctions around M1 Junction 13 has identified a capacity problem at the left turn on-slip to the A421 at Salford Road for different growth scenarios [7.13 and 7.16]. In 2026, with MKSMSRS and EoEP growth, the degree of saturation would be 93% and with the

addition of SEoEP growth this saturation level would increase to 96%. With minor mitigation work these degrees of saturation would drop to well below 90% [7.14 and 7.17]. Given that this mitigation work could be undertaken at no additional cost and that no modifications to the draft Orders would be necessary [7.14], I conclude that this alteration should be incorporated into the Scheme at the outset.

- 8.7 If the SoS was to propose land use changes in the SEoEP, over and above those already identified in close proximity to M1 Junction 13, these could create junction capacity problems. Although M1 Junction 13 would not cause any impediment to the current growth proposals [7.16], I draw the SoS's attention to the fact that the impact of any significant land use changes on existing and proposed infrastructure would need to be assessed in accordance with PPS11.
- 8.8 Following on from the M1 Junction 13 capacity issues, I now turn to the separate matters raised by each Objector regarding this junction.

Mr J Jones, WO-2

- 8.9 I have no doubt that the HA has arrived at the M1 Junction 13 layout after extensive consultation and assessment [7.25]. Although at first glance the layout of the junction appears to be rather unusual, once understood, I consider the logic of splitting A421 through traffic and M1 related traffic [7.28] and incorporating the re-use of the existing M1 overbridge, to be sound. I accept the view that a M1 Junction 13A would cause additional severance, loss of agricultural land, major adverse environmental impact, cost and landtake [7.25]. In addition, I consider that the benefits to the local community of downgrading the existing A421 to provide a local distributor road [4.37] would be significant. I conclude that this objection should have no bearing on my recommendations.

Mr M Brookes, WO-18

- 8.10 I concur with the view of the HA that the alternative layout proposed by Mr Brookes would require additional structures, would result in greater landtake and would cause greater visual impact than the Scheme layout [7.26]. I also accept that the proposed alternative would not offer any operational advantages over the current proposals [7.26]. I therefore conclude that I should take no further account of this objection.

Mr K Revill, WO-66

- 8.11 It is clear to me that the HA has taken account of many factors in arriving at the preferred layout for M1 Junction 13 [7.27]. Mr Revill has presented no substantive evidence to support his case that a "more straightforward and elegant single roundabout solution" would perform more satisfactorily than the Scheme layout [7.27]. I understand and accept the views of the HA that a conventional large roundabout, which would not segregate the Bedford/Milton Keynes traffic movements from M1 related traffic movements through the junction, would cause severe congestion on all approaches to such a roundabout [7.27]. Moreover, I consider that for the same reasons the signing regime would not be much more complicated than it is at present [7.28].

- 8.12 I am satisfied that the HA has developed comprehensive planting proposals, including embankments planted with native trees and shrubs, that would substantially mitigate the impact of the Scheme in this area. This planting would form a substantial visual screen within approximately eight to ten years from completion of construction. Moreover, I accept that there would be few residential properties within 1km of the junction that would have views of the Scheme and that a satisfactory balance between cost and impact has been achieved [7.29–7.31]. As such, I conclude that I should not carry this objection forward to my further consideration of the draft Orders.

Mrs R Persaud, WO–69

- 8.13 There is no doubt in my mind that access on to the Ridgmont Bypass has been properly designed to comply with current HA standards [7.32]. The design has been subject to a road safety audit and no relaxation in design standards has been sought at this location [4.29 and 4.30]. Neither have the traffic analyses indicated that there would be any excessive queue lengths at this junction [4.49]. Moreover, it seems to me that the measures incorporated into the Scheme by the HA to cope with any major incidents [7.33] would be satisfactory. In this regard, I note that there have been no objections raised to the proposals by any of the emergency services [4.17]. I therefore conclude that I should take no further account of this objection.

Mr J Barrett, WSO–94

- 8.14 Given the measures proposed by the HA, including the operation of the CEPM [4.76–4.78], I do not see that the proposed location of a temporary works compound adjacent to M1 Junction 13 should affect my recommendation as to whether the draft Orders should be made or not made. I accept that the HA has liaised extensively with all other appropriate authorities regarding future planned works in the area [4.15–4.17, 4.42 and 7.6] and I conclude that this objection should not be carried forward for further consideration.

Objection: the lack of provision at M1 Junction 13 for non-motorised users

Bedfordshire County Council, WSO-73

The Cycling Touring Club Right to Ride Network, O-67

- 8.15 The HA does not dispute that there would not be specific provision in the Scheme for NMUs to cross the M1 at Junction 13 and it has submitted that there would be no point in doing so, because the busyness of M1 Junction 13 would deter cyclists in particular from seeking to use it [7.36]. Although the current busyness of M1 Junction 13 was very evident to me during the accompanied site visit, the Scheme would result in a substantial reduction in the volume of traffic crossing the existing M1 overbridge [7.28]. Accordingly, it seems to me that any assessment of suitability for NMU provision should relate not to the DM traffic volumes at M1 Junction 13, but rather to the DS situation.
- 8.16 I have noted views of BCC and the CTCRRN that the alternative NMU routes discussed are unrealistic [6.9 and 6.12] and I have further noted

the HA's submission that 3km is the norm for cycling distances to access facilities [4.34]. I have had regard to the views expressed by BCC [6.9], that the lack of provision for NMUs at M1 Junction 13 is not compensated by the extent of provision elsewhere on the Scheme [4.35–4.37].

- 8.17 Although the DfT Cycling Infrastructure Design Note advises that roundabouts are dangerous for cyclists [7.36], as I see it the Design Note is not prescriptive in this regard as it also recommends how safer cycling provision might be designed into roundabouts. The HA has suggested that a solution to this lack of provision may arise in the future when the existing M1 overbridge parapets would be up-graded through another contract. Parapet replacement, as part of a rolling programme of M1 bridge improvements, would allow removal of the safety fencing that currently occupies the verges on the existing bridge. This upgrading work is currently programmed for the financial year after the Scheme is open to traffic [7.38]. I consider that it could appear very strange to the general public to observe the commencement of parapet alteration works to the existing overbridge at M1 Junction 13, involving a further period of disruption to the traveller, shortly after the Scheme's completion [7.38]. In my opinion this could justifiably give rise to questions being asked about the HA's ability to co-ordinate its programme of work.
- 8.18 In its statement of case the HA adduced that the Scheme would comply with national planning policies [4.1 to 4.3] and with the 2007 White Paper: Towards a Sustainable Transport System [4.10]. The White Paper has, as part of one of its five goals, "promoting travel modes that are beneficial to health". Other policies stated in PPSs, including PPS1, PPS3 and PPS11 [4.3], call for the promotion of cycling as a key objective. It seems to me to be illogical that on the one hand the HA says that there is no need for the Scheme to provide for cyclists, but on the other hand it suggests that a suitable provision could be made in the future as part of another project. I also have noted that the HA has suggested that, in future years, possible junction capacity problems at M1 Junction 13 might be relieved by changes in travel behaviour and travel mode [7.22]. The Scheme, as currently proposed, makes no specific provision for a change from motorised to cycling travel mode at M1 Junction 13.
- 8.19 I have grave concerns about the lack of NMu provision at M1 Junction and I wonder whether the proposed parapet alteration works to the existing M1 overbridge should not be transferred into the Scheme. Notwithstanding my unease, given that there would be a solution to this matter within a reasonable timescale on balance, I conclude that this objection should not be an obstacle to me recommending that the draft Orders be made.

Objection: insufficient and unsatisfactory landscaping provision and noise mitigation in the area of Lower Shelton Road

Marston Moretaine Parish Council, SO-20

Mrs B Jackson, O-45

Ms M Ball, WO-21

Mrs C Delafuente, WO-55

Mr M and Mrs C Hawkes, WO-56

M Blake, WO-57

Mr A J and Mrs N F Yeowell, WO-61

The Occupiers of 2 Horseshoe Close, WO-62

Mr S Lonsdale, WO-63

Mr Tong Lee, WO-95

- 8.20 My understanding of the Objectors' concerns about the impact of the Scheme on their living environment was increased by the accompanied site visit, and I fully appreciate the reference they have made to the "pinch point" problems [6.15-6.23].
- 8.21 In considering this objection, I accept at the outset that the HA has adopted a balanced approach in its design philosophy and has sought to avoid unreasonable costs and environmental impact [4.33]. I also accept that by re-using parts of the existing A421, between Lower Shelton Road and the north-eastern fringes of Marston Moretaine, substantial costs have been saved. It is clear to me that the route alignment has been determined following extensive public consultation [4.15 and 4.16] and had the Scheme not been designed to pass through the "pinch point", the overall environmental impact and construction and land acquisition cost of an alternative route to the north would be much greater [7.48].
- 8.22 Whilst appreciating the Objectors' concerns about noise [6.16–6.23], there is no doubt in my mind that the HA has used the proper methodology in undertaking the noise assessment for the Scheme [4.100 and 4.101]. I am also satisfied that noise impacts from traffic volumes, traffic speed, road gradients, road and junction elevations, road surface type, topography and natural barriers etc. have all been properly taken into account [7.42, 7.43, 7.49, and 7.55].
- 8.23 I understand why the adoption of the alignment of the Scheme through the "pinch point" has led to some constraints. In particular, the space available to provide for the new dual carriageway, the downgraded single carriageway A421, associated street furniture and any necessary amelioration works is more limited than it would be in a green field situation [4.31]. I have noted that the noise barriers proposed by the HA would take up minimal space compared with the acoustic green barriers proposed by Marston Moretaine Parish Council. Although some evidence was presented at the inquiry on acoustic green barriers, I heard or saw nothing to convince me that a 3m high barrier could be supported by a 240mm wide core [6.17]. Notwithstanding the availability of space, I am persuaded by the arguments submitted by the HA against the use of acoustic green barriers [7.47]. However, I am pleased to note that the HA has given an undertaking to carefully consider during detailed design the aesthetics at the termination points of the 3m high noise barriers [7.53].
- 8.24 Although I acknowledge the concern expressed by the Objectors regarding the provision of landscaping, as I see it the Scheme would not provide an outlook from either the southern end of Lower Shelton Road, on the northern side of the A421, or from the turning bay at the northern end of Lower Shelton Road, on the southern side of the A421, that would be any worse than is currently experienced. This would be because, unlike at present where there are direct views of the existing A421 traffic, future views of traffic on the Scheme would be screened by new 3m high noise

barriers. Moreover, no dwellings would directly face these noise barriers in this location.

- 8.25 It is not disputed that there is a gap in the existing tree belt. However, the HA has undertaken to provide such screening that would be possible in the space available between the noise barrier to the north of the Lower Shelton Road turning bay and the downgraded A421 [7.53]. Although I accept that such screening would be minimal because of lack of space, in my opinion, any disadvantage that may arise as a consequence, would be far outweighed by the benefits that would accrue to the community generally from having the down-graded A421 to a local distributor road [4.37], and from having access to the Scheme provided by grade separated junctions [4.36].
- 8.26 I consider that the Scheme would not increase this risk of antisocial behaviour, over and above that which already exists [7.44]. In fact, I consider this risk may well be reduced as the re-aligned Lower Shelton Road would pass close to the northern end of the underpass making it more visible and thus deterring antisocial behaviour. The same argument would apply to the southern end of the underpass, which would be in close proximity to the A421 local distributor road.
- 8.27 I conclude that the above objection should not be an obstacle to me recommending whether the draft Orders should be made or not made.

Objection: a reasonably convenient alternative means of access would not be provided to the IRP Roundabout when the B530 Link from the A421 is stopped up

Kleinwort Benson (Jersey) Trustees Ltd.; Kleinwort Benson (Channel Islands) Corporate Services; Standard Life Investment Funds, O-19, the IRP owners

- 8.28 I consider that the whole matter of the stopping up the B530 Link from the A421 to IRP Roundabout was an unsatisfactory aspect of the inquiry. Initial PoEs were based on model runs that were subsequently superseded. Given that exchanges between the parties commenced well before the inquiry [6.30] it was unfortunate, to say the least, that traffic data transfer was still going on well into the inquiry. This inevitably led to late and seemingly ever changing submissions.
- 8.29 Omissions in the HA's initial SATURN modelling were discovered by the IRP owners [6.30]; the IRP owners separate junction modelling also contained initial inaccuracies [6.35]. Some of the evidence produced by both parties, particularly on queue lengths at Cowbridge Roundabout, was manifestly unrealistic [7.61 and 7.65]. In my opinion, some evidence that was critical to the consideration of congestion at Cowbridge Roundabout, for example observed queue length data, was not available; reference only being made by the HA to "observations" made during the 2007 am and pm peaks [7.65].
- 8.30 Much time was consumed in argument over matters of detail such as: O-DTab traffic flow profiles [6.34 and 7.66]; speculation about the volume of turn-in traffic to the P&R facility [6.31 and 7.66]; junction geometry

[6.34 and 7.66]; and link capacities [6.31 and 7.63]. From what I heard, it was clear to me that the differences in interpretation between the parties on these issues would only have had a fairly minimum impact on the whole question of the capacity of the A6 and Cowbridge Roundabout. I would have expected and indeed requested at the commencement of the inquiry that such detailed issues be considered outside the inquiry and presented in an agreed statement of facts between respective expert witnesses. I was subsequently advised that lack of time had precluded this.

- 8.31 However, in my view the most important omission was the failure by the parties to recognise the role that BCC, as the LHA, would have to play in arriving at any solution to deal with the impact of the Scheme on the A6 corridor and on Cowbridge Roundabout. For most of the inquiry BCC had remained an Objector to the Scheme on account of the impact that it would have on the A6 and Cowbridge Roundabout. In particular BCC had expressed reservations about the adequacy of the SATURN modelling to support junction analysis at either end of the Scheme [6.1].
- 8.32 The IRP owners had presented two mitigation options and they claimed that Option B would be preferred by BCC [6.36], but they had submitted no evidence from BCC to support this claim. The HA had adduced that, if mitigation works were found to be necessary at Cowbridge Roundabout then, as any land necessary to affect these proposals was in fact highway land, no modification would be required to the draft Orders [7.73]. However, the HA presented no confirmation from BCC, as the owners of the land required, that it would be made available.
- 8.33 I now turn to consider whether the alternative route/routes to the IRP Roundabout, as proposed by the HA, would be reasonably convenient when the B530 Link from the A421 is stopped up. In so doing I am influenced by the following factors:
- both the HA and the IRP owners have confirmed that Section 14(6) of the Highways Act 1980 is a stand alone test [6.24 and 7.57]. However, I am of the view that the test of convenience must apply only to the length of the route that it is proposed to stop up. In other words journey time savings, for example between the M1 and the existing B530 Link Roundabout, cannot be factored into the convenience test;
 - BCC has submitted that the initial results of the SATURN traffic modelling at each end of the Scheme are unconvincing [6.1]. I concur with this view and my opinion on this is reinforced by some of the peculiar SATURN outputs produced by the HA [7.64 and 7.65] and by the fact that substantial modifications were required to the SATURN model in the vicinity of M1 Junction 13 to produce credible outputs from the sensitivity testing [7.2]. It is clear to me that some SATURN modelling enhancement needs to be done in the A6/Cowbridge area. I have no doubt that the additional sensitivity testing at M1 Junction 13 [7.1–7.18] finally produced a much greater understanding of the traffic behaviour in the area [7.19–7.23] and I suspect this would also be the case at the eastern end of the scheme. Indeed, it appears that the HA has acknowledged as

much in establishing its MoU with BCC, by accepting the need for a revised and agreed calibrated local model [7.75];

- both the IRP owners and the HA have produced some junction analyses, particularly with regard to queue lengths at Cowbridge Roundabout, that lack credibility. For example, the IRP owners suggested queue lengths of 159 or 399 vehicles [7.61] and the HA suggested a queue length of only two vehicles on the A6 north-bound during the am peak [7.65]. Decisions regarding route capacities and possible enhancement measures cannot be based on such questionable junction modelling outputs;
- it is not disputed that Cowbridge Roundabout is already congested [4.50, 6.26 and 7.62]. This congestion was abundantly clear to me during my accompanied and unaccompanied site visits;
- the HA has submitted that, because the A6 and Cowbridge Roundabout is already approaching capacity, additional traffic diverted from the stopped up B530 Link would have little further impact. This would be because, if A6 congestion did occur, diverted B530 Link traffic and other traffic from further afield would use other routes on the local network as alternatives to the A6;
- the IRP owners have adduced that it would be very unlikely that east-bound traffic, heading to IRP and being unaware of congestion ahead on the A6 at Cowbridge Roundabout, would exit the A421 at Marston Roundabout to take up a route to IRP through the local road network. Similarly, west-bound traffic heading to IRP would be unlikely to exit the A421, some two miles before the A6 Interchange, to take up a route to IRP also through the local road network [6.29]. I agree with this view particularly, as traffic from the A421 to IRP would be signed to IRP via the A6 and Cowbridge Roundabout [4.32]; and
- in my opinion the nub of the matter is the concept that it would be appropriate to divert traffic off primary roads on to the secondary road network to avoid A6 and Cowbridge Roundabout congestion. I agree with the IRP owners that it would be undesirable for any of the five possible local network routes, suggested by the HA, to be used for this purpose as they would pass mostly through residential communities [6.28]. Just because the SATURN modelling forecasts that traffic would re-distribute in this fashion it does not, to my mind justify such re-distribution as an acceptable strategy. The proposition would increase rat-running and inevitably increase accidents in residential communities such as Kempston [4.54]. There is no doubt in my mind that the concept flies in the face of important parts of the HA's overall rationale for the Scheme [4.20 and 4.21] and I find it inappropriate.

8.34 I accept that the B530 Link road to IRP Roundabout should be stopped up, although I conclude that the alternative routes to IRP proposed by the HA would not be reasonably convenient. In so doing, I am comforted by the fact that both the HA and the IRP owners appear to accept that a layout at Cowbridge Roundabout could be found to provide another reasonably convenient route within existing highway land and without modification to the draft Orders [6.36, 7.68–7.72, 7.74, 7.75 and 7.78].

- 8.35 The resolution of this matter rests with the HA and BCC [7.75–7.78] and I have noted the necessary involvement of the IRP owners and that they will be given an opportunity to comment on emerging mitigation proposals [7.78]. I have no doubt about the need for BCC's involvement as it is the LHA with responsibility for the A6 and Cowbridge Roundabout and especially as it is the owner of the highway land that might be used for possible mitigation works. I consider that it is in the public interest that any revised layout at Cowbridge Roundabout should be comprehensive, taking on board not only the impact of the Scheme but also the impact of other major developments in the area, such as the Wixhams and NIRAH and the future impact of the P&R facility [7.74].
- 8.36 I am reassured by the fact that any further additional modelling will have the involvement of BCC and I suspect that this will also provide some comfort to the IRP owners. The outcome of this further work should be a submission, made directly to the SoS by the end of June 2008, of an agreement under Section 4 of the Highways Act 1980, entered into by BCC and the HA. The IRP owners would also confirm directly to the SoS, by the end of June 2008 whether or not they are in agreement with any A6 or Cowbridge Roundabout improvements arrived at by BCC and the HA [7.78].
- 8.37 I endorse the procedure to be adopted, whereby the SoS will receive a submission directly from the parties, and consider it to be more expedient than adjourning the inquiry until the end of June 2008. To have adjourned the inquiry would have meant that most probably the start date of the Scheme would be delayed by a year [4.72]. I carry this conclusion through to my consideration of the draft SROs.

