The Planning Inspectorate

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

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an Inspector appointed by the Secretaries of State for Transport and Communities and Local Government

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HIGHWAYS ACT 1980

ACQUISITION OF LAND ACT 1981

The Oxfordshire County Council (A4095 Witney: Cogges Link Road Classified Road) (Side Roads) Order 2010

The Oxfordshire County Council (A4095 Witney: Cogges Link Road) Compulsory Purchase Order 2010

and

An application to the Secretary of State for Communities and Local Government to issue a Certificate Under Section 19(1)(a) of the Acquisition of Land Act 1981 that he is satisfied that there has or will be given exchange land for the order land.

Inquiries held on 20, 22, 23 & 27-30 September, 4-7, 11 & 12 October & 8-11 & 30 November 2011

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GLOSSARY

AADT	Annual Average Daily Traffic
AOD	Above Ordnance Datum
AQMA	Air Quality Monitoring Area
BAP	Biodiversity Action Plan
BCR	Benefit to Cost Ratio
CA	Conservation Area
Cd	Spill Coefficient
CIL	Community Infrastructure Levy Regulations 2010
CLR	Cogges Link Road
CPO	Compulsory Purchase Order
COBA	COst Benefit Assessment
CPRE	Campaign to Protect Rural England
CS	Core Strategy
DfT	Department for Transport
DIADEM	Dynamic Integrated Assignment and DEmand Modelling
DMRB	Design Manual for Road and Bridges
EA	Environment Agency
EPSL	European Protected Species Licence
EPUK	Environmental Protection UK
ES	Environmental Statement
FRA	Flood Risk Assessment
HA	Highways Agency
IAQM	Institute of Air Quality Management
LAQM	Local Air Quality Management
LEMS	Landscape and Ecological Mitigation Scheme
LOS	Level of Service
LP	Local Plan
LTP	Local Transport Plan
LVIA	Landscape and Visual Impact Assessment
MfS	Manual for Streets
MfS2	Manual for Streets 2
NAQO	National Air Quality Objective
NE	Natural England
NO_2	Nitrogen Dioxide
NO_x	Oxides of Nitrogen
NPPF	National Planning Policy Framework
NPV	Net Present Value
NSO	Non-Statutory Objector
PCU	Passenger Car Unit
PIA	Personal Injury Accident

POS	Public Open Space
PVB	Present Value of Benefits
PVC	Present Value of Costs
RS	Regional Strategy
RSI	Roadside Interview
RTPI	Royal Town Planning Institute
SEP	South East Plan
SGSR	Shores Green Slip Roads
SO	Statutory Objector
SRO	Side Roads Order
SSD	Stopping Sight Distance
SSSI	Site of Special Scientific Interest
TAG	Transport Analysis Guidance
TUBA	Transport User Benefit Appraisal
UU	Unilateral Undertaking
VE	Visual Envelope
vph	vehicles per hour
WEBTAG	Web Based Transport Analysis Guidance
WHO	World Health Organisation
WODC	West Oxfordshire District Council

CASE DETAILS

- These draft Orders and Application are made under Sections 14, 125, 239 and 240 of the Highways Act 1980 and Schedule 2 and Section 19(1)(a) of the Acquisition of Land Act 1981. They are known as:

  The Oxfordshire County Council (A4095 Witney: Cogges Link Road Classified Road) (Side Roads) Order 2010;

  The Oxfordshire County Council (A4095 Witney: Cogges Link Road) Compulsory Purchase Order 2010; and

  An application by the Secretary of State for Communities and Local Government to issue a Certificate Under Section 19(1)(a) of the Acquisition of Land Act 1981 that he is satisfied that there has or will be given exchange land for the order land.

- The Orders and Application are dated 20 October 2010, 2 November 2010 and 26 November 2010 respectively.

- The Oxfordshire County Council (hereafter referred to as the Council) submitted the Orders for confirmation to the Secretary of State for Transport and the Application to the Secretary of State for Communities and Local Government.

- There was one objection to the Orders and Application from a Statutory Objector, named as The JER Mawle Will Trust, Northfield Life Interest Settlement, EJSR Farms Limited, Mr James Mawle, Mr Stephen Mawle, Mrs Eileen Mawle and Mrs Rachel Murphy (hereafter referred to as the SO).

- There were 136 objections to the Orders and Application from Non-Statutory Objectors (hereafter referred to as NSOs).

- If confirmed, the Side Roads Order (SRO) would provide powers to improve or stop up lengths of highway, construct new highways and stop up and/or provide new private means of access to premises.

- If confirmed, the Compulsory Purchase Order (CPO) would authorise the Council to compulsorily purchase land and the rights over land for the purposes of:
  i) the construction of a highway from the existing roundabout at the junction of Witan Way and Station Lane, passing on the south west, south and east of Cogges housing estate to Jubilee Way at its existing traffic signal controlled junction with B4022 Oxford Hill and Cogges Hill Road in the parish of Witney in the District of West Oxfordshire in the County of Oxfordshire;
  ii) the construction and improvement of highways and the provision of new means of access to premises in the said parish in pursuance of The Oxfordshire County Council (A4095 Witney: Cogges Link Road Classified Road) (Side Roads) Order 2010;
  iii) the diversion of watercourses and the carrying out of works on watercourses in connection with the construction and improvement of highways as previously mentioned;

iv) the use by the acquiring authority in connection with such construction and improvement of highways and provision of new means of access to premises and the execution of other works mentioned above;

v) the improvement or development of frontages to the above mentioned new or existing highways or of the land adjoining or adjacent thereto; and

vi) the mitigation of the adverse effect which the existence or use of the highways proposed to be constructed or improved as mentioned above will have on their surroundings.

- If confirmed, the Application would authorise the Council to vest land in Witney Town Council in exchange for plots of open space that are required for the highway and discharge the existing open space plots from rights, trusts and incidents to which they are currently subject.

Summary of Recommendations: I recommend that the Orders are not confirmed and that Application is refused.