TK Maxx, WO-8

SCS Property Development, WO-39

Matalan plc, WO-43

Pets At Home Ltd., WO-53

Staples, WO-59

Brantano (UK) Ltd., WO-60

Fujifilm UK Ltd., WO-80

Alderforce Ltd., (KFC and Burger King), WO-96

Mothercare, WO-98

- 8.38 The interests of the IRP owners are shared by these nine tenants and I consider that any conclusions that I may draw, in relation to the IRP owner's objection, applies to these nine Objectors also. I conclude that the above nine objections should have no bearing on my recommendation as to whether the draft Orders should be made or not made, over and above such conclusions that I have already reached in relation to the IRP owner's objection.

Objection: the Scheme would increase congestion on the A6 corridor generally and on the Cowbridge Roundabout in particular

Elstow Parish Council, SO-97

Mr P and Mrs G Baird, O-44

- 8.39 Whereas I understand the concerns of Mr and Mrs Baird, I accept that

the HA has fully consulted with the emergency services regarding the stopping up of the B530 Link from the A421 to the IRP Roundabout, and that the proposed stopping up presents no risk as far as they are concerned regarding reduced availability of access [7.87].

- 8.40 To my mind, the signing of an MoU between the HA and BCC to undertake further studies to attempt to resolve the impact of the Scheme, not only on Cowbridge Roundabout but also on the A6 generally was significant. Although BCC withdrew its objection regarding issues at the eastern end of the Scheme [6.46] from a review of their earlier correspondence, it is clear to me that it fully intends to seek to resolve any congestion issues arising from the Scheme together with any other highway impacts arising from other imminent developments. I consider this is an appropriate course of action, as any solution regarding the A6 must have BCC involvement. In looking after its own interests, BCC should also resolve the concerns of Elstow Parish Council and Mr and Mrs Baird. In my opinion, the objections of Elstow Parish Council and Mr and Mrs Baird are subsumed in the course of action submitted to the inquiry by the HA [7.75–7.78].
- 8.41 I conclude that the above two objections should have no bearing on my recommendation as to whether the draft Orders should be made or not made, over and above such conclusions that I have already reached in relation to the MoU put in place by the HA and BCC.

Objection: insufficient consideration has been given to the impacts from the changed traffic conditions on adjacent side roads when the Scheme would become operational

Mr A Talbot, O-64

Ms C McArthur, WO-83

Mr P H Vinter, WO-84

Mr P O'Neill, WO-87

- 8.42 It is clear to me, and the Objectors do not submit otherwise, that the Scheme layout has been adopted after appropriate levels of consultation with stakeholders and the local community [4.15-4.17] and that Beancroft Road has been designed to an appropriate standard [7.89]. I place considerable weight on the fact that no part of the Scheme in this location has been subject to any objection from BCC, as the LHA, with respect to safety or any other matter [7.89 and 7.90]. With regard to noise, whilst recognising the reservations of the Objectors [6.50], there is no doubt in my mind that the HA has used the proper methodology in undertaking the noise assessment [4.100 and 4.101]. Matters related to traffic volumes, traffic speed and road surface type etc. have all been taken into account [7.42 and 7.55] and any newly constructed lengths of Beancroft Road would be surfaced with low noise surfacing [7.93]. I have noted that the HA has referred the Objector's concerns about the need for a 30mph speed limit on Beancroft Road to BCC, who will be undertaking a county-wide review of speed limits [7.90], and I consider this action to be appropriate. I conclude that the above four objections should have no bearing on my recommendation as to whether or not the draft Orders should be made or not made.

Objection: the Scheme should be routed further away from existing settlements

Mr A Evans and Son, SO-38

- 8.43 Mr J Paynter appeared at the inquiry on 12 December 2007, on behalf of Mr A Evans and Son, to propose a change in the position of the stopping up point on Hoo Lane [6.52]. The HA explained that it had no objection to the proposed change, provided Mr Paynter could demonstrate agreement from all the parties concerned and could confirm the land ownership situation [7.95-7.97]. It was left that Mr Paynter should provide all of this information before the inquiry closed or alternatively he could make a submission directly to the SoS within a set timescale. Mr Paynter expressed confidence that he could return to the inquiry with proof of agreement and land ownership confirmation before what was then projected inquiry close, 21 December 2007.
- 8.44 In anticipation of Mr Paynter's return, the HA prepared a proposed modification to the SRO [7.97] to alter the position of the stopping up point. In fact the inquiry did not close until 13 February 2008, by which time Mr Paynter had still not re-appeared, as expected, to submit confirmatory evidence or to hear of a deadline by which he should make a direct submission to the SoS.
- 8.45 I conclude that this objection should have no bearing on my further consideration of the draft SROs. However, I draw the SoS's attention to the fact that it is possible that Mr Paynter may make a direct submission to her in due course, regarding this modified stopping up point.

Mr A Owen, WSO-17

Ms R Buckley, WO-26

Mr E Dudose, WO-27

Marston Car Accident Repairs, WO-28

M J Motors, WO-29

Mr C Seamark, WO-30

The Occupier, Rose Cottage 1, WO-34

Mr A Macrae, WO-35

The Occupier, Rose Cottage 2, WO-36

- 8.46 I have already accepted that the HA has undertaken a comprehensive evaluation of route options and that these options have been subject to widespread consultation [4.15-4.18]. Whilst I appreciate the concerns of the Objectors [6.52 and 6.53], I understand and accept the reasons the HA has given for adopting a route that would pass to the north-west of Moretaine Farm [7.98]. Furthermore, having established the preferred route, I consider that the HA has taken appropriate measures to mitigate the impact of the Scheme and to allow it, in due course, to blend into the surrounding landscape [7.99]. As such, I conclude that I should take no further account of this objection.

The subsisting individual objections

Objection: the extent of the CPOs and access arrangements relating to individual properties

Marston Moretaine Parish Council as Trustees of land managed by

Marston Moretaine Playing Field Management Committee, SO-9

- 8.47 I do not accept that there is any substantive evidence that the land in question, under the control of the Playing Field Management Committee, is in fact public open space [6.54]. Conversely, I understand and accept the evidence submitted by the HA in this regard [7.101-7.104] and I agree that the HA has no locus in how the relationship between the Trustees and the Management Committee is administered. Whilst I understand and have sympathy with the Trustees' dilemma, I conclude that this matter does not form grounds for an objection to the Scheme and I give it no further consideration. In my opinion, the acquisition of land from Marston Moretaine Parish Council could be dealt with by the normal process of compensation.

Mrs S G Cook, WSO-1

- 8.48 The HA has proposed modifications to the draft SROs and draft CPOs [7.105], which seem to me to satisfactorily address Mrs Cook's concerns [6.55]. Other than to note the proposed draft Order modifications and to note that I consider that Mrs Cook's objection should be dealt with by the normal processes of compensation, I take no further account of this objection.

Mr D J Patterson, WSO-10

- 8.49 I consider that the HA has satisfactorily demonstrated that the route of the Scheme provides the optimum solution in terms of engineering requirements, landtake, environmental impact and cost [7.107]. As such, I do not accept Mr Patterson's objection that the land to be acquired from him is unnecessary [6.56]. On the other hand, I concur with the views of the HA that the land to be acquired is necessary for the construction or for the mitigation of adverse impacts of the Scheme [7.106]. It seems to me that the normal process of compensation could deal with the issue of the land to be permanently acquired from Mr Patterson and I conclude that I should take no further account of the objection.

Mr A Parrish, WSO-11

- 8.50 The HA has undertaken to divert a watercourse in land parcel 14AQ, provided Mr Parrish obtains the necessary third party consent [7.109]. It is clear to me that evidence of this consent has not been forthcoming from Mr Parrish, so the HA has not been able to include any associated modifications proposed to the draft Orders. Whilst I appreciate Mr Parrish's aspiration to improve his farming efficiency [6.56], as no modifications to the draft Orders have been put before me, I have no alternative but to conclude that I should take no further account of this objection. It seems to me that the acquisition of land from Mr Parrish could be dealt with by the normal process of compensation.

Mrs M M E L Poole, WSO-16

- 8.51 I understand Mrs Poole's concerns [6.57] and it is clear to me that these concerns are also recognised by the HA [7.110]. The HA accepts that Mrs Poole would be affected by the works during construction and by the activities that would take place at the neighbouring temporary construction compound in Salford Road. In addition, although the impact

of the Scheme would decrease with time as mitigation planting matures, the proximity of the new road would inevitably have an on-going visual impact. However, I agree with the HA's view that this impact would not be so great as to make occupation of 'Omega' intolerable, particularly as there would only be a negligible change in the noise climate [7.110].

- 8.52 I concur with the view of the HA that, in due course, there would be some benefit from the Scheme in that there would be a reduced impact from less traffic passing directly outside 'Omega' than currently is the case [7.111]. I have noted that plot 5B, which would be taken under temporary licence, would be restored to its original condition and returned to Mrs Poole, and that the draft CPO is proposed to be modified to reflect the fact that there is no longer any requirement for the acquisition of plot 36A [7.113]. I carry this objection forward to my consideration of the draft Orders.

St. John the Baptist College, WSO-58

- 8.53 Whilst I understand the Objector's concerns regarding the impact of the Scheme and the adjacency of walkers on Hayfield Farm [6.59], it seems to me that these have been addressed by the HA's proposed modifications to the draft SRO [7.114]. I accept the HA's view that the increase in noise levels would be less than 1dB(A), which would be barely perceptible [7.114]. I conclude that I should take no further account of this objection in my consideration of the draft Orders.

Whitbread Harrowden Settlement, WSO-65

- 8.54 I have some sympathy with the concern of the Objector that land should not be compulsorily acquired for topsoil storage [6.60]. However, I agree with the HA that it might not be possible for the Contractor to obtain land temporarily on the open market without incurring the risk of increased haulage costs. Moreover, I accept that haulage of topsoil from a remote source would cause unnecessary environmental and disruption impact from a significant number of extra HGVs on the local road network [7.115]. I carry this objection forward to my consideration of the draft Orders.

Ms L MacKenzie and Mr M Goode, WSO-70

- 8.55 I concur with the views of the HA that the plots in question [6.61] are necessary for the construction and maintenance of the Scheme and that suitable provision has been made in the draft Orders for the Objectors to retain vehicular access rights to their property [7.116]. All land to be permanently acquired from Ms MacKenzie and Mr Goode could be dealt with by the normal process of compensation. I take no further account of the objection in relation to the CPO, but I carry the matter of access provision forward to my further consideration of the draft SROs.

The Trustees of Husborne Crawley Charities, WSO-71

- 8.56 It seems to me that the Objector's concerns [6.62] have been satisfactorily addressed, as the HA has included provision to accommodate watercourse arrangements and retained land access in the proposed modifications to the draft Orders [7.117]. I conclude that I should take no further account of the objection.

Mr and Mrs R Weston, WSO-75

- 8.57 It appears to me that modifications to the Scheme, supported by the proposed modifications to the draft Orders [7.118-7.121], satisfactorily address the concerns expressed by Mr and Mrs Weston regarding access to Manor Farm, Brogborough [6.63]. In particular, I have noted that access would be provided by an accommodation bridge that would be suitable for all normal farming vehicles. I take no further account of the objection in relation to the CPO, but I carry the matter of access provision forward to my further consideration of the draft SROs.

Mr C Le Boutillier, WSO-76

- 8.58 I accept the position of the HA that land acquired permanently as highway land at 'The Woodland' cannot be provided on an exclusive basis [7.122], as requested by Mr Le Boutillier [6.64]. I have also noted that extending or raising the bund provided on the plot in question would only have a small impact on noise levels and that planting would provide an effective screen within six to eight years [7.122]. I conclude that I should take no further account of this objection and note that the acquisition could be dealt with by the normal process of compensation.

The Woodland Trust, WSO-88

- 8.59 It is clear to me that the HA cannot accede to the request of the Woodland Trust to provide it with the freehold of its access over land owned by St. James property [6.65]. I have noted that the draft SROs and CPOs are proposed to be modified so that the Trust would have exclusive use of the vehicle access track, which would be gated at its eastern end. It seems to me that the arrangements proposed by the HA [7.123-7.125] substantially meet the aspirations of the Trust and I take no further account of this objection.

Mr K Burke, O-68

- 8.60 Mr Burke is understandably concerned about the impact of the Scheme on his residence and grounds [6.66]. However, from the evidence adduced by the HA [7.127] and from the observations I made during my accompanied site visit, I have no doubt that the noise impact from the Scheme would be negligible compared to the noise levels currently experienced from the nearby M1.
- 8.61 The ground floor and garden of Brooke Farm are well screened by existing vegetation and a substantial hedge along the south-eastern boundary. There would be views of the Scheme from the first floor windows, over this vegetation, and in particular of the new M1 overbridge at some 480m distance [7.128-7.132]. However, the Scheme would include planting beside the A421 that would substantially screen the road and traffic from Brooke Farm. In addition a linear belt of trees and shrubs would be planted along the south-west side of the re-aligned Salford Road. Notwithstanding the fact that it would take a number of years for this planting to become fully established, I do not accept that any further landscaping mitigation measures are warranted, over and above those already proposed.
- 8.62 I have noted that the HA has indicated that the Contractor would be

willing to discuss with Mr Burke the location of temporary topsoil storage tips to mitigate, as far as possible, the impacts of any temporary compound arrangements on Brooke Farm [7.131].

- 8.63 I conclude that I should take no further account of this objection in my further consideration of the draft Orders.

Mr T and Mrs L Smith, WO-77

- 8.64 I conclude that I should give no further consideration to this objection [6.67], as the land originally proposed to be acquired at 'Lanberis' was included in error and this is reflected in the proposed modifications to the draft CPOs [7.132].

Objection: unsatisfactory provision of PRowS

Lidlington Parish Council, SO-46

- 8.65 I fully appreciate the Council's aspiration to have a new footway around the northern edge of Lidlington Lake and I understand its sense of grievance that the provision of such a facility is, for historic reasons, long overdue [6.68]. My awareness of the issue was greatly improved by the accompanied site visit. However, I do not see that the provision of such a footway is the responsibility of the HA, neither do I consider that the cost of extending the piled raft, supporting the highway embankment in this area to help provide for a footway, can be justified. I accept the views of the HA that the Scheme would present no obstacle to pedestrian access in the area, as the verge of the A421 local distributor road would be available as a pedestrian route [7.133-7.136]. I conclude that I should take no further account of this objection.

Bedfordshire Rights of Way Association, WSO-72

Bedfordshire County Council Rights of Way, WSO-086

The Ramblers Association, WSO-81

- 8.66 It seems to me that the HA's position on this matter is entirely reasonable [7.137 and 7.138]. I understand why the HA does not want to state specific widths of PRowS on the draft Order documents, as requested by the Objectors [6.69 and 6.70]. I consider the HA's undertaking regarding provision of as-constructed PRow details to the Objectors [7.139] to be appropriate and I conclude that I should take no further account of this objection.

The British Horse Society, WSO-92

- 8.67 I accept that the HA has substantially addressed the points of concern raised by the British Horse Society [7.141-7.147] regarding the provision of bridleways [6.71]. I consider this objection no further, except to identify the need for the HA to liaise further with the Society during the detailed design period.

Mr A Pibworth, WO-6

- 8.68 It is clear to me that Mr Pibworth's objection [6.72] is fully addressed by the HA's response that cyclists would be able to use the new re-aligned Fields Road to travel over the proposed and existing A421 highways

[7.148]. I conclude that I should take no further account of this objection.

Other objections

National Grid (Electricity), WSO-3

National Grid (Gas), WSO-4

Anglian Water Services Ltd., WSO-89

Atkins Telecoms, R-19

- 8.69 I am satisfied that the HA has taken what steps it can to progress agreements with National Grid (Gas), National Grid (Electricity), Anglian Water Services and Atkins Telecoms. I do not consider it unusual that at this early stage detailed matters have not yet been finally resolved with the statutory undertakers and I accept the HA's undertaking to honour its obligations in this respect [7.149, 7.150 and 7.158]. I carry these objections forward into my consideration of the draft SROs.

English Heritage, WSO-93

- 8.70 I accept the HA's undertaking to continue consultation with English Heritage throughout the design and construction of the Scheme [7.151], and I conclude that I should consider this objection no further.

Miss F Longmuir, WO-7

- 8.71 I understand Miss Longmuir's concern [6.76], but it is clear to me that traffic on the Scheme would be further away from Roberts Drive than it is currently on the existing A421 and that traffic noise would be reduced by the incorporation of absorbent noise barriers between the new and existing carriageways [7.152]. I conclude that I should take no further account of this objection.

Mr D Cheseldine, WO-12

- 8.72 Mr Cheseldine has expressed the view that alternatives to the Scheme, such as traffic demand management, have not been explored [6.77]. However, I concur with the views of the HA that demand management, in the form of road user charging, is not currently Government Policy. I therefore accept that the Scheme has been progressed in line with Government policy to enhance the strategic road network and tackle congestion. I also accept that the LSMMMS recommended the introduction of "area wide road user charging" after 2016 [7.153-7.155]. I conclude that I should take no further account of this objection.

Bedford and Milton Keynes Waterway Trust, WO-15

- 8.73 It seems to me unfortunate that the HA has not been able to make provision of an underpass to accommodate the proposed Bedford to Milton Keynes Waterway [6.78]. However, I understand and accept the HA's reasons for not doing so; the Waterway is in the design phase, with no detailed plans for its construction, no planning application has been made and no funding is in place [7.156]. I conclude that I should give this objection no further consideration.

Miss D M J Smith, WO-74

- 8.74 There is no doubt in my mind that the HA has consulted widely on the Scheme and has taken account of all committed and strategic developments up to 15 years after opening of the Scheme [7.157]. I conclude that I should take no further account of this objection.

The draft Orders

- 8.75 Where I have carried over any matter from my consideration of the topic related or individual objections, this is discussed under the relevant draft Order heading below. I turn now to assess each draft Order in relation to the relevant statutory criteria [4.28]. If I am to recommend that each of the draft Orders be made, I consider that I need to be satisfied that the following criteria have been met.

Draft Line and Detrunking Orders criteria, Highways Act 1980, Section 10(2)

- 8.76 Changes to the trunk road network should bear in mind the requirements of local and national planning, including the requirements of agriculture.
- 8.77 The changes should be expedient for the purpose of extending, improving or re-organising the national system of routes in England and Wales.
- 8.78 Under the term "expedient", I consider I need to be satisfied that:
- there is a need for the Scheme and the proposals would meet that need;
 - the design of the Scheme is appropriate and safe;
 - the impact of the Scheme on the local environment would be acceptable;
 - the Scheme would represent the best available option and best value for money; and
 - the advantages of the Scheme would outweigh the disadvantages.