1 PREAMBLE

1.1 I held concurrent Local Inquiries at Eynsham Hall, North Leigh, Witney on 20 September 2011 and The Methodist Church, High Street, Witney on 22, 23 and 27-30 September, 4-7, 11 and 12 October and 8-11 and 30 November 2011 to hear representations and objections concerning an application made by the Council for confirmation of the above mentioned Orders and the above mentioned Application. The change of venue from Eynsham Hall to The Methodist Church was necessary due to the number present exceeding the capacity of the venue at Eynsham Hall.

1.2 The purpose of the proposed scheme, the Cogges Link Road (CLR), is to reduce the volume of traffic in the centre of Witney, particularly in the High Street, Bridge Street and Staple Hall areas which are currently affected by slow moving or stationary traffic. This would be achieved by the provision of a second river crossing and a linkage to Jubilee Way to fulfil a town distributor road function. The CLR would enable improved and more reliable journey times, better access for public transport, a reduction in road traffic accidents and opportunities for complementary measures in the town centre. The CLR would be designed to meet the LTP[1] [CD11] objectives of tackling congestion, delivering accessibility and improving road safety, air quality and the street environment. The CLR has also had policy support in strategic and local planning documents for a number of years [OCC/108 paras109 & 110].

1.3 The CLR would connect to a roundabout at the junction of Witan Way and Station Lane by the construction of a new fourth leg. From the roundabout, the CLR would head in a south easterly direction, rising on an embankment to a crest between two branches of the River Windrush. Bridges would carry the CLR over the branches of the river. It would continue on embankment across the river flood plain falling gradually to a low point by Stanton Harcourt Road. A new underbridge would allow the CLR to pass beneath Stanton Harcourt Road. On the east side of Stanton Harcourt Road, the CLR would continue in an easterly direction in cutting to the south of the Cogges housing estate, parallel to the A40 Witney bypass for approximately 200m before turning north east then north around the east of Cogges, where the carriageway would climb continuously in a combination of natural and false cuttings towards Oxford Hill. New roundabouts would be constructed at a new junction between the CLR and Cogges Hill Road and where the CLR would meet Oxford Hill and Jubilee Way, with the latter roundabout replacing the existing traffic signal controlled junction. The single carriageway CLR would be some 1.9km in length with widening at junctions, and the route is safeguarded in the LP[2] [CD8]. Complementary measures, including traffic restrictions at the Staple Hall junction, a roundabout at the Ducklington Lane and Station Lane junction, the widening of the A415, the widening of the Sainsbury's exit to the Witan Way roundabout and a toucan crossing on Witan Way, would be implemented in conjunction with the CLR.

[1] Local Transport Plan
[2] West Oxfordshire District Local Plan 2011

1.4 I was appointed to conduct the Inquiries in accordance with paragraph 7 of Schedule 1 of the Highways Act 1980 and Section 13(2) of the Acquisition of Land Act 1981. The concurrent Inquiries are, for convenience, referred to in this report as the Inquiry.

1.5 I carried out an unaccompanied inspection of the route of the scheme and surrounding land on 19 September 2011 and at various times during the course of the Inquiry. I also carried out accompanied site inspections on 9 and 29 November 2011 to agreed itineraries.

1.6 The Council confirmed at the Inquiry that it had complied with all necessary statutory formalities [OCC/15]. During the Inquiry, the Council called Mr Hall and Mr Woods in place of Mr Kingston due to illness[INQ/8]. Some criticism of the availability of Council evidence was dealt with during the Inquiry[INQ/5-7].

1.7 This report contains a brief description of the proposed route and its surroundings and the gist of the Council's, SO's and NSOs' cases together with my conclusions and recommendations. Lists of Inquiry documents are attached. I have also attached all documents submitted to the Inquiry, including proofs of evidence. The proofs are as originally submitted, and they do not take account of how evidence may have been affected by any aspects of the Inquiry. Figures in subscript brackets [] refer to documents listed at the end of the report and witnesses initials are used when referring to examination in chief [XC], cross examination [XX] or re-examination [RX].

1.8 At the time of the Inquiry and the completion of this report, the NPPF[3] was of consultation draft status. The parties at the Inquiry were invited to address the contents of this document and these views, together with conclusions on the matters raised are presented later in the report. Of particular relevance are matters in relation to the presumption in favour of sustainable development and the protection of green infrastructure. The intention of the Secretary of State to revoke RSs[4] has been taken into account in this report insofar as the provisions of the Localism Act 2011 reflect this intention.

1.9 No alternative routes were put forward by any parties other than the Council prior to or at the Inquiry. Objectors to the proposal have however referred to the addition of west facing entry and exit slip roads at the grade separated junction between the A40 and Oxford Hill as an alternative to the CLR. This alternative, the Shores Green Slip Roads (SGSR) best shown in the Council's evidence[OCC/24], has been considered in this report. Complementary measures, including traffic restrictions at the Staple Hall junction, a roundabout at the Ducklington Lane and Station Lane junction, the widening of the A415, a roundabout at the Oxford Hill and Jubilee Way junction, and traffic signals at the end of the A40 eastbound exit slip road and changes to the A40 westbound exit arrangements at the A415 junction, would need to be implemented in conjunction with the CLR.

[3] National Planning Policy Framework: Consultation Draft: 25 July 2011
[4] Regional Strategy

1.10 An ES[5] has been prepared as part of the planning application for the CLR, and both the Council and the SO have submitted UUs[6] to the Inquiry[CD79, OCC/107 & MT/44]. The undertaking from the SO is dated 30 November 2011 and given under the Town and Country Planning Act 1990, the Local Government Act 1972, the Local Government Act 2000 and the Highways Act 1980[MT/44 para3.1]. It makes land available for the construction of the SGSR at no cost to the Council, land and a contribution towards the provision of a cycle and footway between the Cogges estate and the town centre should the SGSR proceed, and a contribution towards the cost of the SGSR. The Council's UU is dated 22 November 2011 and given under the Local Government Act 2000. It requires the Council to complete: measures at the Staple Hall junction as soon as possible, and no later than 6 months, after the CLR is opened to traffic; measures at Ducklington Lane within 6 months of the opening of the CLR; and the Witan Way crossing within three months of the opening of the CLR.

1.11 Statements of common ground were agreed between the Council and the SO in respect of air quality, noise, landscape, ecology and developer funding[OCC/21, 26, 27, 28 & 33].