Side Roads Orders criteria

- 8.79 There should be provision for the preservation of rights of statutory undertakers in respect of their apparatus, Highways Act 1980, Section 14(2)(a).
- 8.80 Before any highway is stopped up, another reasonably convenient route is available or would be provided, Highways Act 1980, Section 14(6).
- 8.81 Before a means of access to premises is stopped up, either no access to the premises is required or another reasonably convenient means of access to the premises is available, Highways Act 1980, Section 125(3)(a) and (b).

Compulsory Purchase Orders criteria, ODPM Circular 06/2004, Part 1

- 8.82 There is a compelling case for acquisition in the public interest and that this justifies interfering with the human rights of those with an interest in

the land affected, having regard, in particular, to the provisions of Article 1 of the First Protocol to the EU Convention on Human Rights, and, in the case of a dwelling, to Article 8 of the Convention (para. 17).

- 8.83 That the acquiring authority has a clear idea as to how it intends to use the land it seeks to acquire (para. 19).
- 8.84 That the acquiring authority can show that all necessary resources to carry out its plans are likely to be available within a reasonable timescale (para. 19).
- 8.85 That the acquiring authority can demonstrate that the land is required immediately for the purpose that the acquisition is intended (para. 18).
- 8.86 That the public benefit would outweigh the private loss (para. 19).

The draft Line and Detrunking Orders

- 8.87 Considering each of the elements of the criteria in turn:

National, regional and local policies

- 8.88 It is clear to me that the Scheme would comply with PPS1 [4.1], as it would support new and existing economic development and housing and would comply with other national, regional and local policies:
- the MKSMSRS [4.5];
 - apart from carbon emissions, the October 2007 White Paper: Towards a Sustainable Transport System [4.10];
 - the MKSMRTS [4.11 and 4.12];
 - the Bedford Borough Local Plan, the Mid-Bedfordshire Local Plan First Review and the Bedfordshire Transport Plan [4.13]; and
 - it would deliver one of the trunk road improvements identified by the SoS following the LSMMMS [4.14] and, as such, the Scheme would be essential to the strategic planning objectives for the area [4.5].

Agriculture

- 8.89 I consider that the impact of the Scheme would:
- not have a significant impact on the loss of best and most versatile land [4.120];
 - not impact adversely to any great extent on farm holdings [4.121]; and
 - accord with the requirements of PPS7 [4.2].

Expediency: Is there a need for the Scheme and would the proposals meet that need?

- 8.90 There is no doubt in my mind that there is an urgent need for the Scheme in that the existing A421:
- is well below current standards for parts of its length [4.20];

- is over capacity for long periods leading to congestion and rat-running [4.20, 5.1, 5.6 and 6.45];
- has a poor and higher than national average accident record [4.21]; and
- has a junction with the M1 which has insufficient capacity [4.22].

8.91 I accept that the Scheme would meet this need in that it would:

- improve opportunities for all to access jobs [4.11] and to leisure facilities [4.86];
- enable development and environmental improvements in Marston Vale [4.13];
- reflect the views of statutory consultees and other stakeholders [4.17];
- incorporate measures identified in the ES to help reduce environmental impact [4.18];
- provide a practical design which would balance cost and environmental impact considerations [4.33];
- enhance existing PRowS and provide an additional 5km of PRowS [4.35]; and
- significantly reduce journey times between the M1 and Bedford [4.44].

Expediency: Would the design of the Scheme be appropriate and safe?

8.92 I am entirely satisfied that the design of the Scheme would be appropriate in that:

- it would comply with current design standards [4.29];
- all departures from design standards have been approved [4.30];
- the Scheme traffic model has been approved by the relevant approval authority [4.39 and 4.58]; and
- the assessment of necessary environmental mitigation has been carried out in accord with currently recommended standards [4.81, 4.98, 4.116, 4.122, 4.126, 4.131, and 4.138].

8.93 I am also satisfied that, apart from my concerns about the provision of a safe NMU crossing of the M1 [8.15-8.19], the Scheme would be safe in that:

- it has been subject to a Stage 1 safety audit and would be subject to Stage 2 and 3 safety audits [4.30];
- it would improve safety for the local communities by providing a local distributor road that would be segregated from trunk road traffic [4.37];
- it would provide safe crossing of the Scheme for NMUs [4.36];
- it would significantly reduce accidents [4.59–4.61]; and
- it would incorporate safety measures into methods of working and

into temporary traffic management [4.67, 4.74 and 4.75].

Expediency: Would the impact of the Scheme on the local environment be acceptable?

- 8.94 I consider that the mitigation of temporary works would be acceptable in that:
- the environmental impacts, requiring mitigation during construction of the Scheme, would be understood [4.76];
 - the impact of any temporary land acquisition would be minimised [4.69];
 - appropriate advance mitigation works would be undertaken [4.71]; and
 - a CEMP would be operated [4.76].
- 8.95 Moreover in my opinion the permanent works would be acceptably mitigated in that:
- the landscape scheme would be appropriate to its context [4.97];
 - overall there would be suitable noise mitigation [4.115];
 - there would only be neutral or slightly adverse built heritage impacts [4.125];
 - there would only be neutral or slightly adverse archaeological and historic landscape impacts [4.130];
 - the mitigation of ecological effect would be appropriate [4.137];
 - there would be no significant impacts on water environment [4.140]; and
 - there would be minimal air quality impacts [4.144 and 4.145].
- 8.96 I also consider that the design of the Scheme conforms to the requirements of PPS7. In arriving at my conclusion, I have placed much weight on the fact that none of the statutory consultees to the ES has made any adverse comment on the proposals [4.146].

Expediency: Would the Scheme represent the best available option and best value for money?

- 8.97 The Scheme's origins can be traced back to the outputs from the LSMMMS [4.14] and, since then, it has been subjected to a substantial level of public and statutory consultation [4.15–4.18, 4.80, 4.88, and 4.103]. Not least of all, the capacity of M1 Junction 13 and the IRP access issue have been examined in considerable detail at the public inquiry. The route of the Scheme has been constrained by M1 Junction 13, Marston Junction and the A421/A6 Interchange and adjoining major topographical features [4.31 and 4.82–4.84]. In the area of the "pinch point" I have already concluded that the benefits of adopting the route of the existing A421 outweigh the disadvantages of any negative environmental impacts [8.21]. In terms of value for money, the Scheme provides very substantial economic benefits [4.62–4.65] which on a comparative basis are extremely high. I conclude therefore the Scheme

represents the best available option and best value for money.

Expediency: Would the advantages of the Scheme outweigh the disadvantages?

- 8.98 I accept that with a scheme of this nature it is inevitable that there would be some environmental impacts arising from the temporary and permanent works. However, to my mind, any disadvantages would, on balance, be far out-weighed by the advantages that the Scheme would bring. Moreover, as evidenced by the responses to the publication of the draft Orders, most of the objections made were in respect of particular details, and the Scheme enjoys a very high level of public support.

Summary of conclusions on the draft Line and Detrunking Orders

- 8.99 Overall, I am satisfied that the Scheme would accord with local and national policies, bearing in mind the requirements of agriculture, and that the Scheme would be expedient for the purpose of extending the trunk road network in England. I conclude therefore that there is no obstacle to me recommending that the draft Line and Detrunking Orders be made.

The draft Side Roads Orders

Provision for preservation of the rights of statutory undertakers

- 8.100 I am satisfied that the HA has taken what steps it can to progress agreements with the public utilities. It seems to me that the public utilities have not so much objected to the Scheme, but rather they have asked the HA to enter into agreements to have service diversions undertaken [6.73, 6.74 and 6.80]. I do not consider it unusual that, at this early stage, the precise details of service diversions have yet to be resolved and I accept the HA's undertaking to honour its obligations in this respect [7.149, 7.150 and 7.158]. Given the special status afforded to the public utilities under the Section 14(2)(c) of the Highways Act 1980 I do not see that this matter should prevent me from recommending that the draft Side Roads Orders should be made.

Before any highway is stopped up, is another reasonably convenient route available or would it be provided?

- 8.101 I have already concluded that, with specific reference to the stopping up of the B530, the currently proposed alternative route would not be reasonably convenient [8.34] and I have described the procedure to be followed [8.35]. I conclude that there are no other stopping up matters that need to be taken into account [4.37].

Before a means of access to premises is stopped would no access to the premises be required or would another reasonably convenient means of access to the premises be available?

- 8.102 I consider that any matters relating to stopping up of means of access to premises, and particularly the objections raised by Ms Mackenzie and Mr Goode, WSO-70 and by Mr and Mrs Weston, WSO-75 have been addressed in my consideration of the individual objections [8.47–8.64] and that there are no other access issues that I need to take into account.

- 8.103 I conclude that, apart from the matter of stopping up of the B530 Link to IRP Roundabout and the procedure I have described to be followed [8.34-8.37], the draft Side Roads Orders criteria are satisfied and that the draft SROs should be made.

The draft Compulsory Purchase Orders

Is there a compelling case for acquisition in the public interest and would this justify interfering with the human rights of those with an interest in the land affected, having regard, in particular, to the provisions of Article 1 of the First Protocol to the EU Convention on Human Rights, and, in the case of a dwelling, to Article 8 of the Convention?

- 8.104 I consider that the HA has stated the reasons for acquiring each individual plot adequately in the Land Reference Plans and that, where objections to the CPOs have been made, satisfactory responses have been given. I have concluded separately on each of these objections [8.47-8.64]. Moreover, I concur with the views of the HA that there is a compelling case in the public interest for land for temporary works compounds and topsoil storage tips to be included in the CPOs [4.69, 7.34 and 7.115]. With regard to topsoil storage tips in particular, I have noted but rejected the objection of the Whitbread Harrowden Settlement, WSO-65.

Has the acquiring authority has a clear idea as to how it intends to use the land it seeks to acquire?

- 8.105 I consider that the Scheme, as presented at the public inquiry, is well developed. I am satisfied that the ECI process has allowed refinement of required temporary working spaces [4.66-4.69] and that, since the publication of the draft Orders, there has been constructive dialogue with land owners regarding the extent of land acquisition and accommodation works. To my mind, this is evidenced by the number of original Objectors who have withdrawn their objections and by the fact that the draft SROs and CPOs have been modified to reflect the agreements made [4.25]. I am satisfied that the HA has a clear idea as to how it intends to use the land it is seeking to acquire.

Can the acquiring authority show that all necessary resources to carry out its plans are likely to be available within a reasonable timescale?

- 8.106 The HA has confirmed that funding has been ear-marked for the Scheme [4.26] and a major international Contractor has already been appointed [4.16], who is ready to begin advance works in Autumn 2008 and commence main construction in January 2009 [4.70-4.72]. It is clear to me that this criterion is satisfied.

Can the acquiring authority demonstrate that the land is required immediately for the purpose that the acquisition is intended?

- 8.107 There is no doubt in my mind that, if the SoS was to give approval for the Scheme to proceed, all of the land identified for acquisition in the CPOs would be required immediately. A detailed programme showing the period for advance works and for the construction of the permanent works has been established [4.70 and 4.71]. As I see it, given the criticality of the earthworks programme [4.72], there would be absolutely

no opportunity for the land necessary to construct the Scheme to be acquired in a piecemeal fashion.

Would the public benefit outweigh the private loss?

- 8.108 I have no doubt that any private loss as a consequence of the Scheme, including the impact of the Scheme on Mrs Poole; WSO-16 would be far out-weighed by the public benefits and particularly the road safety improvements that would accrue.
- 8.109 I conclude that the statutory criteria have been met and that the draft CPOs should be made.

Proposed modifications to the draft Orders

- 8.110 The HA has proposed modifications to the draft SROs and CPOs. These modifications reflect development of the Scheme since the draft Orders were published [4.25] and I consider them to be appropriate and acceptable. In addition, the titles in the signatory blocks in the draft Orders which currently read "Signed by the Secretary of State for Transport, Local Government and the Regions" need to be changed to read "Signed by the Secretary of State for Transport" [4.25].

Environmental assessment

- 8.111 In arriving at my recommendations I have taken account of the ES and any other environmental evidence presented by members of the public. I have noted in particular that no adverse comments have been made by the statutory consultees to the ES [4.146] and that all environmental mitigation measures recommended, as a result of the ES, have been incorporated in the design of the Scheme [4.107, 4.119, 4.124, 4.128, 4.137 and 4.140]. Furthermore, I have noted that additional traffic modelling work [4.38] has resulted in the production of a revised AST. This revised AST, with which I am in agreement, has demonstrated that the previously predicted impacts of the Scheme on noise and air quality have been reduced [4.27].

Overall Summary

- 8.112 Overall it is my view that the Scheme is very much in the public interest and should be allowed to proceed. I have considered each of the draft Orders against the relevant statutory criteria and I have concluded that, apart from the issue of the stopping up of the B530 Link, they comply. I have considered the proposed modifications to the draft Orders and I have concluded that they are necessary for the implementation of the Scheme. To my mind any adverse impacts, which would be limited, would be far outweighed by the significant benefits that the Scheme would bring. I have had regard to these and all other matters raised both at the inquiry and in written representations, but they do not outweigh the conclusions I have reached and the recommendations that I make.

9.0 RECOMMENDATIONS

9.1 I recommend that:

- **The A421 Trunk Road (M1 Junction 13 to Bedford Improvements and Detrunking) Order 20..** . be modified, as referred to in para. 4.25 above, and that the Order so modified be made.
- **THE A421 TRUNK ROAD (M1 JUNCTION 13 TO BEDFORD IMPROVEMENTS) COMPULSORY PURCHASE ORDER (MP No.), 20..** . be modified, as referred to in para. 4.25 above, and that the Order so modified be made.
- **THE A421 TRUNK ROAD (M1 JUNCTION 13 TO BEDFORD IMPROVEMENTS SIDE ROADS) ORDER 20..** be modified as referred to in para. 4.25 above, and that the Order so modified be made subject to consideration by the Secretary of State of submissions to be made to her, by the end of June 2008, with regard to the (1) an agreement between the Highways Agency and Bedfordshire County Council, under Section 4 of the Highways Act 1980, to carry out capacity enhancement works at Cowbridge Roundabout and (2) confirmation from the Interchange Retail Park owners that these works are acceptable to them, as referred to in para. 8.31 above.
- **The A421 Trunk Road (M1 Junction 13 Improvements) Order 20 .** . be modified, as referred to in para. 4.25 above, and that the Order so modified be made.
- **THE A421 TRUNK ROAD (M1 JUNCTION 13 IMPROVEMENTS) COMPULSORY PURCHASE ORDER (MP No.), 20..** be modified, as referred to in para. 4.25 above, and that the order so modified be made.
- **THE A421 TRUNK ROAD (M1 JUNCTION 13 IMPROVEMENTS SIDE ROADS) ORDER 20..** . be modified, as referred to in para. 4.25 above, and that the order so modified be made.
- **The M1 Motorway (Junction 13 and Connecting Roads) Order 20 .** be modified, as referred to in para. 4.25 above, and that the order so modified be made.
- **THE M1 MOTORWAY (JUNCTION 13) COMPULSORY PURCHASE ORDER (MP No.), 20..** be modified as referred to in para. 4.25 above, and that the Order so modified be made.
- **THE M1 MOTORWAY (JUNCTION 13 SIDE ROADS) ORDER 20..** be modified as referred to in para. 4.25 above, and that the Order so modified be made.

Jack Moffett

Jack Moffett

Inspector.

APPENDIX A

APPEARANCES

For the HA

Mr P Brown	of Counsel, instructed by: The Treasury Solicitor
He called:	
Mr R Brunsdon CEng MICE MIHT MHKIE	Project Leader The HA
Ms S McCallum BA (Hons) DipTP MRTPI	Associate Scott Wilson
Mr G Law BSc (Hons) MICE MIHT	Technical Director Scott Wilson
Mr C Gilliam BSc MSc FIHT MAPM	Technical Director Hyder Consulting Limited
Mr M Ranft HND MIHT	Project Manager Balfour Beatty Civil Engineering
Mr B Shorter BSc MSc MICE MCIWEM CEng CEnv	Principal Environmental Specialist Scott Wilson
Mr A Maneylaws BSc MSc MIOA	Senior Noise and Vibration Consultant Scott Wilson
Mr E Hall BA (Hons) DipLA MSc MLI	Landscape Architect Scott Wilson
Mr R Young BSc	Principal Transport Planner Hyder Consulting Limited

Supporter

Dr R Chatham BSc PhD MIMechE CEng	Escheat Dairy Woburn Road Lidlington Bedford MK43 0NL
--------------------------------------	-------------------------------------------------------------------

Objectors

For Kleinwort Benson (Jersey) Trustees Ltd.; Kleinwort Benson (Channel Islands) Corporate Services; Standard Life Investment Funds, the IRP owners

Mr R Price Lewis

Queen's Counsel: instructed by:
Addleshaw Goddard, Solicitors,
10 Noble Street
London
EC2V 7JW

He called:

Mr D Hunter-Yeates BEng CEng
MICE FIHT CMILT

Director
WSP Development and
Transportation Limited

Mr G Sector

Managing Associate
Addleshaw Goddard, Solicitors,
10 Noble Street
London
EC2V 7JW

For Marston Moretaine Parish Council and the Trustees of the Marston Moretaine Playing Field Management Committee

Mr R Garner

11 Lower Shelton Road
Marston Moretaine
Bedford
MK43 0LN

For Aspley Guise Parish Council

Mr I Pickering

10 Bedford Road
Aspley Guise
Milton Keynes
MK17 8DJ

For Lidlington Parish Council

Mr I Clapham

17 Lombard Street
Lidlington
Bedford
MK43 0RP

For Elstow Parish Council

Mr A C Hare

2 Melrose Drive
Elstow
Bedfordshire
MK42 9FH

For South-East Milton Keynes Consortium of Developers

Mr M Knowles BSc (Hons) MICE MIHT
DipTE CEng

Divisional Director
RPS Transport
3 London Road
Newbury
Berkshire
RG14 1JL

For the Cycling Touring Club Right to Ride Network

Mr A Sprod

8 Lea Road
Amphill
Bedfordshire
MK45 2PR

For Evans and Son

Mr J Paynter

John Drake & Co
Chartered Valuation Surveyors,
Land Agents and Planning
Consultants
9 High Street
Olney
Buckinghamshire
MK46 4EB

Individual Objectors

Ms G Baird

22 Juniper Walk
Kempston
Bedford
MK42 7SX

Mrs B Jackson

95 Lower Shelton Road
Marston Moretaine
Bedford
MK43 0LN

Mr T Talbot

LowerRoxhillFarmhouse
Roxhill
Marston Moretaine
Bedford
MK43 0QG

Mr K Burke

Brooke Farm
Salford Road
Aspley Guise
Bedfordshire
MK17 8BS

He called:

Ms E J Smith BSc

Assistant Planner
DLP Planning Limited

LISTS OF DOCUMENTS

APPENDIX B

1. THE HA DEPOSIT DOCUMENTS

Draft Orders

- DD01 The A421 Trunk Road (M1 Junction 13 to Bedford Improvements and Detrunking) Order 20..
- DD02 THE A421 TRUNK ROAD (M1 JUNCTION 13 TO BEDFORD IMPROVEMENTS) COMPULSORY PURCHASE ORDER (MP No.), 20..
- DD03 THE A421 TRUNK ROAD (M1 JUNCTION 13 TO BEDFORD IMPROVEMENTS SIDE ROADS) ORDER 20..
- DD04 The A421 Trunk Road (M1 Junction 13 Improvements) Order 20 .
- DD05 THE A421 TRUNK ROAD (M1 JUNCTION 13 IMPROVEMENTS) COMPULSORY PURCHASE ORDER (MP No.), 20..
- DD06 THE A421 TRUNK ROAD (M1 JUNCTION 13 IMPROVEMENTS SIDE ROADS) ORDER 20.. (Superseded by ID/HA/6a)
- DD07 The M1 Motorway (Junction 13 and Connecting Roads) Order 20 . (Superseded by ID/HA/7a)
- DD08 THE M1 MOTORWAY (JUNCTION 13) COMPULSORY PURCHASE ORDER (MP No.), 20..
- DD09 THE M1 MOTORWAY (JUNCTION 13 SIDE ROADS) ORDER 20..

Environmental Statement

- DD10 Vol. 1-Scheme Information and Summary of Assessment
- DD11 Vol. 2-Detailed Assessment and Supplementary Information
Vol. 2a: Policies and Plans, Land use and agriculture, Cultural Heritage, Landscape, Ecology
- DD12 Vol. 2b: Geology, Road Drainage and Water, Noise, Air Quality, Pedestrians, Equestrians, Cyclists and Community Effects, Vehicle Travellers, Construction
- DD13 Vol. 3-Figures
- DD14 Environmental Statement-Non-Technical Summary

Core Legislation: Acts

- DD15 Section 105A of the Highways Act 1980 (amended by the Highways (Assessment of Environmental Effects) Regulations 1994)
- DD16 Highways Act 1980
- DD17 Acquisition of Land Act 1981
- DD18 Control of Pollution Act 1974
- DD19 Wildlife and Countryside Act 1981
- DD20 Planning and Compulsory Purchase Act 2004
- DD21 Disability Discrimination Act 1995
- DD22 Local Government Act 1972
- DD23 Towards a Sustainable Transport System, DoT, 2007

Core Legislation: Regulations

- DD25 The Highways (Assessment of Environmental Effects) Regulations 1994
- DD26 The Highways (Assessment of Environmental Effects) Regulations 1999
- DD27 Conservation (Habitats) Regulations 1994
- DD28 Noise Insulation Regulations 1975
- DD29 Noise Insulation (Amended) Regulations 1988

Core Legislation: Rules

- DD31 The Highways (Inquiries Procedure) Rules 1994
- DD32 The Compulsory Purchase by Ministers (Inquiries Procedure) Rules 1994

Core Legislation: Directives

- DD33 European Union Council Directive 85/337/EEC, as amended by Directive 97/11EEC: Environmental Assessment

Policy Assessment and Methodologies

- DD35 Design Manual for Roads and Bridges Vols. 1-11 (DMRB)
- DD36 Interim Advice Note 36/01: Vol. 12: The Use and Application of Micro-simulation Traffic Models
- DD37 Interim Advice Note 76/06: Vol. 11 Section 1 Part 1: Aims and Objectives of Environmental Assessment
- DD38 Interim Advice Note 77/06: Vol. 11 Section 2 Part 1: Introduction
- DD39 Interim Advice Note 78/06: Vol. 11 Section 2 Part 2: Environmental Assessments
- DD40 Interim Advice Note 79/06: Vol. 11 Section 2 Part 3: Screening
- DD41 Interim Advice Note 80/06: Vol. 11 Section 2 Part 4: Scoping
- DD42 Interim Advice Note 81/06: Vol. 11 Section 2 Part 5: Assessment and Management of Environmental Effects
- DD43 Interim Advice Note 82/06: Vol. 11 Section 2 Part 6: Reporting
- DD44 Interim Advice Note 60/05: The Introduction of a New HA Policy for the Performance Requirements for Central Reserve Safety Barriers on Motorways
- DD45 Interim Advice Note 61/05: Guidance for Undertaking Environmental Assessment of Air Quality for Sensitive Ecosystems
- DD46 Interim Advice Note 69/05: Designing for Maintenance
- DD47 TA 46/97: Traffic Flows Ranges for Use in the Assessment of New Rural Roads (Vol. 5:1:3)
- DD48 TD 9/93: Highway Link Design (Vol. 6:1:1)
- DD49 TD 16/07: Geometric Design of Roundabouts (Vol. 6:2:3)
- DD50 TD 42/95: Geometric Design of Major/Minor Priority Junctions (Vol. 6:2:6)
- DD51 TD 41/95: Vehicular Access to All Purpose Trunk Roads (Vol. 6:2:7)
- DD52 TD 22/06: Layout of Grade Separated Junctions (Vol. 6:2:1)
- DD53 TD 36/93: Subways for Pedestrians and Pedal Cyclists (Vol. 6:3:1)
- DD54 TA 57/87: Roadside Features (Vol. 6:3:3)
- DD55 TD 19/06: Requirement for Road Restraint Systems (Vol. 2:2:8)
- DD56 TA 90/05: The Geometric Design of Pedestrian, Cycle and Equestrian Routes (Vol. 6:3:5)
- DD57 TD 27/05: Cross-Sections and Headrooms (Vol. 6:1:2)
- DD58 TD 40/94: Layout of Compact Grade Separated Junctions (Vol. 6:2:5)
- DD59 TA 69/96: The Location and Layout of Lay-bys (Vol. 6:3:3)
- DD60 TD 49/07: Appraisal of New and Replacement Lighting on the Strategic Motorway and All Purpose Trunk Road Network (Vol. 8:3)
- DD61 TD 34/07: Design of Road Lighting for the Strategic Motorway and Trunk Road Network (Vol. 8:3)
- DD62 HD 19/03: Road Safety Audits (Vol. 5:2:2)
- DD63 HD 26/06: Pavement Design (Vol. 7:2:3)
- DD64 HD 36/06: Surfacing Materials for New and Maintenance Construction (Vol. 7:5:1)
- DD65 HD 37/99: Bituminous Surfacing Materials and Techniques (Vol. 7:5:2)
- DD66 TA 49/86: Appraisal of New and Replacement Lighting on Trunk Roads

- and Trunk Road Motorways (Vol. 8.3)
- DD67 TA 91/05: Provision for Non-Motorised Users (Vol. 5:2:4)
- DD68 HD 42/05: Non-Motorised User Audits (Vol. 5:2:5)
- DD69 BD 29/04: Design Criteria for Footbridges (Vol. 2:2:8)
- DD70 HD 33/06: Surface and Sub-surface Drainage Systems for Highways (Vol. 4:2:3)
- DD71 TA 44/92: Capacities, Queues, Delays and Accidents at Road Junctions (Vol. 5.1.1)
- DD72 HA 103/01: Vegetative Treatment for Highway Run-off
- DD73 TD 16/93: Geometric Design of Roundabouts (Vol. 5:1:1)
- DD74 The Future of Transport: a Network for 2030
- DD75 A New Deal for Transport: Better for Everyone
- DD76 A New Deal for Trunk Roads in England
- DD77 Transport 2010 The 10 Year Plan
- DD78 Delivering Better Transport: Progress Report
- DD79 Feasibility Study of Road Pricing in the UK
- DD80 Strategic Roads 2010 - HA 10 Year National Roads Strategy
- DD81 HA Business Plan 2007-2008
- DD82 Managing our Roads
- DD83 Transport Analysis Guidance
- DD84 London to South Midlands Multi Modal Study (LSMMMS)
- DD85 TD 34/91: Design of Road Lighting for Motorway Trunk Roads (Vol. 8:3)
- DD87 Review of HA's Major Roads Programme (The Nichols Report)
- DD88 A New Deal for Trunk Roads in England: Guidance on the New Approach to Appraisal
- DD89 A New Deal for Trunk Roads in England: Understanding the New Approach to Appraisal
- DD90 Securing the Future: Delivering the UK Sustainable Development Strategy
- DD91 RPG9: Regional Planning Guidance for the South East
- DD93 East of England Plan-draft
- DD94 East of England Regional Transport Strategy-part of draft East of England Plan (pp134-154)
- DD95 The Eddington Transport Study
- DD96 ODPM Circular 06/2004
- DD97 Notes for the Guidance of Inspectors: Holding Inquiries into Orders and Special Road Schemes
- DD98 WebTAG Transport Analysis Guidance (TAG) Unit 3.3.2 Noise Sub-Objective, November 2006
- DD100 Strategic Safety Action Plan (SSSP) for the Core Trunk Road Network
- DD101 Planning and the Strategic Road Network
- Planning Policy Guidance Notes/Planning Policy Statements**
- DD102 PPS1 Delivering Sustainable Development
- DD103 PPG2 Green Belts
- DD104 PPG4 Industrial, Commercial Development and Small Firms
- DD105 PPS7 Sustainable Development in Rural Areas
- DD106 PPS9 Biodiversity and Geological Conservation
- DD107 PPS10 Planning for Sustainable Waste Management
- DD108 PPS11 Regional Spatial Strategies
- DD109 PPG13 Transport
- DD110 PPG14 Development on Unstable Land
- DD111 PPG15 Planning and the Historic Environment

- DD112 PPG16 Archaeology and Planning
- DD113 PPS23 Planning and Pollution Control
- DD114 PPG24 Planning and Noise
- DD115 PPS25 Development and Flood Risk

Scheme Documents

- DD118 Scheme Layout Drawings (1:2500)
- DD119 A421 Dualling and M1 J13/13a Improvements Stage 1 Report Vol. 1 Main Report and Vol. 2 Options Considered
- DD120 Technical Appraisal Report Vol. 1
- DD121 Stage 2 Scheme Assessment Report
- DD122 Post-Public Consultation Options Assessment Report
- DD123 Scheme Assessment Report and Recommendation
- DD124 Stage 2 Environmental Impact Assessment Report
- DD125 Public Consultation Route leaflet
- DD126 Preferred Route Announcement leaflet
- DD127 Preferred Route Announcement notice
- DD128 Works Information
- DD129 Schedule of Modifications
- DD130 Stage 3 TAG Appraisal
- DD131 Appraisal Summary Table (AST)
- DD132 Stage 3 Scheme Assessment Report
- DD133 Early Contractor Involvement Contract
- DD134 Construction Environmental Management Plan (CEMP)
- DD135 Ambient Noise Monitoring Report D109831-P1A-NOI-R002 Rev02
- DD136 Construction Time Location Programme
- DD137a Preliminary Sources Study. Vol. 1: Report. March 2005.
- DD137b Preliminary Sources Study. Vol. 2: Collected Data. March 2005.
- DD137c Preliminary Sources Study. Vol. 3: Collected Data. March 2005.
- DD138 Review of Gas and Groundwater monitoring near Brogborough and Stewartby Landfill Sites D109831-P1A-ENV-R003
- DD139 Land Ownership and Concept Design drawings, GD006R/1014-1016
- DD140 A421 Improvements M1 Junction 13 to Bedford: Scheme Brief (signed)

Engineering Documents

- DD142 Traffic Signs Manual-Chapter 5 extract
- DD143 NMU Context Report D109831-P1A-HIG-R009 Rev 2
- DD144 Vertical Concrete Barrier (VCB) Comparison Report D109831-P1A-HIG-R004 Rev2
- DD145 Drainage Strategy Report D019831-P1A-DRA-R001
- DD146 Scheme Development Report D109831-P1A-GEN-R004
- DD147 Design for Maintenance Report D109831-P1A-HIG-R001
- DD148 Report on the Development of Mainline and Junction Layout Options D109831-P1A-HIG-R003
- DD149 Stage 1 Road Safety Audit Designers Response D109831-P1A-HIG-R006
- DD150 Departures from Standards Report D109831-P1A-HIG-R007
- DD151 Supplementary Stage 1 Road Safety Audit Designers Response D109831-P1A-HIG-R011
- DD152 Junction Capacity Study Report D109831-P1B-TRA-R001
- DD153 Non-Motorised User Survey Report D109831-P1B-ENV-R008
- DD154 Lower Shelton Link Road Report D109831-P1A-HIG-R005
- DD155 Structures Options Report D109831-P1A-STR-R001 Rev 4 and Addendum Rev A
- DD156 M1 Existing Bridge Design Options Report D109831-P1A-STR-R036

- DD157 Abnormal Load Report D109831-P1A-HIG-R008
- DD158 Value Management Report D109831-P1A-VAL-R001
- DD159 Wootton Developments: Surface Water Drainage Strategic Proposals Stage 1-Consultation Report 0094 GD00612 GDI BD
- DD161 Improvements to London to South Midlands Multi Modal Study GD00612/GDR/1011 Technical Note
- DD162 Traffic Signs Regulations and General Directions

Traffic and Economics Documents

- DD164 Traffic Survey Report 1064_GD00612_GDR_RB
- DD165 Guidelines for the Use of Micro-simulation Software, HA, 2007
- DD166 Traffic Forecasting Report 002_GD00908_GDR_RC
- DD167 Economic Assessment Report 003_GD00908_GDR_RC
- DD168 Economic Impact Report 1027_GD00612_GDR_RA
- DD169 TEMPRO-DfT Trip End Model Program
- DD170 2001 Base Year Stage 2 Model for the A421 Improvements Scheme- Validation Report GC00612/GDR/1020 Rev B
- DD171 East of England Regional Highway Assignment Model - Model Development and Validation Report, Faber Maunsell, 2007
- DD172 East of England Regional Demand Model - Model Development and Validation Report, Faber Maunsell, 2007
- DD173 Standing Advisory Committee on Trunk Roads and the Generation of Traffic
- DD174 Transport Research Laboratory Research Report RR274: The Use of TRANSYT at Signalised Roundabouts
- DD175 Tomorrow's Roads - Safer for Everyone
- DD176 "The Calculation of Saturation Flows for SATURN - a few thoughts", David Boddy, Cambridgeshire County Council
- DD177 Milton Keynes Local Plan

Landscape and Visual Impact Documents

- DD180 The Landscape Institute and Institute of Environmental Management and Assessment: Guidelines for Landscape and Visual Impact Assessment 2nd Edition
- DD181 The Countryside Agency: Landscape Character Assessment – Guidance for England and Scotland
- DD182 Countryside Character Vol. 6: East of England
- DD183 Forest of Marston Vale Forest Plan 2000
- DD184 Bedford Borough Landscape Character Assessment
- DD185 Mid Bedfordshire District Landscape Character Assessment
- DD186 BS3882: Specification of Topsoil 1992

Noise and Vibration Documents

- DD187 Guidelines for Community Noise, WHO, Geneva, 1999
- DD188 BS 6472: 1992 Guide to Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz)
- DD189 Calculation of Road Traffic Noise (CRTN) (Revised 1988)
- DD190 BS 5228: Part 1: 1997 Code of Practice for Basic Information and Procedures for Noise and Vibration Control
- DD191 BS 5228: Part 2: 1997 Noise and Vibration Control on Construction and Open Sites: Guide to noise and vibration control legislation for construction and demolition including road construction and maintenance
- DD192 BS 5228: Part 4: 1992 Code of Practice for Noise and Vibration Control Applicable to Piling Operations
- DD193 Transport Analysis Guidance (TAG) Unit 3.3.2 The Noise Sub Objective,

June 2003

- DD194 Control of Vibration during Piling, British Steel
- DD195 Minerals Policy Statement 2: 2005 Controlling and Mitigating the Environmental Effects of Minerals Extraction in England (Annex 2: Noise)

Environmental Documents

- DD196 D109831 P1A-ENV-R001 Rev2 Environmental Statement Scoping Report

Air Quality Documents

- DD197 Bedford Borough Council Updating and Screening Assessment
- DD198 Bedford Borough Council Revised Detailed Assessment of Nitrogen Dioxide
- DD199 Bedford Borough Council Air Quality Progress Report
- DD200 Mid Bedfordshire District Council Detailed Assessment for Mid Bedfordshire District Council
- DD201 HA 207/07: Air Quality Assessment
- DD202 The DMRB Air Quality Screening Method (Version 1.02): Calibration Report

Land Use and Agriculture Documents

- DD204 Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land
- DD205 The Good Practice Guide for Handling Soils
- DD206 Town and Country Planning (General Development Procedure) Order 1995, Statutory Instrument 1995 No 419

Water Environment Documents

- DD210 HA 216: Road Drainage and the Water Environment
- DD211 The Surface Waters Plan
- DD212 General Guide to the Prevention of Pollution PPG1
- DD213 Above Ground Oil Storage Tanks PPG2
- DD214 Use and Design of Oil Separators in Surface Water Drainage Systems PPG3
- DD215 Works in, Near or Liable to Affect Watercourses PPG5
- DD216 Working at Construction and Demolition Sites PPG6
- DD217 Refuelling Facilities PPG7
- DD218 Safe Storage and Disposal of Used Oil PPG8
- DD219 High Pressure Water and Steam Cleaners PPG13
- DD220 Managing Fire Water and Major Spillages PPG18
- DD221 Pollution Incident Response Planning PPG21
- DD222 Storage and Handling of Drums and Intermediate Bulk Containers PPG26
- DD223 Surface Water (River Ecosystem) (Classification) Regulations 1994

Ecology Documents

- DD224 European Union Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora: Habitats Directive (extracts, pages 1-14, Annex II pages 23-48)
- DD225 European Union Council Directive 79/409/EEC on the Conservation of Wild Birds: Birds Directive

Cultural and Built Heritage Documents

- DD226 Archaeological Baseline Report D109831-P1A-ACH-R002
- DD227 Built Heritage Baseline Report D109831-P1A-ENV-R004 Rev02

Geology and Contamination

- DD228 Building Research Establishment Special Digest 1: Concrete in Aggressive Ground

- DD229 Contaminated Land Report 7
- DD230 Contaminated Land Report 8
- DD231 Contaminated Land Report 9
- DD232 Contaminated Land Report 10
- DD233 Contaminated Land Report 11
- DD234 British Geological Survey Map Sheet 203, Bedford (Drift)
1:63360
- DD235 Envirocheck Report

Regional and Local Planning and Policy Documents

- DD236 Bedfordshire Transport Plan 2006 (covered by relevant local plans)
- DD237 Bedford Borough Local Plan (adopted 2002) (Extract: saved policies only)
- DD238 Mid-Bedfordshire Local Plan First Review (adopted 2005)
- DD239 Bedfordshire Local Transport Plan for 2006/07 - 2010/11
- DD240 Bedfordshire and Luton Structure Plan 2011 (Adopted 1997)
- DD241 Milton Keynes and South Midlands Sub-Regional Strategy
- DD242 Bedfordshire and Luton Minerals and Waste Local Plan
- DD243 The South East Plan Vol. 1: Report - Extract: Section 23
- DD244
 - a) East of England Plan
 - b) RSS Statement by HA
 - c) Vol. 1 Report of the Panel
 - d) Vol. 11 Report of the Panel
 - e) The SoS proposed changes to the draft E of E Plan

2. STATEMENTS OF CASE

Submitted by the HA

- HA/P1 Statement of Case – Mr R Brunsden
- HA/P1/A Appendices to the Statement of Case
- HA/P1/O Outline Statement of Case
- HA/P1/S Summary of Statement of Case

Submitted by the Objectors

The HA has included in their response to each Objector an appendix which includes copies of all the correspondence between the Objector and the HA since the date of publication of the draft Orders and, where provided by the Objector, the Objector's statement of case. For ease of reference, the HA's response to each Objector is located in the relevant Objector file in the batch of documents accompanying this report.