1.12 I would like to thank the Inquiry Programme Officer, Mr Graham Groom, for the assistance that he gave to all involved in the Inquiry, and to The Methodist Church in the High Street, Witney for providing an alternative venue at very short notice.

2. DESCRIPTION OF THE SITE AND ITS SURROUNDINGS

2.1 The site generally crosses the floodplain of the River Windrush and continues across agricultural land rising to the east. In the floodplain, the site includes disused allotments and scrubland, grassland which is part of the Witney Lake and Meadows Country Park together with pasture and arable land. To the east of the floodplain, the site includes part of an area of POS[7] together with rough pasture and arable land. The site adjoins the A40 dual carriageway for much of its length. It also circles the Cogges estate on its southern and eastern sides, providing a connection between Witan Way (a distributor road that runs around the town centre of Witney on its eastern side) and Jubilee Way (a distributor road that encloses housing development to the north east of the town centre) and Oxford Hill (which provides an eastbound only link from the east side of Witney to the A40). The locations of these, and other areas identified in this report are usefully shown in the Council's evidence[OCC/9/1/5].

3. THE CASE FOR THE OXFORDSHIRE COUNTY COUNCIL

The material points are:

The Approach to be Taken Towards the Compulsory Purchase

3.1 It is a condition of the exercise of the relevant CPO power that the land in question is required either for the construction of a highway, the acquisition of land in exchange for open space land or the improvement of a highway.

[5] Environmental Statement
[6] Unilateral Undertaking
[7] Public Open Space

The Council may also acquire land for the purpose of mitigating any adverse effects on the surroundings of the highway.

3.2 In this case, it is common ground that there are no objections which suggest that too much land is required for the specified purpose or that any particular parcel of land is not required[SS XX]. As a result, the statutory requirements are satisfied. The primary test in this case, apart from the matters which are contained within Circular 06/2004[8], is therefore whether there is a compelling case in the public interest for the CPO or whether the public interest decisively so demands that the CPO should take place[OCC/109/3].

3.3 Here, the SO accepts much of the justification for the CPO. In particular, that: the centre of Witney needs to be relieved of traffic; this need arises in respect of Bridge Street, High Street, the AQMA[9] and the CA[10]; the traffic problems are long standing and chronic; there is sufficient need for the CLR to justify a CPO[SS XX]; and the only reason that there may not a compelling case in the public interest is the existence of the SGSR. It appears that no NSO takes a different stance.

3.4 The following principles arose from the leading case, *de Rothschild*, on the approach to be taken where it is suggested that an alternative to a proposed CPO scheme exists[OCC/109/3]. The primary question is whether there is a sufficient justification for the CPO on its merits[OCC/109/3 pg939a]. In making that decision, there are a multitude of different factors which the decision maker has to take into account[OCC/109/3 pg939c-d]. There is no question of there being an onus of proof on the Council to establish that the CPO scheme is better than the alternative scheme. On balance, the question is whether the proposed scheme would be better, taking into account all the information before the Secretary of State[OCC/109/3 pg943d-e].

3.5 In *de Rothschild*, the Court said that the assessment should be one of a value judgment, on the basis of the information before the Secretary of State. The balance may include: the effect on traffic flow; the requirement of the road in a particular form and in a particular place; the effect on amenity and the environment; and, very importantly, the question of cost and the question of the time factor which has to be regarded in the carrying out of the work[OCC/109/3 pg 943j]. If the alternative would serve as equally well as the CPO scheme, taking into account matters like cost and delay, that could be capable of defeating the proposed CPO[OCC/109/3 942e-f]. That approach was however taken in a case where the objector had control of all the land over which the suggested alternative route would pass[OCC/109/3 pg939f]. That is not the situation here, where the SGSR would require a CPO to proceed, as not all of the required land is within the control of the SO.

3.6 It is clear that, when considering alternatives, the decision maker is entitled to take into account the opposition of an owner of the land to a proposal to use his land[OCC/109/5 paras27 & 28]. There therefore would have to be a compelling case in the public interest for the SGSR scheme. The CLR and the SGSR must thus be

[8] Circular 06/2004: Compulsory Purchase and the Crichel Down Rules
[9] Air Quality Monitoring Area
[10] Conservation Area

judged against the same CPO criterion of: which scheme is better; and which establishes that there is a compelling case in the public interest in terms of merits and deliverability.

3.7 The judgment of which scheme is better must be reached on the evidence before the Secretary of State. The SO cannot therefore simply sit back and suggest either that a doubt on the evidence must be resolved in its favour or wait for the Council to discharge an onus of proof. The reasons for that are as follows:

3.8 First, in the *de Rothschild* case, a suggestion was put forward by the objector that any doubt must be resolved in the objector's favour, consistent with there being an onus on the authority[OCC/109/3 pg935f-g]. The objector relied on the *Prest* case[11], and argued that the Court had, in that case, indicated that a doubt should be resolved in favour of the objector. The Court in the *de Rothschild* case however specifically rejected that approach, and made it clear that there were no special rules applicable to the Secretary of State's consideration of a CPO[OCC/109/3 pg938j]. The Court in *de Rothschild* also pointed out that, in *Prest*, the Court was not suggesting that there was an onus upon the authority[OCC/109/3 pg938e]. The question for the Secretary of State is therefore whether it can be concluded that there is a compelling case in the public interest.

3.9 Second, as the SO's alternative depends upon a CPO, the SO must be reasonably expected to produce evidence which seeks to show that its alternative would be better.

3.10 Third, the SGSR has been promoted for many years. The SO has incurred a great deal of cost through the local plan and the core strategy processes so that it could reasonably be expected to provide sufficient information to show that the SGSR would be better.

3.11 Fourth, the SO considered it appropriate to consider some topics in this Inquiry at a very considerable level of detail. Any lack of detail in relation to aspects of the SGSR would therefore be a matter of a conscious decision on the SO's part.

3.12 There is further support for the approach, that an alternative should be better, in *Rhodes v Minister of Housing and Local Government*[OCC/109/4]. Here, it was stated that, if the objectors do not provide necessary evidence but leave matters vague, the Minister is entitled to say that the balance is in favour of the proposal.