- SC/1 National Grid Electric (O3)
- SC/2 National Grid Gas (O4)
- SC/3 Kleinwort Benson (Jersey) Trustees Ltd.; Kleinwort Benson (Channel Islands) Corporate Services; Standard Life Investment Funds, the IRP owners (O19)
- SC/4 Bedfordshire Rights of Way (O72)
- SC/6 Lidlington Parish Council (O46)
- SC/7 Mr T Talbot (O64)
- SC/8 Marston Moretaine Parish Council Playing Field Committee (O9)
- SC/9 The Owen Family (O17)
- SC/10 Mrs B Jackson (O45)
- SC/11 Marston Moretaine Parish Council (O20)
- SC/12 Bedfordshire County Council (O73)
- SC/13 Milton Keynes Council (O85)

SC/14	Mr A Evans and Son (O38)
SC/15	Matalan PLC (O43)
SC/16	The Cycling Touring Club Right to Ride Network (O67)
SC/17	Mr D Cheseldine (O12)
SC/18	Mr M Brookes (O18)
SC/19	Mr and Mrs P Baird (O44)
SC/20	South East Milton Keynes Consortium of Developers (O23)
SC/21	Mr Yuk Tong Lee (O95)

3. PROOFS OF EVIDENCE

Submitted by the HA

HA/P2	Proof of Evidence on Engineering – Mr G Law
HA/P2/A	Appendices to Proof of Evidence on Engineering
HA/P2/S	Summary Proof of Evidence on Engineering
HA/P3	Proof of Evidence on Traffic, Accidents and the Economy – Mr C Gilliam
HA/P3/A	Appendices to Proof of Evidence on Traffic, Accidents and the Economy
HA/P3/S	Summary Proof of Evidence on Traffic, Accidents and the Economy
HA/P4	Proof of Evidence on Landscape and Visual Effects – Mr E Hall
HA/P4/S	Summary Proof of Evidence on Landscape and Visual Effects
HA/P5	Proof of Evidence on Noise and Vibration - Mr A Maneylaws
HA/P5/A	Appendices to Proof of Evidence on Noise and Vibration
HA/P5/S	Summary Proof of Evidence on Noise and Vibration
HA/P6	Proof of Evidence on Construction – Mr M Ranft
HA/P6/S	Summary Proof of Evidence on Construction
HA/P7	Proof of Evidence on Policies and Plans – Ms S McCallum
HA/P7/S	Summary Proof of Evidence on Policies and Plans
HA/P8	Proof of Evidence on Environmental Matters – Mr B Shorter
HA/P8/S	Summary Proof of Evidence on Environmental Matters

Submitted by the Objectors

These are to be found in the relevant Objector file in the batch of documents accompanying this report.

P1/1	Mr D Hunter-Yeats (O19)
P1/2	Figures to proof
P1/3	Appendices
P1/4	Summary proof
P1/5	Addendum
P2/1	Lidlington Parish Council (O46)
P2/2	Lidlington PC – Extract of Definitive Map 11/12/07
P3/1	Mrs B Jackson (O45)
P4/1	The Cycling Touring Club Right to Ride Network (O67)
P4/2	Appendix: Ridgmont Bypass non technical Summary
P5/1	Mr and Mrs K Burke (O68)
P6	Not allocated
P7/1	Marston Moretaine Parish Council letter of authority, 5 December 2007 (O20)
P7/2	Marston Moretaine Playing Field Committee letter of authority, 5 December 2007 (O9)

4. DOCUMENTS SUBMITTED DURING THE INQUIRY

To assist locating the HA's response to a specific Objector the list of the HA documents produced at the inquiry has been split into two: firstly Supplementary Documents and secondly Responses to Objectors.

HA: Supplementary Documents

ID/	HA/	1	Batch of drawings in support of the Order proposals	
ID/	HA/	2	Miscellaneous plans requested by the Inspector	
ID/	HA/	3	Drawings – location of objectors	13/11/07
ID/	HA/	3a	Letter to Inspector explaining HA's Appendix A and B.	
ID/	HA/	4	Letter explaining need for revised evidence	28/11/07
ID/	HA/	5	Compliance with Statutory Procedures	04/12/07
ID/	HA/	6a	Proposed modifications to published draft Side Roads Orders	19/12/07
ID/	HA/	7a	Proposed modifications to published draft Compulsory Purchase Orders – A421 Trunk Road (M1 Junction 13 to Bedford Improvements)	19/12/07
ID/	HA/	7b	Proposed modifications to published draft Compulsory Purchase Orders – M1 Motorway (Junction 13 Improvements)	19/12/07
ID/	HA/	7c	Proposed modifications to published draft Compulsory Purchase Orders – A421 Trunk Road (M1 Junction 13 Improvements)	19/12/07
ID/	HA/	8	List of withdrawn objections	04/12/07
			List of withdrawn objections	12/12/07
			List of withdrawn objections	18/12/07
ID/	HA/	9	Opening Statement of Mr P Brown of Counsel	04/12/07
ID/	HA/	10	List of Bodies Consulted by the HA	05/12/07
ID/	HA/	11	Scheme layout at Lower Shelton Link Road	05/12/07
ID/	HA/	12	List of re-classification of representations	05/12/07
ID/	HA/	13	List of objectors showing statutory and non-statutory status	05/12/07
ID/	HA/	17	Note in response to Inspector's question – A421 dualling west of J13	05/12/07
ID/	HA/	18	Note in response to Inspector's request for confirmation of funding (HA/P1 para. 4.8)	05/12/07
ID/	HA/	25	Plan – Road marking overlaid onto proposed scheme M1 J13 in year 2011	06/12/07
ID/	HA/	26	Note in response to Inspector's question on compliance with the White Paper on Sustainable Transport	06/12/07
ID/	HA/	27	Note in response to Inspector's request for details of the Draft East of England Plan	06/12/07
ID/	HA/	28	Note in response to Inspector's question concerning the status of the Milton Keynes and South Midlands Sub-Regional Growth Strategy and if subject of public consultation	06/12/07
ID/	HA/	29	Note to Inspector on the signatory block irregularities	04/12/07
ID/	HA/	30	Revised Noise contour plans – supplement to the	06/12/07

			Noise proof of evidence	
ID/	HA/	57	List of Statutory Consultees	11/12/07
ID/	HA/	58	Note to Inspector – provenance of accident data	11/12/07
ID/	HA/	59	Note to Inspector – reason for landtake for contractor's compound	11/12/07
ID/	HA/	60	Note to Inspector – noise assessment and speed increase	11/12/07
ID/	HA/	61	Note to Inspector - noise evidence question of Mrs B Jackson	11/12/07
ID/	HA/	62	Response to request for TAME approval of inter-peak models	11/12/07
			Tame Approvals	
			Addendum to LMV Report	
			Addendum to Economic Assess Report	
			Addendum to TFR Vol. 1	
			Addendum to TFR Vol. 2	
ID/	HA/	63	Note on noise barriers question by Marston Moretaine Parish Council	11/12/07
ID/	HA/	64	Site Plan 3 to Side Roads Order – Lidlington footpaths	11/12/07
ID/	HA/	80	Current status of statutory and non-statutory objectors	06/12/07
ID/	HA/	96	A421 Public Inquiry: Accident Statistics Note	12/12/07
ID/	HA/	104	Local Transport Note Extract – Cycle Infrastructure Design – Consultation draft – July 2007	13/12/07
ID/	HA/	107	Technical Note to South East Milton Keynes Consortium of Developers TN22, (023)	13/12/07
ID/	HA/	108	Response to Inspector's query – 2005 Annual Average Daily Traffic Flows – Figures used in evidence	13/12/07
ID/	HA/	109	Model Version 2 Aspley Guise Traffic Flows	14/12/07
ID/	HA/	110	Technical Note 23	14/12/07
ID/	HA/	111	A Comparison of the M1 Widening Model and the A421 Model	17/12/07
ID/	HA/	112	Confirmation of approval from Emergency Services	18/12/07
ID/	HA/	113	Line and Side Roads Orders overlaid onto Scheme Plans used during Round Table Session	18/12/07
ID/	HA/	114	Note to the Inspector – Clarification of Trunk Road Status	18/12/07
ID/	HA/	115	Response to the Inspector's questions relating to the use of PARAMICS for Junction Modelling	18/12/07
ID/	HA/	116	Note to the Inspector – Regional Planning Policy of relevance to the Proposed Improvements to the A421	18/12/07
ID/	HA/	117	Note to the Inspector – Revised Appraisal Summary Table (AST)	19/12/07
ID/	HA/	118	Letter dated 21 March 2007 to Elstow Parish Council re: Notification of the making of the Orders	13/12/07
ID/	HA/	119	Concerns raised by Mr D Hunter-Yeates during cross examination by Mr P Brown	19/12/07

ID/	HA/	123	M1 J13 PARAMICS Model 2011 and 2026. Video and Supporting Notes	20/12/07
ID/	HA/	125	Letter re. resumed inquiry time and venue	07/01/08
ID/	HA/	126	Note to PO re. revised area at resumed inquiry	14/01/08
ID/	HA/	127	Note and drawing to PO re. resumed inquiry room layout	15/01/08
ID/	HA/	128A	Letter to BCC re Cowbridge Roundabout	22/01/08
ID/	HA/	129	Signed agreement between the HA and BCC (original ID/HA/129 and ID/HA/129 deleted)	28/01/08
ID/	HA/	130	Email to the PO	25/01/08
ID/	HA/	131	Note on Induced Traffic	25/01/08
ID/	HA/	132	Technical Note 24	25/01/08
ID/	HA/	133	Technical Note 25	25/01/08
ID/	HA/	134	M1 Junction 13 Methodology Audit	25/01/08
ID/	HA/	135*	Letter to Atkins Telecoms responding to their letter of 3 January 2008	28/01/08
ID/	HA/	136	Highway Design Note on Increased Capacity at M1 Junction 13	29/01/08
ID/	HA/	137	Drawing to accompany Highway Design Note on Increased Capacity at M1 Junction 13	29/01/08
ID/	HA/	138	Drawing of M1 Junction 13 Fully Signalised Option	29/01/08
ID/	HA/	139	Technical Note 27	29/01/08
ID/	HA/	140	Technical Note 28	30/01/08
ID/	HA/	141	Revised Orders for possible extension of Stopping Up of Hoo Lane	30/01/08
ID/	HA/	142	Quantification of Induced Traffic	31/01/08
ID/	HA/	143	Technical Note 30	31/01/08
ID/	HA/	144	Cowbridge Roundabout – Naming Conventions	31/01/08
ID/	HA/	145	Enlarged version of Figure 2.1 from Technical Note 25	31/01/08
ID/	HA/	146	Technical Note 31	31/01/08
ID/	HA/	147	Technical Note 29	31/01/08
ID/	HA/	148	Technical Note 32	31/01/08
ID/	HA/	149*	Letter to Elstow Parish Council (O97)	04/02/08
ID/	HA/	150*	Letter to Addleshaw Goddard (O19)	08/02/08
ID/	HA/	151	Draft Technical Note 33	08/02/08
ID/	HA/	152	Technical Note 33	11/02/08
ID/	HA/	153	Part response to Inspector's ID/8	12/02/08
ID/	HA/	154	2026 Mitigation at Salford Road	13/02/08
ID/	HA/	155	Capacity matrices at M1 Junction 13	13/02/08
ID/	HA/	156	DfT Paper – The "MOVA" signal control system	13/02/08
ID/	HA/	157	TRRL Paper – MOVA: The 20 site trial	13/02/08
ID/	HA/	158	Closing Submission of Mr P Brown of Counsel	13/02/08
ID/	HA/	159	Appendix to closing submission: <u>Hall and another v First Secretary of State and another</u>	13/02/08
ID/	HA/	160	Appendix to closing submission: Draft Summary of SRO Schedules	13/02/08

*Contained in relevant Objector or representation file

HA: Responses to Objectors

These are to be found in the relevant Objector's file contained in the batch of documents accompanying this report.

ID/	HA/	42	Response to Mrs S G Cook, O1	06/12/07
ID/	HA/	105	Response to Mr J Jones, O2	13/12/07
ID/	HA/	78	Response to National Grid (Electricity), O3	11/12/07
ID/	HA/	77	Response to National Grid (Gas), O4	11/12/07
ID/	HA/	33	Response to Mr A Pibworth, O6	06/12/07
ID/	HA/	76	Response to Miss F Longmuir, O7	11/12/07
ID/	HA/	87	Response to TK Maxx, O8	12/12/07
ID/	HA/	21	Marston Moretaine Parish Council as Trustees of land managed by Marston Moretaine Playing Field Management Committee, O9	06/12/07
ID/	HA/	66	Response to Mr D J Patterson, O10	11/12/07
ID/	HA/	94	Response to Mr A Parrish, O11	12/12/07
ID/	HA/	81	Response to Mr D Cheseldine, O12	12/12/07
ID/	HA/	41	Response to Bedford and Milton Keynes Waterway Trust, O15	06/12/07
ID/	HA/	82	Response to Mrs M M E L Poole, O16	12/12/07
ID/	HA/	56	Response to Mr A Owen, O17	11/12/07
ID/	HA/	79	Response to Mr M Brookes, O18	11/12/07
ID/	HA/	83	Response to Kleinwort Benson (Jersey) Trustees Ltd.; Kleinwort Benson (Channel Islands) Corporate Services; Standard Life Investment Funds, the IRP owners O19	12/12/07
ID/	HA/	19	Response to Marston Moretaine Parish Council, O20	06/12/07
ID/	HA/	40	Response to Ms M Ball, O21	06/12/07
ID/	HA/	51	Response to Ms R Buckley, O26	06/12/07
ID/	HA/	44	Response to Mr E Dudose, O27	06/12/07
ID/	HA/	43	Response to Marston Car Accident Repairs, O28	06/12/07
ID/	HA/	45	Response to M J Motors, O29	06/12/07
ID/	HA/	46	Response to Mr C Seamark, O30	06/12/07
ID/	HA/	50	Response to the Occupier, Rose Cottage 1, O34	06/12/07
ID/	HA/	48	Response to Mr A Macrae, O35	06/12/07
ID/	HA/	49	Response to the Occupier, Rose Cottage 2, O36	06/12/07
ID/	HA/	22	Response to Mr A Evans and Son, O38	06/12/07
ID/	HA/	86	Response to SCS Property Development, O39	12/12/07
ID/	HA/	85	Response to Matalan plc, O43	12/12/07
ID/	HA/	54	Response to Mr P and Mrs G Baird, O44	11/12/07
ID/	HA/	20	Response to Mrs B Jackson, O45	06/12/07
ID/	HA/	16	Response to Lidlington Parish Council, O46	05/12/07
ID/	HA/	84	Response to Pets At Home Ltd., O53	12/12/07
ID/	HA/	39	Response to Mrs C Delafuente, O55	06/12/07
ID/	HA/	38	Response to Mr M and Mrs C Hawkes, O56	06/12/07
ID/	HA/	37	Response to M Blake, O57	06/12/07
ID/	HA/	65	Response to St. John the Baptist College, O58	11/12/07
ID/	HA/	90	Response to Staples, O59	12/12/07
ID/	HA/	88	Response to Brantano (UK) Ltd., O60	12/12/07
ID/	HA/	36	Response to Mr A J and Mrs N F Yeowell, O61	06/12/07
ID/	HA/	35	Response to the Occupiers of 2 Horseshoe Close, O62	06/12/07

ID/	HA/	34	Response to Mr S Lonsdale, O63	06/12/07
ID/	HA/	55	Response to Mr A Talbot, O64	11/12/07
ID/	HA/	100	Response to Whitbread Harrowden Settlement, O65	13/12/07
ID/	HA/	102	Response to Mr K Revill, O66	13/12/07
ID/	HA/	32	Response to the Cycling Touring Club Right to Ride Network, O67	06/12/07
ID/	HA/	14	Response to Mr K Burke, O68	05/12/07
ID/	HA/	106	Response to Mrs R Persaud, O69	13/12/07
ID/	HA/	92	Response to Ms L MacKenzie and Mr M Goode, O70	12/12/07
ID/	HA/	68	Response to the Trustees of Husbourne Crawley Charities, O71	11/12/07
ID/	HA/	24	Response to Bedfordshire Rights of Way Association, O72	06/12/07
ID/	HA/	128	Response to Bedfordshire County Council, O73	20/12/07
ID/	HA/	75	Response to Miss D M J Smith, O74	11/12/07
ID/	HA/	97	Response to Mr and Mrs R Weston, O75	13/12/07
ID/	HA/	53	Response to Mr C Le Boutillier, O76	06/12/07
ID/	HA/	99	Response to Mr T and Mrs L Smith, O77	13/12/07
ID/	HA/	89	Response to Fujifilm UK Ltd., O80	12/12/07
ID/	HA/	74	Response to The Ramblers Association, O81	11/12/07
ID/	HA/	72	Response to Ms C McArthur, O83	11/12/07
ID/	HA/	70	Response to Mr P H Vintner, O84	11/12/07
ID/	HA/	122	Response to Milton Keynes Council, O85	20/12/07
ID/	HA/	93	Response to Bedfordshire County Council Rights of Way, O86	12/12/07
ID/	HA/	71	Response to Mr P O'Neill, O87	11/12/07
ID/	HA/	98	Response to The Woodland Trust, O88	13/12/07
ID/	HA/	95	Response to Anglian Water Services Ltd., O89	12/12/07
ID/	HA/	121	Response to The Milton Keynes Partnership, O90	20/12/07
ID/	HA/	69	Response to The British Horse Society, O92	11/12/07
ID/	HA/	31	Response to English Heritage, O93	06/12/07
ID/	HA/	101	Response to Mr J Barrett, O94	13/12/07
ID/	HA/	23	Response to Mr Tong Lee, O95	06/12/07
ID/	HA/	91	Response to Alderforce Ltd., (KFC and Burger King), O96	12/12/07
ID/	HA/	124	Response to Elstow Parish Council, O97	20/12/07
ID/	HA/	120	Response to Mothercare O98	20/12/07

Objector's supplementary documents

These are to be found in the relevant Objector's or representation file in the batch of documents accompanying this report.