3.13 The SO has suggested that, if the decision maker found that the disbenefits of the CLR scheme were not clearly outweighed by the benefits, then it could not be concluded that there was a compelling case in the public interest[TD XX]. That is wrong and a test made without legal authority[SS XX].

3.14 Furthermore, when considering the question of whether there is a compelling case in the public interest to purchase the SO's land, the underlying significance of the interest in question should be borne in mind[OCC/109/3 pg943j]. Here, the SO is not raising an objection that there will be the loss of agricultural land or that the viability of a farm is threatened by the CLR[SS XX].

[11] *Prest v Secretary of State for the Environment* [1983] J.P.L. 112

3.15 In relation to human rights, there is no requirement, when assessing the proportionality of the decision, for the decision maker to show that he has adopted the least intrusive means. Even if a practical and less intrusive alternative means of achieving the required objective of the CLR had been available, the rejection of such an alternative, in favour of the confirmation of the Order, does not mean that there is a lack of proportionality[OCC/109/2 para 25 & OCC/109/8 para83].

3.16 Each of tests contained in Circular 06/2004 can also be met as follows. Should there be a compelling case in the public interest, there would be compliance with Article 1 of Protocol 1 and Article 8 of the Human Rights Act 1998. As much information as possible about the resource implications of acquiring the land and implementing the scheme should be provided. It is not however suggested by the SO and NSOs that insufficient information has been provided. The timing of the availability of the funding is likely to be a relevant factor. The funding is available now, and it is not suggested that the timing of the funding for the CLR in this case presents any difficulties.

3.17 In demonstrating that there is a reasonable prospect of the CLR going ahead, the Council will need to be able to show that it is unlikely to be blocked by any impediments to implementation. There is nothing indicating that either the CLR or the complementary measures would be prevented by any impediments. Physical and legal impediments also need to be taken into account, which include any need for planning permission or other consent or licence. Again, there are no issues which cannot be overcome. Where planning permission is required and has not been granted, there should be no obvious reason why it might be withheld. Here, planning permission has been granted, and there is no reason why any of the conditions will not be fulfilled. The Government's encouragement of sustainable development is set out in the NPPF. Although consultation on this document has yet to be completed, it is derived from earlier documents and should be afforded significant weight.

3.18 There are therefore no questions of approach that cannot be satisfactorily dealt with, and the primary question is which scheme is better, the CLR or the SGSR, taking into account all the information before the Secretaries of State. It is now necessary to address the relevant considerations in this case.

Traffic

Existing Situation

3.19 Witney has grown by some 420% since the 1950s, but still only has a single river crossing at Bridge Street[OCC/9/1/5]. This crossing is relied on for the majority of local journeys, and vehicles compete for access from the adjoining junctions. The effect of the convergence of town centre routes on this single and congested crossing point is wide reaching throughout Witney. It results in increased journey times and slow moving or stationary vehicles blocking junctions. The street environment also becomes less attractive, which limits opportunities for more sustainable modes of transport.

3.20 Journeys made in Witney are predominantly to the industrial estates and the business centre of the town from the housing estates which have been developed in recent years. Some of these housing developments are located on

the east side of the River Windrush to the north east of the town, namely the Woodgreen, Cogges and Madley Park estates. The business heart of Witney is located to the west of the river at Station Lane and Thorney Leys. The recent expansion of Sainsbury's, the largest supermarket in Witney, which is also to the west of the river, adds to the number of journeys over the single river crossing at Bridge Street. These factors result in approximately 50% of journeys on Bridge Street being of 5 miles or less with 70% less than 10 miles[OCC/60 para2.11].

3.21 The roads approaching Bridge Street that are affected by delays include West End, the A4095 Woodgreen, Newland, High Street (north of Witan Way) and the A4095 Bridge Street. In the pm peak, traffic queuing on the Witan Way approaches to the High Street signalled junction can wait for more than one signal cycle before proceeding through the junction. As a result, queues can extend along Witan Way to the Woolgate car park. From all of the above, there is a current and imperative need to relieve these problems[OCC/108 para25].

3.22 All public off-street car parks in the town centre are time-limited, which significantly restricts the number of spaces available for journey to work trips. The policy of the Council and WODC[12] is to manage demand by implementing schemes to promote sustainable travel modes and to control traffic movement to parking areas in the town centre.

3.23 The main area of long-term parking on Woodford Way, which provides 250 12hr spaces, is due to be redeveloped for housing. This will leave 144 9hr spaces in the Woolgate car park. All the remaining spaces in the town centre are time limited up to 5 hrs. There are however around 1,300 private off-street parking spaces in the town centre which are potentially available for travel to work journeys. Charging for parking would therefore not automatically lead to congestion relief in Witney.

Recent Traffic Growth

3.24 Between 2005 and 2010, traffic has grown in Witney by 4% based on AADT[13] flows[OCC/84 para1.14]. This period has been characterised by traffic growth between 2005 and 2007, together with decline since 2007. It corresponds to UK economic conditions over the same period.

3.25 Certain roads have however shown high levels of growth between 2005 and 2010. In particular, the A4095 north east of Jubilee Way has shown growth of 23% over this period, while the A4095 to the east of Witney has shown growth of 14%[OCC/94]. This reflects the level of new housing development in the Woodgreen and Madley Park estates and the role of Jubilee Way in providing a route of a good standard to the A4095 and the east which avoids delays on the A40. Recent traffic growth on the A40, which still serves as a regional route despite de-trunking, has been low and, east of Witney in 2010, traffic levels were the same as observed in 2005[OCC/84 para1.18].

[12] West Oxfordshire District Council
[13] Annual Average Daily Traffic

SATURN 2005 Base Traffic Model

3.26 This traffic assignment model was developed from 12 RSIs[14] to assess the traffic impact of the CLR and the SGSR. These formed a cordon of observed movements between the town centre and those areas outside of the cordon, together with supplementary traffic count and journey time data[CD19 & 20]. The model includes a buffer zone, in a March 2011 update, to represent traffic on the A40 between Burford and Eynsham and to better model route choices between the A40 and A4095 to the east of Witney[CD21]. Through traffic is modelled by the northern and southern screen lines that each include 10 count locations[OCC/64 Tbl3]. The model provides weekday am (0800-0900) and pm (1700-1800) peak traffic flows which represent the busiest on a weekday in Witney.