ID/	O17/	1	Letter to the HA	02/01/08
ID/	O19/	1	ARCADY Analysis of Cowbridge Roundabout	11/12/07
ID/	O19/	2	ARCADY ODTAB 1	11/12/07
ID/	O19/	3	ARCADY ODTAB 2	11/12/07
ID/	O19/	4	Peak hour turning movements at Cowbridge Roundabout Version 3 Saturn Road	11/12/07
ID/	O19/	5	Hyder Flows Version 3 and Hyder Flows Version 3 and Park and Ride Adjustment tables	11/12/07
ID/	O19/	6	Opening Statement by Mr R Price Lewis, QC	11/12/07
ID/	O19/	7	Note for the Inspector on relevant references to	11/12/07

			calibration/validation in Guidelines for the Use of Micro-simulation Software (DD165)	
ID/	O19/	8	Note for the Inspector – The decrease in ACARDY queues with ODTAB function compared with flat profile shown in Tables 2 and 4 in SLI/1/6 (P1/6)	11/12/07
ID/	O19/	9	Capacity Analysis of Improvement Options at Cowbridge Roundabout	21/12/07
ID/	O19/	9A	Letter enclosing Capacity Analysis	21/12/07
ID/	O19/	10	Closing Submission by Mr R Price Lewis, QC	11/12/07
ID/	O19/	11	Letter to HA re. possible meeting	14/01/08
ID/	O19/	12	Email to PO re response following meeting between HA/BCC/O19 on 21/01/08	22/01/08
ID/	O19/	13	Letter to the HA	29/01/08
ID/	O19/	14	Letter dated 28 January 2008 from Addleshaw Goddard to HA re the agreement between HA and BCC	28/01/08
ID/	O19/	15	Letters dated 31 January 2008 from Addleshaw Goddard to the Programme Officer	31/01/08
ID/	O19/	16	Letter to HA	08/02/08
ID/	O20/	1	Marston Moretaine Parish Council – hard copy of slide presentations	12/12/07
ID/	O20/	2	Extract of Construction drawing showing Marston Moretaine Bypass at Lower Shelton circa 1986	13/12/07
ID/	O20/	3	Marston Moretaine Parish Council – Closing Submission	
ID/	O38/	1	Mr A Evans and Son, Land ownership issues	12/12/07
ID/	O45/	1	Closing submission by Mrs B Jackson	12/12/07
ID/	O73/	X	BCC: Letter to PO	20/12/07
ID/	O73/	1	BCC: Clarification on Cowbridge Roundabout terminology	10/01/08
ID/	O73/	2	Email from BCC to the PO dated 28 January	28/01/08
ID/	O73/	3	Letter dated 28 January 2008 to the PO updating the Inquiry	28/01/08
ID/	O97/	1	Elstow Parish Council: Objection submission	12/12/07
ID/	O97/	2	Letter to BCC from Elstow Parish Council, 15 August 2007	
ID/	O97/	3	Letter from Elstow Parish Council to PO	09/01/08
ID/	O97/	4	Response by Elstow Parish Council, O97 to HA's rebuttal	09/11/08
ID/	O97/	5	Letter from Elstow Parish Council to PO	09/01/08
ID/	O97/	6	Minutes of Elstow Parish Council meeting, 08/01/08	
ID/	R19/	1	Letter from Atkins Telecoms	03/01/08

Inspector's documents

ID/	1	Pre-Inquiry Meeting Notes	02/11/07
ID/	2	Notes from HA to the Inspector at PIM	25/10/07
ID/	3	Note on Cowbridge Roundabout/IRP	11/01/08
ID/	4	Clarification on Cowbridge Roundabout terminology to BCC	10/01/08
ID/	5	Note to Chiltern Radio on reasons for inquiry adjournment	03/01/08
ID/	6	Note to HA on induced traffic	16/01/08
ID/	7	Note on expectations from further studies	01/02/08
ID/	8	Note on cost estimates for possible mitigation measures	03/02/08

ID/ 9	Required clarifications on TN33	12/02/08
ID/ 10	Comparison of junction performances: Original Traffic Proof of Evidence and TN33, chapter 5.	12/02/08

5. OTHER DOCUMENTS

File of letters of support

Supporter S1, Mr V M Christensen

S1 /1 Letter of Support dated 23 March 2007

Supporter S2, Mr P Smith

S2 /1 Email Letter of Support dated 2 April 2007

Supporter S3, Mr P Sayer

S3 /1 Letter of Support dated 2 April 2007

Supporter S4, Mr D J Green

S4 /1 Letter of Support dated 31 March 2007

Supporter S5, Mr A Richards

S5 /1 Letter of Support dated 30 March 2007

Supporter S6, A G and D M Shaw

S6 /1 Email Letter of Support dated 17 June 2007

Supporter S7, M R T Matthews

S7 /1 Letter of Support dated 18 June 2007

Supporter S8, Hulcote and Salford Parish Council

S8 /1 Letter of Support dated 26 June 2007

Supporter S9, Brogborough Parish Council

S9 /1 Letter of Support dated 20 June 2007

Supporter S10, Husborne Crawley Parish Council

S10 /1 Letter of Support dated 24 June 2007

Supporter S11, Stuart Michael Associates

S11 /1 Email Letter of Support dated 05 July 2007

Supporter S12, Mr M Jarvis

S12 /1 Letter of Support dated 6 August 2007

Supporter S13, Praedium Property

S13 /1 Letter of Support dated 4 September 2007

Supporter S14, Barretts of Aspley

S14 /1 Letter of Support dated 4 August 2007

Supporter S15, WRG

S15 /1 Letter of Support dated 4 September 2007

Supporter S16, Mr M Starkness

S16 /1 Letter of Support dated 14 August 2007

Supporter S18, The Environment Agency

S18 /1 Letter of Support dated 3 September 2007

Supporter S20, Dr R Chatam

S20 /1 Email letter of Support dated 2 December 2007

Supporter S21, Ms L Lindsay

S21 /1 Email letter of Support dated 5 December 2007

Supporter S87, The Royal Society for the Protection of Birds (was Rep 017)

S17 /1 Letter of Support dated 15 August 2007

Objector's files

When the HA commenced incoming document referencing some objections had been initially classified by as representations. Some of these representations have been subsequently re-classified as objections. Therefore, where the classification has changed the early documents references may commence with a REP prefix and the list of documents may subsequently change to an OBJ prefix.

Objector 1, Mrs S G Cook

OBJ_001_001 Letter from Mrs Cook dated 27 March 2007.
OBJ_001_002 HA acknowledgement 3 April 2007.
OBJ_001_003 HA letter to Mrs Cook dated 19 April 2007.
OBJ_001_004 HA letter to Mrs Cook dated 2 May 2007.
OBJ_001_005 Signed letter from affected residents dated 12 June 2007.
OBJ_001_006 HA full response dated 20 June 2007.
OBJ_001_007 Proforma returned by Mrs Cook received 9 August 2007.
OBJ_001_008 HA response dated 25 September 2007.
OBJ_001_009 Undated letter maintaining objection.

Objector 2, Mr J Jones

OBJ_002_001 Letter from Mr Jones dated 3 April 2007.
OBJ_002_002 HA acknowledgement dated 11 April 2007.
OBJ_002_003 HA full response dated 15 May 2007.
OBJ_002_004 Form issued by Mr Jones on 11 August 2007.
OBJ_002_005 Letter from Mr Jones dated 8 September 2007.

Objector 3, National Grid (Electricity)

OBJ_003_001 NGET response to issue of draft Orders, dated 17 April 2007.
OBJ_003_002 HA initial response dated 18 April 2007.
OBJ_003_003 HA full response dated 16 May 2007.
OBJ_003_004 NGET request dated 25 May 2007.
OBJ_003_005 HA confirmation dated 20 June 2007
OBJ_003_006 HA correspondence dated 15 October 2007.
OBJ_003_007 NGET return of the HA's pro-forma dated 19 October 2007.
OBJ_003_008 Letter to HA from NGE dated 20 December 2007

Objector 4, National Grid (Gas)

OBJ_004_001 NGG response to issue of draft Orders, dated 19 April 2007.
OBJ_004_002 HA initial response dated 20 April 2007.
OBJ_004_003 HA full response dated 16 May 2007.
OBJ_004_004 NGG request for HA to pay NGG legal costs dated 25 May 2007.
OBJ_004_005 HA confirmation dated 20 June 2007.
OBJ_004_006 HA correspondence dated 15 October 2007.
OBJ_004_007 NGG return of the HA's pro-forma dated 19 October 2007.
OBJ_004_008 Proforma from NGG dated 19 October 2007.
OBJ_004_009 HA letter enclosing draft agreement dated 4 December 2007.
OBJ_004_010 Letter to HA from NGG dated 18 December 2007.

Objector 6, Mr A Pibworth

OBJ_006_001 Letter from Mr Pibworth dated 2 May 2007.

- OBJ_006_002 HA acknowledgement dated 31 May 2007.
- OBJ_006_003 HA full response dated 26 June 2007.
- OBJ_006_004 Letter from Mr Pibworth dated 16 August 2007.
- OBJ_006_005 HA full response dated 4 September 2007.

Objector 7, Miss F Longmuir

- OBJ_007_001 Letter from Francesca Longmuir (undated).
- OBJ_007_001 Letter from HA to Miss Longmuir dated 7 June 2007.

Objector 8, TK Maxx

- OBJ_008_001 Letter from T K Maxx dated 1 June 2007.
- OBJ_008_002 Letter from HA to T K Maxx dated 4 June 2007.
- OBJ_008_003 Letter from HA to T K Maxx dated 26 June 2007.

Objector 9, Marston Moretaine Parish Council as Trustees of land managed by Marston Moretaine Playing Field Management Committee

- OBJ_009_001 Letter from MMPC to HA dated 4 June 2007.
- OBJ_009_002 Letter from MMPC to HA dated 5 June 2007.
- OBJ_009_003 Letter from HA to MMPC dated 6 June 2007.
- OBJ_009_004 Email from Parish Clerk MMPC to HA dated 29 June 2007.
- OBJ_009_005 Letter from HA to MMPC dated 6 August 2007.
- OBJ_009_006 Proforma from MMPC dated 16 August 2007.
- OBJ_009_007 Letter from MMPC to HA dated 4 September 2007.
- OBJ_009_008 Letter from HA to MMPC dated 10 September 2007.
- OBJ_009_009 Letter from HA to MMPC dated 15 October 2007.
- OBJ_009_010 Proforma from MMPC dated 31 October 2007
- OBJ_009_011 Letter from MMPC to HA dated 13 November 2007.

Objector 10, Mr D J Patterson

- OBJ_010_001 Letter to HA on behalf of Mr Patterson dated 6 June 2007.
- OBJ_010_002 HA acknowledgement dated 7 June 2007.
- OBJ_010_003 Notes of Meeting dated 19 June 2007.
- OBJ_010_004 HA full response dated 17 July 2007.
- OBJ_010_005 Letter to HA on behalf of Mr Patterson dated 29 August 2007.
- OBJ_010_006 HA full response dated 10 September 2007.
- OBJ_010_007 Letter to HA on behalf of Mr Patterson dated 3 October 2007.

Objector 11, Mr A Parrish

- OBJ_011_001 Letter to HA on behalf of Mr Parrish dated 6 June 2007.
- OBJ_011_002 HA acknowledgement dated 7 June 2007.
- OBJ_011_003 Notes of Meeting dated 19 June 2007.
- OBJ_011_004 HA full response dated 13 July 2007.
- OBJ_011_005 Notes of Meeting between HA and Wood End residents dated 4 September 2007.
- OBJ_011_005A Notes of Meeting dated 11 September 2007.
- OBJ_011_006 HA full response dated 24 September 2007.
- OBJ_011_007 Letter on behalf of Mr Parrish dated 3 October 2007.

Objector 12, Mr D Cheseldine

- OBJ_012_001 Mr Cheseldine's email to HA dated 13 June 2007.
- OBJ_012_002 HA's letter dated 14 June 2007.
- OBJ_012_003 Mr Cheseldine's email to HA dated 27 July 2007.
- OBJ_012_004 HA's email dated 27 July 2007.
- OBJ_012_005 Mr Cheseldine's email to HA dated 15 October 2007.
- OBJ_012_006 HA's letter dated 27 July 2007.

Objector 15, Bedford and Milton Keynes Waterway Trust (was Rep 005)

REP_005_001 Request under Freedom of Information Act 2000, dated 9 March 2007.
REP_005_002 Letter from HA dated 30 March 2007.
REP_005_003 Letter dated 19 April 2007.
OBJ_015_001 Letter from BMKWT to HA with objection dated 9 June 2007.
OBJ_015_002 Letter from HA to BMKWT dated 22 June 2007.
OBJ_015_003 Letter from Woodfines Solicitors to HA dated 25 June 2007.
OBJ_015_004 Letter from HA to BMKWT dated 28 June 2007.
OBJ_015_005 Email from BMKWT dated 17 October 2007.
OBJ_015_006 Email to the HA dated 13 December 2007.
OBJ_015_007 HA letter in response dated 13 December 2007.
OBJ_015_008 Email to the HA dated 17 December 2007.
OBJ_015_009 Email from HA dated 18 December 2007.

Objector 16, Mrs M M E L Poole

OBJ_016_001 Letter from Mrs Poole received 25 June 2007.
OBJ_016_002 Letter from HA dated 25 June 2007.
OBJ_016_003 Letter from HA to the Pooles dated 28 June 2007.
OBJ_016_004 Letter from Faulkners dated 2 August 2007.
OBJ_016_005 Letter from HA to Faulkners dated 7 August 2007.
OBJ_016_006 Letter from Faulkners to HA dated 19 September 2007.
OBJ_016_007 Letter from HA to Faulkners dated 21 September 2007.
OBJ_016_008 Letter from HA dated 15 October 2007.
OBJ_016_009 Email from Faulkners to HA dated 18 October 2007.
OBJ_016_010 Proforma from Mrs Poole dated 17 October 2007

Objector 17, Mr A Owen

OBJ_017_001 Warmingtons' letter to HA dated 22 June 2007.
OBJ_017_002 HA's initial response dated 25 June 2007.
OBJ_017_003 HA's full response dated 16 July 2007.
OBJ_017_004 Warmingtons' letter to HA dated 31 July 2007.
OBJ_017_005 HA's letter dated 3 August 2007.
OBJ_017_006 HA's second full response dated 23 August 2007.
OBJ_017_007 Warmington's letter to HA dated 11 September 2007.
OBJ_017_008 HA's letter dated 24 September 2007.
OBJ_017_009 HA's letter dated 15 October 2007.
OBJ_017_010 Public Inquiry form from Warmingtons dated 17 October 2007.
OBJ_017_011 Warmington's letter dated 9 November 2007.
OBJ_017_012 Letter in response to HA's rebuttal dated 2 January 2008.
OBJ_017_013 HA letter to Warmingtons dated 31 January 2008.

Objector 18, Mr M Brookes

OBJ_018_001 E-mail from Mr Brookes dated 25 June 2007.
OBJ_018_002 Letter to Mr Brookes dated 25 June 2007 from HA.
OBJ_018_003 Letter from HA to Mr Brookes dated 27 July 2007.
OBJ_018_004 Note from Mr Brookes dated 19 November 2007.

Objector 19, Kleinwort Benson (Jersey) Trustees Ltd.; Kleinwort Benson (Channel Islands) Corporate Services; Standard Life Investment Funds Ltd., the IRP owners

OBJ_019_001 Objection letter dated 25 June 2007.
OBJ_019_002 HA receipt of Objection letter dated 26 June 2007.
OBJ_019_003 HA letter dated 27 June 2007.
OBJ_019_004 HA letter with extra info as requested dated 6 August 2007.
OBJ_019_005 Addleshaw Goddard letter dated 19 September 2007.

OBJ_019_006 HA letter, re: Traffic Model dated 26 September.
OBJ_019_007 Addleshaw Goddard letter dated 2 October 2007.
OBJ_019_008 HA receipt of letter dated 9 October.
OBJ_019_009 Addleshaw Goddard letter dated 19 October 2007.
OBJ_019_010 Addleshaw Goddard letter dated 25 October 2007.
OBJ_019_011 Addleshaw Goddard letter dated 5 November 2007.
OBJ_019_012 HA letter dated 7 November 2007.
OBJ_019_013 Email from WSP with drawings dated 8 November 2007.
OBJ_019_014 Addleshaw Goddard letter dated 4 December 2007.

Objector 20, Marston Moretaine Parish Council

OBJ_020_001 Mr Garner's letter to HA dated 24 June 2007.
OBJ_020_002 HA's initial response dated 26 June 2007.
OBJ_020_003 HA's full response dated 18 July 2007.
OBJ_020_004 HA's letter dated 15 October 2007.
OBJ_020_005 Mr Garner's full email dated 22 October 2007.
OBJ_020_006 Mr Garner's letter dated 12 November 2007.

Objector 21, Ms M Ball

OBJ_021_001 Ms Ball's letter dated 24 June 2007.
OBJ_021_002 HA initial response dated 26 June 2007.
OBJ_021_003 HA full response dated 18 July 2007.
OBJ_021_004 Ms Ball's objection form received 3 September 2007.

Objector 26, Ms R Buckley

OBJ_026_001 Letter from Ms Buckley dated 23 June 2007.
OBJ_026_002 Letter from HA to Ms Buckley dated 27 June 2007.
OBJ_026_003 Letter from HA to Ms Buckley dated 12 July 2007.
OBJ_026_004 Form issued by Ms Buckley on 6 August 2007.
OBJ_026_005 Minutes of the Public Meeting with Wood End Residents on 4 September 2007.

Objector 27, Mr E Dudose

OBJ_027_001 Letter to HA from Mr Dudose dated 23 June 2007.
OBJ_027_002 Letter from HA to Mr Dudose dated 27 June 2007.
OBJ_027_003 Letter from HA to Mr Dudose dated 12 July 2007.
OBJ_027_004 Form issued by Mr Dudose on 6 August 2007.
OBJ_027_005 Minutes of the Public Meeting with Wood End Residents on 4 September 2007.

Objector 28, Marston Car Accident Repairs

OBJ_028_001 Letter to HA from Mr Librowski dated 23 June 2007.
OBJ_028_002 Letter from HA to Mr Librowski dated 27 June 2007.
OBJ_028_003 Letter from HA to Mr Librowski dated 12 July 2007.
OBJ_028_004 Form issued by Mr Librowski on 6 August 2007.
OBJ_028_005 Minutes of the Public Meeting with Wood End Residents on 4 September 2007.

Objector 29, M J Motors

OBJ_029_001 Letter to HA from Mr Dudoic dated 23 June 2007.
OBJ_029_002 Letter from HA to Mr Dudoic dated 27 June 2007.
OBJ_029_003 Letter from HA to Mr Dudoic dated 12 July 2007.
OBJ_029_004 Form issued by Mr Dudoic on 6 August 2007.
OBJ_029_005 Minutes of the Public Meeting with Wood End Residents on 4 September 2007

Objector 30, Mr C Seamark

OBJ_030_001 Letter to HA from Mr Seamark dated 23 June 2007.
OBJ_030_002 Letter from HA to Mr Seamark dated 27 June 2007.
OBJ_030_003 Letter from HA to Mr Seamark dated 12 July 2007.
OBJ_030_004 Form issued by Mr Seamark on 6 August 2007.
OBJ_030_005 Minutes of the Public Meeting with Wood End Residents on 4 September 2007.