3.27 The base model generally satisfies the DfT[15] model calibration advice, in which 85% of counts should achieve the guideline [CD19 Tbl5.1]. In the am peak, 43 of the 44 validation count sites (97.3%) achieve the guideline and, in the pm peak, these figures are 37 of the 44 (84%)[OCC/64 Tbl3]. This is an acceptable level of model validation.

3.28 The CLR would be located partly outside of the model cordon, whilst the SGSR would be located outside of the cordon. This does not however reduce the ability of the model to assess the impact of these schemes, as the traffic that would use the schemes to access the town centre would have been surveyed at the RSI cordon. Such a situation is not uncommon as, in the assessment of highway schemes such as bypasses, it is usual for the RSI cordon to be located around the area to be relieved by the scheme. Through movements on a bypass scheme are typically not observed at RSI sites, but are calculated from count data.

3.29 Traffic between the Cogges, Madley Park and Woodgreen housing estates and the east can use the A4095 or the A40. The model assigns all traffic from these areas to the A4095, and this results in the modelled traffic on the A4095 being higher than that observed[OCC/61 & 94]. In turn, the modelled traffic on the A40 is lower than that observed, and the increase of 3,000 AADT on the A4095 is matched by an under-assignment of traffic of 3,400 AADT on the A40[OCC/84].

3.30 The relief to traffic on Bridge Street that would be provided by either the CLR or the SGSR would not be affected by the choice of route between the A40 and A4095[OCC/64 Tbl4]. This is because the model validates well on Bridge Street, the approaches to Bridge Street from Oxford Hill (Newland) and on Woodstock Road. The model is therefore a valid tool for assessing the impact of the CLR and the SGSR on Witney town centre.

3.31 There are differences between the modelled flows for Stanton Harcourt Road and the SO's June 2011 traffic count[MT/2/1 paras4.4.1 to 4.4.3]. Of the 110 southbound am peak PCUs[16] that are modelled on the road, only 24 use Bridge Street [OCC/64

[14] Road Side Interview Site
[15] Department for Transport
[16] Passenger Car Units

[CD19 Tbl1]. This is a tiny proportion of the 1,718 south west bound am peak PCUs that are modelled on Bridge Street.

3.32 The Stanton Harcourt Road flow is also less than 700vph[17] in each direction, and the observed flow is within 100 vehicles of the modelled flow in three of the four cases. This degree of model validation on the link accords with the validation criteria in DMRB[18] Vol 12. The differences between the modelled and observed flows are therefore not significant to the assessment of traffic in the town centre, and the model achieves a good level of validation [CD19 & OCC/64].

3.33 The Hill Farm bridge is a low design standard accommodation bridge over the A40 dual carriageway to the east of the SGSR. It is not part of the highway network, although it is maintained by the Highway Authority. In the absence of west facing slip roads at Shores Green, the bridge, and its associated junction with the A40, is used by traffic from areas to the east of the River Windrush to access the westbound A40 in the am peak. These areas include the Cogges, Madley Park and Woodgreen housing estates.

3.34 Traffic accesses the eastbound A40 at Shores Green and then uses the bridge to perform a U-turn to access the westbound A40. This traffic uses the A40 and its A415 junction to access western areas of Witney, including Station Lane, Ducklington Lane and Thorney Leys. In addition, some of the bridge traffic continues westbound on the A40. The trips are reversed in the pm peak[OCC/84 & 86].

3.35 The bridge is not included in the traffic model because it is not part of the public highway network and access cannot be guaranteed in the future. September 2011 traffic surveys show 71 and 113 PCUs making this movement in the am and pm peaks.

3.36 It is likely that the use of the bridge by U-turning traffic has increased since the model base data was collected in 2005. Hence, these movements may have instead been observed in the 2005 RSI surveys as using Bridge Street or Oxford Hill[CD19 Fig4.1]. Traffic that was using the bridge at the time of the 2005 surveys and was seeking to enter Witney would also have been surveyed at Ducklington Lane. In such cases, this traffic will have been included in the model. In any event, the traffic using the bridge is a small element of the model, which achieves the required validation guideline criteria[CD19 & OCC/64].

Traffic Growth Forecasting

3.37 The 2005 SATURN base model has been used to create traffic forecasts for the opening year (2013) and the design year (2028). Forecast growth has been applied in accordance with TEMPRO Version 6.2 which was issued in April 2011[CD85]. This takes account of a range of elements that would affect future traffic growth, including the number of households, levels of employment and car ownership and changes in income and the cost of fuel.

3.38 Forecast growth in TEMPRO is made up of two components. The first, new development, includes the trend to higher car ownership, and projections

[17] vehicles per hour
[18] Design Manual for Road and Bridges

were updated in April 2011 to reflect the impact of the recession between 2007 and 2010[OCC/61]. The second, fuel and income effect, reflects the growth in traffic due to the impact of rising real incomes over time, more fuel efficient cars and a greater proportion of vehicles using diesel instead of petrol.

3.39 The TEMPRO forecast Oxfordshire growth between 2005 and 2013 is 16.8 and 18.5% in the am and pm peaks. Between 2013 and 2028, it is 15.5 and 16.6%. In Witney, growth between 2005 and 2013 is 20.0 and 22.6% in the am and pm peaks. Between 2013 and 2028 it is 12.4 and 15.1%.

3.40 The levels of growth used to derive the opening year forecasts are higher than the observed level of growth of 4% in Witney between 2005 and 2010. Traffic growth has however been applied in accordance with current WebTAG[19] guidance. This recognises the strong link between traffic and real income growth. Furthermore, the growth rates have been applied to the CLR and SGSR, and the schemes have therefore been compared on an equivalent basis.

3.41 Current Government forecasts for real income GDP growth are 1.70, 2.50 and 2.90% in 2011, 2013 and 2031. Therefore, strong traffic growth is forecast for the period up to 2013 which, if realised, will bring the observed level of growth closer to the TEMPRO forecast. This strong level of growth is forecast to continue at rates above 2.25% to 2028 and beyond.

3.42 Within the growth period from 2005 to 2013, the individual significant developments that are included are: new housing development at various sites including Madley Park, Early's Mill, Bridge Street Mills, Tower Hill, Church Green, Dark Lane, Cogges and Buttercross Works; development at Marriot's Close; and expansion at Sainsbury's. For 2028, growth takes account of future development at North Curbridge, including the proposed Down's Lane junction with the A40.

SATURN Model Future Parameters

3.43 The highway infrastructure within the model for the CLR includes: the CLR with a roundabout at the Cogges Hill Road/CLR junction; a signal controlled junction at Staple Hall; a roundabout at the Station Lane/Ducklington Lane junction; the widening of the A415 between the A40 and Station Lane; a Toucan crossing on Witan Way, approximately 60m north of the CLR roundabout; and a two lane entry onto the Witan Way roundabout from Sainsbury's[OCC/40 appB & OCC/61].

3.44 The highway infrastructure within the model for the SGSR includes: the SGSR; a signal controlled junction at Staple Hall; a roundabout at the Station Lane/Ducklington Lane junction; the widening of the A415 between the A40 and Station Lane; a roundabout at the Oxford Hill/Jubilee Way junction; and traffic signals at the A40 eastbound exit slip road/Ducklington Lane junction[OCC/55 & 61]. Before 2028, the A40 westbound exit slip road at the A415 junction would also need to be improved to provide a 'Type B' diverge, but the model cannot differentiate between different diverge arrangements.

3.45 The modelling has not included an assessment of potential parking restraint measures. This would require the development of a more complex parking

[19] Web Based Transport Analysis Guidance: Department for Transport

model. A variable demand assessment has however been undertaken which indicated that the induced traffic effects of the CLR and the SGSR did not result in any a significant impact [CD20 appB].

Future Traffic Levels

3.46 In terms of the primary role of key roads in Witney, a distinction can be made between roads that are sensitive to traffic levels and roads whose role is to distribute traffic around the town[OCC/66 & 79]. Sensitive roads have: residential properties accessing directly from the road or shop frontages; listed buildings; and relatively high levels of pedestrian activity, such as in shopping areas or near to schools. In Witney, these roads typically follow a historic alignment through the town centre, such as Woodgreen Hill, Newland, Bridge Street, High Street and Mill Street. Many of the roads considered by CPRE[20] are sensitive roads[OBJ/20/2 tbl1 & 2]. Distributor roads typically have few shop frontages, little direct residential access and lower levels of pedestrian activity.

3.47 In 2013, the introduction of the CLR would result in significant reductions in traffic on the following sensitive roads: New Yatt Road; High Street; Woodgreen Hill; Newland; Bridge Street; Mill Street; and High Street[OCC/61 app7 fig7:27 & 7:28 & OCC/66 tbl1]. Corn Street would however experience a small increase, although the flow would still be similar to that achieved on other sensitive streets such as Mill Street or Bridge Street. An increase in flow would be experienced on the following distributor roads: Langdale Gate; Witan Way; Jubilee Way; the CLR; Station Lane; and Thorny Leys. An exception to this pattern would be a reduction in flow on the distributor road at Welch Way[OCC/79]. The pattern of changes in 2028 would be identical to that in 2013[OCC/66 tbl2].

3.48 This reassignment of flows to distributor roads, which have been constructed to cater for the volumes of traffic needed to relieve Witney's congestion, would be essential for the Witney road network to function efficiently and as intended. Furthermore, the CLR is a 40mph local distributor road that would complete the planned network to support developments that have taken place over the last 30 years. The model also demonstrates that, as a result of the CLR, there would be significant time savings for many local journeys.

3.49 In 2013, the introduction of the SGSR would result in reductions in traffic on the following sensitive roads: New Yatt Road; High Street; Woodgreen Hill; Newland; Bridge Street; Mill Street; High Street; and Corn Street[OCC/61 app7 fig7:29 & 7:30 & OCC/66 tbl3]. In almost all cases, the reduction in flow on sensitive roads would be less than that forecast for the CLR. The exception to this is Corn Street, which would experience a decrease with the SGSR instead of the increase with the CLR. The SGSR would reduce vehicle numbers on sensitive roads by 42% as against 47% with the CLR[OCC/86 tbl5.1]. For distributor roads, an increase in flow would be experienced on Jubilee Way and Thorny Leys together with small reductions on Welch Way, Langdale Gate, Witan Way and Station Lane east[OCC/66 tbl3 & OCC/79].

3.50 In 2028, the pattern of changes for sensitive roads with the introduction of the SGSR would be identical to that in 2013, with the exception of Corn Street.

[20] Campaign to Protect of Rural England

This would experience an increase with the SGSR instead of the decrease with the CLR[OCC/66 tbl4]. The following distributor roads would experience a reduction in flow: Welch Way; Witan Way; Station Lane; and Thorney Leys, whereas Jubilee Way and Langdale Gate would experience an increase in flow[OCC/66 tbl4]. Whilst the level of relief provided to sensitive roads would not be much as with the CLR, it would be extensive [MT/32 tbl5.6.1 IW XX].

3.51 The reassignments resulting from the SGSR in 2013 and 2028 would not represent an efficient use of the distributor road network in Witney. The SGSR would instead rely on the A40 to provide the route for many local movements. This would require traffic to travel further to make the same journeys when compared to the CLR. It would also result in conflicting traffic movements on the A40, as local traffic would need to merge and diverge with faster moving regional traffic, notwithstanding the fact that sufficient mainline capacity exists on the A40[IW XX]. The SGSR would also rely on two junctions on Ducklington Lane to get the local traffic back into the town centre.

Future Traffic Routes

3.52 In the 2013 am peak with the CLR, the traffic that would remain on Bridge Street would be accessing areas in the town centre that are relatively close to Bridge Street[OCC/61 app7 fig7:27]. These areas would include: Witan Way, between High Street and the Woolgate car park; High Street, north of Welch Way; and Welch Way itself. The CLR would access: Witan Way, south of the Woolgate car park; High Street, south of Witan Way; and Corn Street.

3.53 In the 2013 am peak with the SGSR, the traffic that would remain on Bridge Street would be accessing areas including: Witan Way and Station Lane, as far as Avenue Two; High Street; Corn Street; and Welch Way[OCC/61 app7 fig7:29]. The areas that the SGSR would access would include: Station Lane, to the west of Avenue Two; Ducklington Lane; and the western end of Welch Way and Corn Street.