Objector 34, The Occupier Rose Cottage (1)

OBJ_034_001 Letter to HA from Mr K Tracey dated 23 June 2007.
OBJ_034_002 Letter from HA to Mr K Tracey dated 27 June 2007.
OBJ_034_003 Letter from HA to Mr K Tracey dated 12 July 2007.
OBJ_034_004 Form issued by Mr K Tracey on 6 August 2007.
OBJ_034_005 Minutes of the Public Meeting with Wood End Residents on 4 September 2007.

Objector 35, Mr A Macrae

OBJ_035_001 Letter to HA from Mr Macrae dated 23 June 2007.
OBJ_035_002 Letter from HA to Mr Macrae dated 27 June 2007.
OBJ_035_003 Letter from HA to Mr Macrae dated 12 July 2007.
OBJ_035_004 Form issued by Mr Macrae on 5 August 2007.
OBJ_035_005 Minutes of the Public Meeting with Wood End Residents on 4 September 2007.

Objector 36, The Occupier Rose Cottage (2)

OBJ_036_001 Letter to HA from Mrs Tracey dated 23 June 2007.
OBJ_036_002 Letter from HA to Mrs Tracey dated 27 June 2007.
OBJ_036_003 Letter from HA to Mrs Tracey dated 12 July 2007.
OBJ_036_004 Form issued by Mrs Tracey on 6 August 2007.
OBJ_036_005 Minutes of the Public Meeting with Wood End Residents on 4 September 2007.

Objector 38, Mr A Evans and Son

OBJ_038_001 Notes of meeting of 13 June 2007 between Messrs P and A Evans, and the HA.
OBJ_038_002 Letter from Balfour Beatty to Messrs P and A Evans dated 22 June 2007.
OBJ_038_003 Letter from Mr Andrew Evans dated 25 June 2007.
OBJ_038_004 Letter from HA to Mr A Evans dated 27 June 2007.
OBJ_038_005 Email from Mr A Evans to HA dated 28 June 2007.
OBJ_038_006 Email from HA to Mr A Evans dated 29 June 2007.
OBJ_038_007 Letter from HA to Mr A Evans dated 9 July 2007.
OBJ_038_008 Letter from Mr J Paynter of John Drake & Co, land agent to Messrs Evans dated 10 August 2007.
OBJ_038_009 Letter from Mr J Paynter dated 2 October 2007.
OBJ_038_010 Letter from HA to Mr J Paynter dated 22 October 2007.
OBJ_038_011 Enclosures omitted from letter issued on 26 October 2007
OBJ_038_012 Letter from HA dated 15 October 2007.
OBJ_038_013 Letter from John Drake & Co dated 23 October 2007.
OBJ_038_014 Record of telephone conversation between Mr J Paynter and Ms A Taylor of Balfour Beatty dated 30 October 2007.
OBJ_038_015 Email from URS dated 12 November 2007.
OBJ_038_016 Letter from BCC to HA dated 23 November 2007.
OBJ_016_017 Email to HA from BCC dated 19 December.

Objector 39, SCS Property Development Ltd.

OBJ_039_001 Letter to HA from SCS Ltd dated 26 June 2007.

OBJ_039_002 Letter from HA to Mr Foster dated 27 June 2007.
OBJ_039_003 Letter from HA to Mr Foster dated 17 July 2007.
OBJ_039_004 Letter from HA to Mr Foster dated 15 October 2007.
OBJ_039_005 Form on behalf of SCS Ltd dated 24 October 2007.

Objector 43, Matalan PLC

OBJ_043_001 Letter to HA on behalf of Matalan PLC dated 26 June 2007.
OBJ_043_002 Letter from HA to Mr Cheadle dated 27 June 2007.
OBJ_043_003 Letter to HA on behalf of Matalan PLC dated 26 June 2007.
OBJ_043_004 Letter from HA to Mr Cheadle dated 13 July 2007.
OBJ_043_005 Letter from HA to Mr Cheadle dated 15 October 2007.
OBJ_043_006 Form to HA on behalf of Matalan PLC dated 23 October 2007.
OBJ_043_007 Letter on behalf of Matalan PLC dated 19 October 2007.

Objector 44, Mr P and Mrs G Baird

OBJ_044_001 Letter from Mr and Mrs Baird received on the 27 June 2007.
OBJ_044_002 Letter from HA to Mr and Mrs Baird dated 28 June 2007.
OBJ_044_003 Letter from HA to Mr and Mrs Baird dated 2 August 2007.
OBJ_044_004 HA letter to Objectors dated 15 October 2007.
OBJ_044_005 Proforma from Mr and Mrs Baird dated 20 October 2007.

Objector 45, Mrs B Jackson

OBJ_045_001 Mrs Jackson's letter to HA, dated 28 June 2007.
OBJ_045_002 HA's initial response dated 28 June 2007.
OBJ_045_003 HA's full response dated 18 July 2007.

Objector 46, Lidlington Parish Council

OBJ_046_001 LPC's letter to HA dated 27 June 2007.
OBJ_046_002 HA's initial response letter dated 28 June 2007
OBJ_046_003 HA's, full response letter dated 6 July 2007
OBJ_046_004 LPC's letter to HA dated 10 August 2007
OBJ_046_005 LPC's form withdrawing objection dated 30 August 2007
OBJ_046_006 HA's letter dated 15 October 2007
OBJ_046_007 LPC's letter to HA reinstating objection dated 12 October 2007.
OBJ_046_008 LPC's Inquiry form dated 24 October 2007.
OBJ_046_009 LPC's email to HA dated 12 November 2007.

Objector 53, Pets At Home Ltd.

OBJ_053_001 Letter on behalf of Pets at Home Ltd. dated 28 June 2007.
OBJ_053_002 Letter from HA to Mr Ellison dated 28 June 2007.
OBJ_053_003 Letter from HA to Mr Ellison dated 13 July 2007.

Objector 55, Mrs C Delafuente

OBJ_055_001 Mrs Delafuente's letter dated 7 June 2007
OBJ_055_002 HA initial response dated 28 June 2007
OBJ_055_003 HA full response dated 18 July 2007.

Objector 56, Mr M and Mrs C Hawkes

OBJ_056_001 Mr and Mrs Hawkes' letter, dated 26 June 2007.
OBJ_056_002 HA initial response, dated 28 June 2007.
OBJ_056_003 HA full response, dated 18 July 2007.
OBJ_056_004 HA form regarding PI attendance dated 31 July 2007.
OBJ_056_005 Mr and Mrs Hawkes' form to HA dated 24 October 2007

Objector 57, M Blake

OBJ_057_001 M Blake's letter dated 7 June 2007.
OBJ_057_002 HA initial response dated 28 June 2007.

OBJ_057_003 HA full response dated 18 July 2007.
OBJ_057_004 M Blake's form dated 2 August 2007.
OBJ_057_005 HA form to M Blake dated 31 July 2007.
OBJ_057_006 M Blake's form dated 17 October 2007.

Objector 58, St. John the Baptist College

OBJ_058_001 Letter on behalf of St John the Baptist College dated 26 June 2007.
OBJ_058_002 Letter from HA to Savills dated 28 June 2007.
OBJ_058_003 Letter from HA to Savills dated 20 July 2007.
OBJ_058_004 Letter from HA to Savills dated 24 July 2007.
OBJ_058_005 Letter from HA dated 12 October 2007.
OBJ_058_006 Letter from Savills to HA dated 17 October 2007.
OBJ_058_007 Letter from Savills to HA dated 30 November 2007.

Objector 59, Staples

OBJ_059_001 Letter to HA on behalf of Staples UK Ltd. dated 28 June 2007.
OBJ_059_002 Letter from HA to Mr Smalley dated 29 June 2007.
OBJ_059_003 Letter from HA to Mr Smalley dated 13 July 2007.
OBJ_059_004 Letter to HA from Mr Smalley dated 6 September 2007.
OBJ_059_005 Letter from HA to Mr Smalley dated 15 October 2007.
OBJ_059_006 Letter to HA 2007 from Mr Smalley dated 25 October.

Objector 60, Brantano (UK) Ltd.

OBJ_060_001 E-mail to HA from Brantano (UK) Ltd. dated 28 June 2007.
OBJ_060_002 Letter from HA to Ms Essen dated 29 June 2007.
OBJ_060_003 E-mail to HA from Ms H Essen dated 29 June 2007.
OBJ_060_004 Letter from HA to Ms Essen dated 16 July 2007.
OBJ_060_005 Letter to HA dated 30 August 2007.

Objector 61, Mr A J and Mrs N F Yeowell

OBJ_061_001 Mr and Mrs Yeowell's letter dated 7 June 2007.
OBJ_061_002 HA initial response dated 2 July 2007.
OBJ_061_003 HA full response dated 18 July 2007.
OBJ_061_004 Mr and Mrs Yeowell's objection form dated 27 August 2007.
OBJ_061_005 HA response to Mr and Mrs Yeowell dated 25 September 2007.

Objector 62, The Occupiers of 2 Horseshoe Close

OBJ_062_001 The Occupier of 2 Horseshoe Close's letter dated 7 June 2007.
OBJ_062_002 HA initial response dated 2 July 2007.
OBJ_062_003 HA full response dated 18 July 2007.

Objector 63, Mr S Lonsdale

OBJ_063_001 Mr Lonsdale's letter dated 28 June 2007.
OBJ_063_002 HA initial response dated 2 July 2007.
OBJ_063_003 HA full response, dated 18 July 2007.
OBJ_063_004 Mr Lonsdale's objection form, received 8 August 2007.

Objector 64, Mr A Talbot (was Rep 023)

REP_023_001 Letter from Mr Talbot to HA dated 17 June 2007.
REP_023_002 HA letter to Mr Talbot dated 19 June 2007.
REP_023_003 HA full response to Mr Talbot dated 12 July 2007.
OBJ_064_001 Proforma returned to HA by Mr Talbot dated 7 August 2007.
OBJ_064_002 HA response dated 26 September 2007.
OBJ_064_003 Letter from Mr Talbot to HA dated 4 October 2007.
OBJ_064_004 HA letter to Objectors dated 15 October 2007.
OBJ_064_005 Email from Mr Talbot to HA dated 22 October 2007.

OBJ_064_006 Copy of Letter sent to BCC dated 22 October 2007.

Objector 65, Whitbread Harrowden Settlement (was Rep 004)

REP_004_001 Letter to HA from the Southill Estate dated 27 March 2007.
REP_004_002 HA initial response dated 27 March 2007.
REP_004_003 HA letter to the Southill Estate dated 01 August 2007.
REP_004_004 Letter from the Southill Estate dated 13 August 2007.
REP_004_005 HA email to The Southill Estate dated 14 August 2007.
OBJ_065_001 The Southill Estate letter to the HA dated 18 September 2007.
OBJ_065_002 HA letter to the Southill Estate dated 25 September 2007.
OBJ_065_003 HA letter to the Southill Estate dated 15 October 2007.
OBJ_065_004 Email from the Southill Estate dated 17 October 2007 to the HA.
OBJ_065_005 The Southill Estate pro-forma dated 01 November 2007 to the HA.

Objector 66, Mr K Revill (was Rep 012)

REP_012_001 Letter to the HA from Mr Revill dated 17 April 2007.
REP_012_002 HA acknowledgement dated 18 April 2007.
REP_012_003 Letter from Mr Revill dated 5 June 2007 to the HA.
REP_012_004 HA acknowledgement dated 8 June 2007
REP_012_005 HA full response dated 6 July 2007.
REP_012_006 Returned pro forma from Mr Revill dated 1 September 2007.
OBJ_066_001 Emailed from Mr Revill dated 30 September 2007 to the HA.
OBJ_066_002 Hard copy of letter received 2 October 2007.

Objector 67, The Cycling Touring Club Right to Ride Network (was Rep 002)

REP_002_001 Email to HA from Mr Sprod received on the 23 March 2007
REP_002_002 Letter 2007 from HA to Mr Sprod dated 26 March.
REP_002_003 Response from HA to Mr Sprod's dated 27 March 2007.
REP_002_004 Email to the HA from Mr Sprod received on the 28 March 2007.
REP_002_005 Full response from HA to Mr Sprod's email dated 29 March 2007.
REP_002_006 Letter from HA to Mr Sprod dated 22 June 2007.
REP_002_007 Letter from Mr Sprod dated 25 June 2007.
REP_002_008 Response from HA to Mr Sprod's letter dated 2 August 2007.
OBJ_067_001 Letter from Mr Sprod dated 4 September 2007.
OBJ_067_002 HA letter to Objectors dated 15 October 2007.
OBJ_067_003 Email from Mr Sprod to HA dated 16 October 2007.
OBJ_067_004 Email from HA to Mr Sprod dated 17 October 2007.
OBJ_067_005 Returned pro forma from Mr Sprod to HA dated 21 October 2007.

Objector 68, Mr K Burke (was Rep 016)

REP_016_001 Letter to HA from Mr and Mrs Burke received on the 4 May 2007.
REP_016_002 Letter from HA to Mr and Mrs Burke dated 9 May 2007.
REP_016_003 Letter from HA to Mr and Mrs Burke dated 28 June 2007.
REP_016_004 Letter to HA from Mr and Mrs Burke dated 17 July 2007.
REP_016_005 Letter from HA to Mr and Mrs Burke. dated 26 July 2007.
REP_016_006 Letter to HA from HA to Mr and Mrs Burke dated 6 August 2007.
REP_016_007 Letter to ha from Mr and Mrs Burke dated 6 September 2007.
OBJ_068_001 Letter from HA to Mr and Mrs Burke dated 9 October 2007.

Objector 69, Mrs R Persaud (was Rep 019)

REP_019_001 Email TO HA from Mrs Persaud dated 8 June 2007.
REP_019_002 HA letter to Mrs Persaud dated 11 June 2007.
REP_019_003 Email from MKC in response to points raised by Mrs Persaud.
REP_019_004 HA response to Mrs Persaud dated 12 July 2007.
REP_019_005 HA letter to Objectors dated 12 October 2007.

REP_019_006 Proforma to HA from Mrs Persaud dated 16 October 2007.

Objector 70, Ms L Mackenzie and Mr M Goode (was Rep 037)

REP_037_001 Letter from Ms Mackenzie and Mr Goode to the HA dated 28 June 2007.

REP_037_002 Letter from HA to Ms Mackenzie and Mr Goode dated 28 June 2007.

REP_037_003 Response from HA to Ms Mackenzie and Mr Goode dated 9 July 2007.

REP_037_004 Letter from Kirkby and Diamond to HA dated 8 October 2007.

REP_037_005 Letter from HA dated 12 October 2007.

OBJ_070_001 Letter to HA from K&D dated 17 October 2007.

OBJ_070_002 Letter from HA to Ms Mackenzie and Mr Goode dated 24 October 2007.

OBJ_070_003 Letter from HA to K&D dated 25 October 2007.

Objector 71, The Trustees of Husborne Crawley Charities (was Rep 011)

REP_011_001 Letter from Mr Payne on behalf of Mr C T Lousada Chairman of Husborne Crawley Charity dated 17 April 2007.

REP_011_002 HA acknowledgement dated 18 April 2007.

REP_011_003 Letter from Mr Payne dated 16 May 2007.

REP_011_004 HA full response dated 24 May 2007.

REP_011_005 Letter from Mr Payne dated 18 September 2007.

REP_011_006 HA letter to Objectors dated 12 October 2007.

REP_011_007 Email from Mr Payne dated 18 October 2007.

OBJ_071_001 HA response to dated 7 November 2007.

Objector 72, Bedfordshire Rights of Way Association (was Rep 035)

REP_035_001 BRWA's letter to HA dated 22 June 2007.

REP_035_002 HA's letter to BRWA dated 25 June 2007.

REP_035_003 HA's letter to BRWA dated 6 July 2007.

REP_035_004 BRWA's letter to HA dated 11 September 2007

REP_035_005 HA's letter to BRWA dated 14 September 2007

REP_035_006 HA's letter to BRWA dated 12 October 2007

REP_035_007 BRWA's form dated 17 October 2007

Objector 73, Bedfordshire County Council (was Rep 036)

REP_036_001 Letter to HA from BCC dated 26 June 2007.

REP_036_002 HA acknowledgement letter dated 28 June 2007.

REP_036_003 HA response to BCC dated 6 August 2007.

REP_036_004 HA letter to Objectors dated 12 October 2007.

REP_036_005 Email to HA from BCC dated 19 October 2007.

REP_036_006 HA letter to BCC dated 22 October 2007.

OBJ_073_001 Letter to HA from BCC dated 19 October 2007.

OBJ_073_002 Email from Hyder to BCC dated 18 October 2007.

OBJ_073_003 Email from MKC to HA dated 1 November 2007.

OBJ_073_004 Letter from HA to BCC dated 1 November 2007.

OBJ_073_005 Email from Hyder to BCC dated 14 November 2007.

OBJ_073_006 Letter to PO from BCC dated 13 November 2007.

OBJ_073_007 Letter from HA to BCC dated 14 November 2007.

OBJ_073_008 Email from Scott Wilson to BCC dated 6 November 2007.

OBJ_073_009 Email from Hyder to BCC dated 22 November 2007.

OBJ_073_010 Email to Hyder from BCC dated 20 November 2007.

OBJ_073_011 Email from Hyder to BCC dated 22 November 2007.

OBJ_073_012 Email from BCC to Hyder dated 22 November 2007.

OBJ_073_013 Letter to the HA from the BCC dated 23 November 2007.

Objector 74, Miss D M J Smith

LOBJ_002_001 Letter to HA from Miss Smith dated 24 July 2007.
LOBJ_002_002 HA acknowledgement dated 27 July 2007.
LOBJ_002_003 HA letter to Miss Smith dated 30 July 2007.
LOBJ_002_004 Miss Smith's reply dated 31 August 2007.
LOBJ_002_005 HA reply dated 25 September 2007.
OBJ_074_001 Undated letter to PO maintaining objection.

Objector 75, Mr and Mrs R Weston (was Rep 006)

REP_006_001 Fax from Mr Mavro dated 30 March 2007.
REP_006_002 HA acknowledgement dated 30 March 2007.
REP_006_003 HA letter to Mr Mavro dated 19 April 2007.
REP_006_004 HA letter to Mr Mavro dated 2 May 2007.
REP_006_005 Fax to HA from Mr Mavro dated 10 May 2007.
REP_006_006 HA acknowledgement dated 10 May 2007.
REP_006_007 Fax to HA from Mr Mavro dated 22 May 2007.
REP_006_008 HA acknowledgement dated 22 May 2007.
REP_006_009 Minutes of residents meeting dated 21 May 2007.
REP_006_010 Fax to HA from Mr Mavro dated 8 June 2007.
REP_006_011 Signed letter from affected residents dated 12 June 2007.
REP_006_012 HA response dated 22 June 2007.
REP_006_013 Letter to HA from Mr Mavro dated 25 June 2007.
OBJ_075_001 Letter to HA from Mr Mavro dated 5 November 2007.

Objector 76, Mr C Le Boutillier (was Rep 007)

REP_007_001 Mr Le Boutillier's email to HA dated 1 April 2007.
REP_007_002 HA response dated 3 April 2007.
REP_007_003 HA response dated 16 May 2007
REP_007_004 Notes of noise site visit dated 15 June 2007
REP_007_005 HA's letter to Mr Le Boutillier dated 6 July 2007.
REP_007_006 Notes of meeting with Wood End objectors, 4 September 2007.
REP_007_007 Mr Le Boutillier's objection form, received 3 October 2007
OBJ_076_001 HA's letter to Mr Le Boutillier dated 15 November 2007

Objector 77, Mr T and Mrs L Smith (was Rep 008)

REP_008_001 Letter to the HA from Mr E Briggs of Faulkners dated 2 April 2007.
REP_008_002 Letter from HA to Faulkners dated 4 April 2007.
REP_008_003 Letter from HA to Faulkners dated 16 April 2007.
REP_008_004 Email from Faulkners to HA dated 24 April 2007.
REP_008_005 Letter from HA to Faulkners dated 1 May 2007.
REP_008_006 Letter from Faulkners to HA dated 3 May 2007.
REP_008_007 Letter from HA to Faulkners dated 16 May 2007.
REP_008_008 Letter from Faulkners to HA dated 21 May 2007.
REP_008_009 Letter from HA to Faulkners dated 18 June 2007.

Objector 80, Fujifilm UK Ltd. (was Rep 014)

REP_014_001 Letter to HA on behalf of Fujifilm UK Ltd. dated 20 April 2007.
REP_014_002 Letter from HA to Mr Cox dated 23 April 2007.
REP_014_003 Letter from HA to Mr Cox dated 25 May 2007.

Objector 81, The Ramblers Association (was Rep 020)

REP_020_001 Letter from Ramblers' Association to HA dated 9 June 2007.
REP_020_002 Letter from HA to Ramblers' Association dated 11 June 2007.
REP_020_003 Letter from HA to Ramblers' Association dated 20 June 2007.

REP_020_004 Proforma confirming support dated 15 August 2007.

Objector 83, Ms C McArthur (was Rep 025)

REP_025_001 Letter to HA from Ms McArthur received 20 June 2007.
REP_025_002 HA acknowledgement dated 20 June 2007.
REP_025_003 HA response dated 12 July 2007.
REP_025_004 Letter to HA from Ms McArthur dated 30 August 2007.
REP_025_005 HA response dated 24 September 2007
REP_025_006 Letter to HA from Ms McArthur dated 27 September 2007.

Objector 84, Mr P H Vintner (was Rep 026)

REP_026_001 Letter to HA from Mr Vintner dated 19 June 2007.
REP_026_002 HA acknowledgement dated 20 June 2007.
REP_026_003 HA response dated 12 July 2007.

Objector 85, Milton Keynes Council (was Rep 027)

REP_027_001 Letter to HA from MKC dated 22 June 2007.
REP_027_002 HA acknowledgement dated 25 June 2007.
REP_027_003 HA full response dated 2 August 2007.
REP_027_004 Email from MKC dated 9 October 2007.
OBJ_085_001 Email to HA from MKC dated 1 November 2007.
OBJ_085_002 Letter to HA from MKC dated 9 November 2007.
OBJ_085_003 Email from HA to BCC dated 14 November 2007.
OBJ_085_004 Email to MKC from DfT dated 14 November 2007.
OBJ_085_005 Emails dated between HA and MKC dated 15 November 2007

Objector 86, Bedfordshire County Council Rights of Way (was Rep 030)

REP_030_001 Letter to HA from BCC (RoW) dated 18 June 2007.
REP_030_002 Response from HA to BCC (RoW) Officer dated 22 June 2007.
REP_030_003 Proforma to HA from BCC (RoW) dated 6 August 2007.

Objector 87, Mr P O'Neill (was Rep 031)

REP_031_001 Letter to HA from Mr O'Neill received 22 June 2007.
REP_031_002 HA acknowledgement dated 22 June 2007.
REP_031_003 HA response dated 12 July 2007.

Objector 88, The Woodland Trust (was Rep 032)

REP_032_001 Letter to HA from WT dated 21 June 2007.
REP_032_002 Letter from HA to WT dated 25 June 2007.
REP_032_003 Response from HA to WT dated 2 August 2007.
REP_032_004 Letter from WT to HA dated 10 August 2007.
REP_032_005 Letter from HA to WT dated 10 September 2007.
REP_032_006 Letter from WT to HA dated 1 October 2007.
REP_032_007 Email WT to HA dated 15 October 2007.

Objector 89, Anglian Water Services Ltd. (was Rep 033)

REP_033_001 Letter to HA from Savills dated 22 June 2007.
REP_033_002 HA response dated 25 June 2007.
REP_033_003 HA response dated 4 July 2007.
REP_033_004 HA letter to Savilles dated 12 October 2007.

Objector 90, The Milton Keynes Partnership (was Rep 034)

REP_034_001 Letter from MK Partnership dated 20 June 2007.
REP_034_002 HA acknowledgement 25 June 2007.
REP_034_003 HA response to MK Partnership dated 2 August 2007.
REP_034_004 Email to HA from MKC dated 9 October 2007.
REP_034_005 Letter to MK Partnership from HA dated 12 October 2007.

REP_034_006 Email to HA from English Partnerships dated 23 October 2007.
OBJ_090_001 Email to HA from MKC dated 1 November 2007.
OBJ_090_002 Email from HA to BCC dated 14 November 2007.
OBJ_090_003 Email to MKC from DfT dated 15 November 2007.
OBJ_090_004 Emails between HA and Brian MKC dated 15 November 2007

Objector 92, The British Horse Society (was Rep 039)

REP_039_001 Letter to HA from BHS dated 27 June 2007.
REP_039_002 Letter from HA to BHS dated 29 June 2007.
REP_039_003 Letter from HA to BHS dated 2 August 2007.
REP_039_004 Email from HA to BHS dated 15 August 2007.
REP_039_005 Letter from HA to BHS dated 10 September 2007.
REP_039_006 Letter from HA from HA to all objectors dated 12 October 2007.
REP_039_007 Email from BHS to HA dated 17 October 2007.

Objector 93, English Heritage (was Rep 040)

REP_040_001 English Heritage's letter to HA dated 28 June 2007.
REP_040_002 HA initial response dated 29 June 2007.
REP_040_003 HA full response dated 6 July 2007.

Objector 94, Mr J Barrett (was late Rep 002)

LREP_002_001 E-mails to HA from Mr Barrett dated 23 July 2007 and HA's partial response dated 24 July 2007.
LREP_002_002 HA full response to Mr Barrett dated 6 August 2007.

Objector 95, Mr Tong Lee (was late Rep 003)

LREP_003_001 Mr Tong Lee's email to HA dated 29 September 2007.
LREP_003_002 HA initial response dated 1 October 2007.
LREP_003_003 HA full response dated 16 October 2007.
LREP_003_004 Email from Mr Tong Lee to HA dated 18 October 2007.

Objector 96, Alderforce Ltd. (KFC and Burger King) (was late Objector 001)

LOBJ_001_001 Letter to HA from KFC and Burger King dated 5 July 2007.
LOBJ_001_002 Letter from HA to Mr Capjon dated 6 July 2007.
LOBJ_001_003 Letter to Mr Capjon dated 16 July 2007.

Objector 97, Elstow Parish Council

OBJ_097 All the documents submitted by O97 were submitted during the inquiry and are referenced in the ID/O97/ series.

Objector 98, Mothercare

OBJ_098_001 Letter from Mothercare, with covering e-mail to the PO, copied to Addleshaw Goddard, Standard Life and the HA dated 3 December 2007.

Representation R19, Atkins Telecom

REP_019 Representation made during the Inquiry see Rep.19 file.

File of letters withdrawing objections and representations

Objector 5, Network Rail

O5/ 7 Letter withdrawing objection, 7 December 2007

Objector 13, Bedford Borough Council

O13/ 17 Email withdrawing objection, 30 November 2007

Objector 14, Old Road Securities (1) (Wootton Development)

O14/ 19 Letter withdrawing objection, 4 December 2007

Objector 22, Aspley Guise Parish Council

O22/ 3 Letter withdrawing objection, 13 February 2008

Objector 23, The Milton Keynes Consortium of Developers

O23/ 1 Letter withdrawing objection, 13 February 2008

Objector 24, S M Barton

O24/ 3 Letter withdrawing objection, 7 December 2007

Objector 25, Mrs B Golder

O25/ 2 Letter withdrawing objection, 18 October 2007

Objector 31, The Kennels

O31/ 2 Letter withdrawing objection, 6 August 2007

Objector 32, Country Kennels

O32/ 2 Letter withdrawing objection, 20 October 2007

Objector 33, J Lowe

O33/ 2 Letter withdrawing objection, 7 December 2007

Objector 37, Mark Howe

O37/ 8 Letter withdrawing objection, 21 October 2007

Objector 40, Woburn Estates Company

O40/ 6 Letter withdrawing objection, 18 October 2007

Objector 41, Sinnot and Partners

O41/ 4 Letter withdrawing objection, 19 October 2007

Objector 42, Marston Vale Trust

O42/ 6 Letter withdrawing objection, 18 October 2007

Objector 47, M J and D J Hassall

O47/ 4 Letter withdrawing objection, 24 October 2007

Objector 48, R Weston, V Lister and A Weston

O48/ 22 Letter withdrawing objection, 4 December 2007

Objector 49, R and J Weston

O49/ 17 Letter withdrawing objection, 4 December 2007

Objector 50, Old Road Securities (2)

O50/ 20 Letter withdrawing objection, 4 December 2007

Objector 51, Eagle Homes Ltd.

O51 18 Letter withdrawing objection, 4 December 2007

Objector 52, J Weston and A Weston (ORS)

O52/ 19 Letter withdrawing objection, 4 December 2007

Objector 54, The Occupier/ 7 Horseshoe Close

O54/ 2 Resident moved away, considered withdrawn

Objector 78, St Albans Diocese Board of Finance

O78/ 11 Letter withdrawing objection, 5 December 2007

Objector 79, Ms D Heath

O79/ 3 Letter withdrawing objection, 3 August 2007

Objector 82, Bedford Borough Council

O82/ 4 Letter withdrawing objection, 14 December 2007

Objector 91, St. James Property/Quickfire Ltd. (was Rep 38)

O91/ 8 Email withdrawing objection, 17 January 2008

Representation R3, Mr A Burt MP

R3/ 2 Email letter withdrawing representation, 24 October 2007

Representation R10, GVA Grimley

R10/ 1 Letter withdrawing representation, 5 September 2007

Representation R18, Total UK PLC

R18/ 1 Email withdrawing objection, 23 October 2007

APPENDIX C

The circumstances surrounding inquiry adjournments Nos.1 and 2

The events leading to adjournment No.1

1. Two Objectors who appeared at the inquiry, AGPC and the SEMKCD had particular concerns about the impact of M1 Junction 13 on the surrounding area and its ability to cope with traffic from planned growth in the region. Prior to the inquiry the SEMKCD had an on-going dialogue with the HA regarding traffic impacts in the Milton Keynes area to attempt to resolve SEMKCD's objection to the Scheme.
2. The HA was questioned on 5 December 2007 as to whether the ML growth scenario and its associated input to the traffic analyses of the cluster of junctions at M1 Junction 13 had regard to the land use allocations contained in the MKSMSRS. The acceptability of representing future growth at only current build rates, rather than at the growth rates predicted in the MKSMSRS, was also questioned.
3. Moreover, the capacity of M1 Junction 13 was questioned in relation to other emerging Spatial Strategies such as the EoEP and the SEoEP. It was recognised that the consultation period for the SoS's proposed changes to the EoEP had expired and that its publication was imminent. However, the SEoEP was at a much earlier stage in its evolution, with the Panel report on the Examination in Public of the draft Plan still being with the SoS, who had yet to consult on any proposed changes. As such, it was accepted that in carrying out any sensitivity testing, to determine highway capacity impacts, the EoEP should carry more weight than the SEoEP.
4. To address the above concerns, the HA carried out further studies. Having regard to what was, at that time, the projected close of the inquiry on 21 December 2007, the HA produced TN23 (ID/HA/110). This covered traffic and junction modelling matters and it was issued electronically on the evening 14 December 2008. Another note, TN22 (ID/HA/107), which was almost identical to TN23, was issued at the same time to SEMKCD. A further note on the relevance to the Scheme of Regional Planning Policy (ID/HA/116) was issued on 18 December 2007.
5. The HA pointed out that during the work undertaken to produce TN23, a specific problem had been encountered with the SATURN outputs used to assess additional growth at M1 Junction 13 in 2026 (ID/HA/110, paras. 4.1 – 4.5). Because these outputs were considered not to be credible further sensitivity testing had been undertaken using PARAMICS micro-simulation software (ID/HA/110, chapter 5).
6. The inquiry dealt exclusively with IRP issues on 18 and 19 December and an am peak hour site visit to IRP (Cowbridge Roundabout) took up part of 20 December 2007. During the remainder of 20 December the growth assumptions contained in TN23 and ID/HA/116 were challenged by AGPC. The method of allocating additional trips on to the SATURN model from previously unrepresented growth and the PARAMICS methodology adopted in the junction behaviour analysis at M1 Junction 13 was questioned by SEMKCD.
7. It was accepted by all the parties that the timing of the dualling of the

A421 to Milton Keynes and the benefits that this would bring to the overall performance of M1 Junction 13 was critical. However, concern was expressed that the junction modelling scenarios presented in TN23 contained no evidence on the conditions that might prevail between the time of the Scheme opening in 2011 and 2018, when it was expected that the A421 dualling would be in place. The prospect of un-quantified lengths of queuing on the M1 north-bound off-slip, as a result of possible congestion at the A507 and A421 Milton Keynes Roundabouts during the period when the A421 to Milton Keynes would still be single carriageway, was identified as a particular issue that needed to be addressed.

8. It was clear that any further work necessary to respond to all of the above issues could not be undertaken before the then projected close of the inquiry on 21 December 2007. Bearing in mind the forthcoming Christmas and New Year holidays, the HA suggested an adjournment (adjournment No.1) and projected that it could complete its further studies to meet a resumed inquiry date of 29 January 2008. This period would allow time for consultation with SEMKCD on the modelling methodology and with AGPC on housing growth issues.
9. It was agreed that the following tasks would be included in the further studies and that the results of this work would be issued before the resumption of the inquiry:
 - the HA would meet with AGPC to resolve any anomalies in the land use growth assumptions;
 - following that meeting the growth inputs to the traffic modelling would be altered if necessary, and the junctions would be checked for the full MKSMSRS growth, with additional sensitivity tests for the possible additional growth identified in the EoEP and the SEoEP;
 - the HA would re-examine its traffic forecasts for in and around Aspley Guise and compare these with the AGPC observed flows;
 - the HA would liaise with SEMKCD to agree a methodology for loading additional growth trips on to the traffic model and the methodology of further PARAMICS modelling should be subject to the agreement of SEMKCD;
 - the HA would undertake a capacity analysis to determine that, with the potential capacity enhancement measures available within the scope of the current draft Orders, M1 Junction 13 could cope in 2026 with the predicted extra growth;
 - the PARAMICS modelling undertaken in the preparation of TN23 would be subject to an independent audit; and
 - M1 Junction 13 modelling scenarios would be run for 2018, with the A421 to Milton Keynes remaining a single carriageway.
10. This further work resulted in the publication of TN25: M1 Junction 13 Sensitivity Tests (ID/HA/133) and TN24: Analysis of Aspley Guise Traffic Data (ID/HA/132). These documents were issued over the week-end of the 25, 26 and 27 January 2008 and were presented to the resumed inquiry on 29 January 2008.

The events leading to adjournment No.2

11. The contents of TN25 were challenged as it did not conclusively demonstrate that M1 Junction 13 could cope in 2026 with all of the growth identified in the MKSMSRS. AGPC expressed concern that their previously stated views on the allocation of housing had only been partially addressed. Furthermore AGPC expressed further concern that the downgrading of the A5130 in Milton Keynes, which had been omitted from the HA's modelling, could have an adverse impact on the capacity of M1 Junction 13. SEMKCD commented that, although the HA had identified a number of possible mitigation measures that would be available within the CPO in 2026, no analysis had been carried out to demonstrate that these measures either in total or in part would work.
12. The HA undertook to consider these observations and present further evidence by 31 January 2008. However the HA was only able to release TN29 (ID/HA/147) and TN32 (ID/HA/148) at 9.30pm on the 31st. When the inquiry resumed at 9.00am on 1 February 2008, the HA presented the contents of these two TNs.
13. Questioning identified still unresolved matters arising from TN29. AGPC expressed concern that the allocation of housing and the extent of network changes in the vicinity of Milton Keynes still had not been satisfactorily addressed. SEMKCD, who had liaised with the HA during Adjournment No. 1, wanted to have a better understanding of the methodology that had been adopted in transferring computer files from the Milton Keynes traffic model into the A421 model. Moreover, SEMKCD thought growth options in the SEoEP needed to be looked at more closely to reflect the intentions of PPS11. SEMKCD also observed that it was most unusual for the HA to bring a scheme to public inquiry with possible bolt-on mitigation options that might have to be implemented within the 15 year design life of the Scheme. Finally, AGPC and SEMKCD advised that their position could be prejudiced if they were not to be given more time to thoroughly consider their responses to TN29 and TN32.
14. The HA proposed a further inquiry adjournment (adjournment No. 2) and discussions ensued between the parties during an inquiry break, as to how long it would take to undertake additional consultation and further work. It was agreed that the HA would meet with AGPC and SEMKCD, produce a further note TN33 and come back to the inquiry to present it on Wednesday 13th February. The HA undertook to release TN33 by 8 February and in turn it was agreed that any responses or queries on TN33 would be issued by mid-day on 12 February. The HA released a draft of TN33 on 8 February and a complete version of TN33 was released on 11 February 2008 and this was presented to the resumed inquiry on 13 February 2008.
15. Following on from the presentation of TN33, AGPC confirmed withdrawal of its objection (ID/O22/3) having obtained the HA's agreement to provide a copy of the latest SATURN model runs and AADT information for traffic flows through Aspley Guise.
16. SEMKCD also withdrew its objection (ID/O23/1) having received the HA's acceptance of SEMKCD's summary of the outcome of TN33 as follows:
 - the contents of TN33 supersede those of TN29, including the

comments relating to the SEoEP in paras. 7.2 and 8.4. The assessments included in TN33 should be regarded as a 'worst case' situation;

- MOVA would be installed from the outset at all the signalised junctions at M1 Junction 13. MOVA would improve modelled capacities and would be expected to reduce overall delays at the junction by around 13%;
- the mitigation for Salford Road Junction, which has been included in Sections 6 and 8 of TN33, could be delivered within the land which would be available to the HA without modification to the draft Orders. If the SoS was to decide that the draft Orders be made, she would determine whether this mitigation measure should be provided as part of the Scheme;
- there are a number of other possible mitigation measures which have been identified by the HA (ID/HA/136 and 137) which could be delivered in engineering terms, within the current draft Orders. None of these mitigation measures would be incorporated into the Scheme at this stage but could be provided in later years should it be considered appropriate and should the necessary funding be available; and
- M1 Junction 13 would perform in a satisfactory manner and would not be a constraint on future development levels in and around Milton Keynes as currently envisaged up to and including 2026. This allows for the targeted housing numbers included within the MKSMSRS, the EoEP and the SEoEP.