3.54 The CLR would thus be more penetrative and better serve areas close to the centre of Witney[OCC/61 figs7.27-29]. With the SGSR, these areas would continue to be served by traffic on Bridge Street. The SGSR would primarily serve the trading estates located off Station Lane and, whilst it would reduce some town centre flows, it would not serve the central area of Witney particularly well[OCC/86 para5.21]. Furthermore, the SGSR would not relieve traffic on Bridge Street and elsewhere in the town centre to the same extent as the CLR. It would also necessitate a longer journey for traffic wishing to avoid the town centre. This would be counter intuitive and would increase the risk that drivers would revert to their original route over time.

Impact on the AQMA and the CA

3.55 Both the CLR and SGSR would substantially reduce traffic in the AQMA[OCC/61 fig7.27 to 7.30 & IW XX].

3.56 The CA includes the Witan Way roundabout at its southern extremity. As a result, all traffic on the CLR passing through the Witan Way roundabout could be said to enter the CA. The traffic moving between the CLR and Station Lane

is however only within the CA for a very brief portion of its journey and skirts the edge of the CA. Consequently, the analysis excludes this traffic.

3.57 In 2013, the introduction of either the CLR or the SGSR would reduce traffic flows entering the CA[OCC/61]. With the CLR however, there would be a greater reduction in traffic, of 28 and 11% in terms of PCUs in the am and pm peaks, on sensitive roads entering the CA compared to the SGSR[OCC/84 para3.38].

3.58 In the 2028 am peak on sensitive roads, there would be 6% more traffic entering the CA under the CLR compared to the SGSR[OCC/84 tbl3.3]. This increase would predominantly be due to a higher flow on Corn Street and, in most cases, the traffic on sensitive roads would be less than with SGSR. In the 2028 pm peak on sensitive roads however, there would be 7% less traffic under the CLR compared to the SGSR. Overall, this is further proof that the CLR would provide a greater benefit than the SGSR though making best use of the distributor road network in order to reduce traffic on the important sensitive roads within the CA.

VISSIM Model Assessment

3.59 The VISSIM model assesses the performance of the key junctions affected by the CLR and SGSR. It predicts junction performance in terms of queues and delays for turning movements, and its use is recommended by the HA[21][OCC/83 appC para1.2.3]. The model extent is limited to the key distributor and strategic roads of the A40, Ducklington Lane, Station Lane, Witan Way, Oxford Hill Road, Jubilee Way, and the CLR[OCC/40 fig5.1]. The model is therefore complimentary to the SATURN model that covers the whole of Witney.

3.60 In the 2028 am peak, the CLR is predicted to operate with a lower average delay than the SGSR at nearly all junctions. The most notable difference is at the Ducklington Lane/Station Lane roundabout. Here, with the SGSR, the high volume of traffic turning right from Ducklington Lane south to Station Lane, a demand of over 1,200 movements, would conflict with traffic from Ducklington Lane north. This would result in an undesirable level of service on the northern approach, with average queue lengths of nearly 200m and an average delay of nearly 3 min[OCC/61 tbl6.1, para6.5 & app5 appD, OCC/40 fig6.1 & 6.2 & IW XX]. The CLR would also result in lower journey times in the am peak for the majority of travel time routes compared with the SGSR, most notably between Ducklington Lane north and Oxford Hill north[OCC/40 tbl6.2, OCC/61 app5 Tbl6.2 & IW XX].

3.61 The SGSR would also have serious problems at the A40 westbound exit slip road at the A415 junction in both peaks[OCC/40 fig6.3 & OCC/87] . This would particularly be the case in the am peak, where a maximum queue length of 284m would result in the existing diverge not being able to cater for the volume of traffic wishing to use it, creating capacity and safety problems[OCC/40 app7]. As the SGSR westbound exit slip road flow would exceed 1,200 vehicles in 2017, the diverge would then require a Type B instead of the existing simple Type A layout[OCC/60 para 5.17 & MT/40 fig2/5AP].

[21] Highways Agency

3.62 Within the VISSIM network, the CLR is therefore predicted to perform more effectively than the SGSR in the am peak[OCC/40 tbl6.3]. In the 2028 am peak, traffic would thus be more likely to divert from using Bridge Street with the CLR rather than the SGSR, given the better junction performance and lower travel times. Whilst individual users might notice a difference in network performance between the CLR and the SGSR, there would not however be a major difference between them[OCC/61 app5 tbl6.3 & IW XX].

3.63 The capacity issues with the SGSR on the A40 westbound exit slip road and the Ducklington Lane north approach to the Station Lane junction in the SGSR also indicate that the CLR scheme would be more resilient. This is because it would maintain more capacity on the A40 and at the Ducklington Lane/Station Lane roundabout than with the SGSR.

3.64 In the 2028 pm peak, the CLR would result in less delay than with the SGSR at the majority of comparable junctions[OCC/40 tbls6.1-6.3]. Both schemes would however have an overall LOS[22] of D or better at all junctions, with the exception of Avenues Two and Three where they intersect with Station Lane[OCC/61 app5 para6.20].

3.65 The main differences between the schemes would again be on the A40 westbound exit slip road at the A415 junction and at the Oxford Hill/Jubilee Way roundabout. At the slip road, the SGSR would have a LOS of C compared to a better LOS of A with the CLR and, at the Oxford Hill roundabout, the SGSR would have a LOS of C compared to a LOS of A with the CLR[OCC/40 tbl6.4]. The other main differences would be at the side street junctions on Station Lane. Here, Avenue Two would have a LOS of E with the CLR compared to a LOS of A with the SGSR, whereas Avenue Three would have a LOS of E with the SGSR compared to a LOS of A with the CLR.

3.66 Eastbound travel times would be lower with the SGSR and westbound times would be lower with the CLR, particularly on the A40 where the SGSR time would be 2 mins longer than the equivalent for the CLR[OCC/40 tbl6.5]. This would be due to less traffic on the A40 with the CLR and the absence of capacity problems at the westbound A415 junction. Whilst, on the identified journeys, the difference between the schemes would be marginal, the differences in travel times in the westbound direction would be generally larger in favour of the CLR compared to the differences in the eastbound direction which favour the SGSR[OCC/40 tbl6.6, OCC/61 app5 tbl6.5 & IW XX]. The effect of these differences would also build up over time.

3.67 The CLR would also process nearly 500 more vehicles than the SGSR and would result in less total distance travelled and average travel time[OCC/40 tbl6.6]. Although the average delay time and number of stops would be higher with the CLR than the SGSR within the VISSIM network, the network does not cover the junctions around Bridge Street. The TUBA[23] assessment however, which is based on the SATURN model of the wider area, indicates annual pm peak travel time savings of over 300,000 vehicle hrs with the CLR compared to the SGSR.

[22] Level of Service
[23] Transport User Benefit Appraisal

3.68 The SGSR would therefore not be a sustainable solution, as it would place pressure on the A40 and the Ducklington Lane junctions. For the latter, the Ducklington Lane and Station Lane junction would probably require signalisation in order to resolve the large queues on Ducklington Lane north[OCC/84]. At some stage an additional crossing of the Windrush River would also be needed.

Accident Assessment

3.69 The assessment was based on the COBA11[24] recommended methodology using combined link and junction accident rates [OCC/91 para3.1]. The introduction of the CLR would result in a decrease of 73 PIAs[25] over 60 years using local accident rates[OCC/91 tbl4.2]. These were obtained from 10 year local accident data to 2010 and corresponding 2010 base model 2-way AADT flows and, for Jubilee Way, the CLR the rate would be 0.110 PIA/mvkm[26]. The monetised benefit associated with this decrease would be £1.463m[OCC/91 tbl4.2].

3.70 The AADT flow used for Jubilee Way was 4,012 vehs/day, and this level of traffic has only existed following the recent Madley Park development[IW XX]. Data from the 10 year accident history and this flow was also applied to the CLR. The 2028 flows for Jubilee Way and the CLR would however be 26,050 and 26,971 vehs/day, and it is possible that these increases could affect the accident rates for Jubilee Way and the CLR [OCC/61 app2 tblB2 & IW XX].

3.71 In the opinion of the Council's highway accident witness, it has been the practice of HA and DfT to use rates from historic data. The guidance however prefers the use of default rates for new links and where there are abnormal changes in traffic flow[OCC/92 paras 4.3 & 4.5 & IW XX]. These default rates are an average for the type of road under consideration. If the default rate of 0.844 PIA/mvkm was used for link and junctions combined, the introduction of the CLR would result in an increase of 210 PIAs and a dis-benefit of £9.19m[OCC/95 tbl5.1]. This change would be principally due to the change in the accident rate for the CLR. Whilst the CLR would have three junctions, this is few compared to its length, and it would therefore be inappropriate to apply this default as it would overestimate the rate compared to the link only default of 0.297 PIA/mvkm. The Council has however used combined link and junction default rates elsewhere[IW XX].

3.72 The introduction of the SGSR would result in an increase of 37 PIAs using local accident rates, and the monetised dis-benefit associated with this would be £6.241m[OCC/91 tbl4.2]. If however the link and junction default rates were used, the monetised dis-benefit associated with this would be £1.18m[OCC/95 tbl5.1].

Economic Assessment

3.73 The economic assessment of the CLR and the SGSR has been undertaken using the TUBA method and by comparing them against a case that includes proposed complementary measures but excludes either scheme. This enables the

[24] COst Benefit Analysis 11
[25] Personal Injury Accidents
[26] Personal Injury Accidents per million vehicle kilometres

benefits that would be associated with the schemes to be identified separately from the effects of the complementary measures.

3.74 The CLR is a local scheme which would improve the vibrancy of the local economy. This would accord with the aims of the January 2011 White Paper[27] which explains in paragraph 2.4 the 'hugely important' role that transport plays in economic growth stating: "getting people to work and healthcare providers, as well as to leisure activities and shops, is crucial to quality of life as well as to enhancing people's spending power".

3.75 The CLR would provide a benefit to the national economy through user time, vehicle operating cost and accident savings together with a monetised carbon benefit. This benefit would give a PVB[28] of £78.695m, a PVC[29] of £5.022m, an NPV[30] of £73.679m and a BCR[31] of 15.670[OCC/106 tbl2.1]. This BCR figure would be well above the DfT high value for money category and would be indicative of the restrictive economic effect of congestion in the town centre[OCC/108 para94, MT32 app10 para37 & IW XX]. The accident benefit component in the BCR figure does not however use the default accident rate for Jubilee Way and the CLR. The use of the default rate would reduce the PVB, NPV and BCR, and the effect can be demonstrated by pure arithmetic[OCC/95 tbl5.1 OCC/.106 tbl2.1 & IW XX].

3.76 The SGSR would also provide a benefit to the national economy through user time and vehicle operating cost savings together with a monetised carbon benefit, although greenhouse gas emission benefits would not be as great as with the CLR[OCC/106 Tbls2.1 & 4.1]. With the SGSR however, the A40 westbound exit slip road at the A415 junction would need to be improved from the current Type A to a Type B diverge and lay-bys would need to be relocated to mid-link positions[OCC/87 para3.2]. The slip road level would need to be raised to improve highway safety visibility, and the junction improvement would impact on the woodland belt to the south of the A40. The Statutory Objectors have also offered to make a contribution up to a value of £200,000 towards acquisition of land not within the control of OCC or the SO for the provision of the SGSR, but this is not secured by a satisfactory undertaking[OCC/33].

3.77 With a diverge improvement cost of £4.598m and reduced developer contributions after 2013, the benefit would give a PVB of £51.970m, a PVC of £5.007m, an NPV of £46.963m and a BCR of 10.379[OCC/106 tbl4.1 run25]. This BCR figure would also be well above the high value for money category[MT32 app10 para37 & IW XX]. The use of the default accident rate however would again reduce the PVB, NPV and BCR as can be demonstrated by pure arithmetic[OCC/95 tbl5.1 OCC/.106 tbl2.1 & IW XX].

3.78 The TUBA assessment uses data on travel times and delays from the SATURN model to calculate benefits. As the SATURN model cannot differentiate between the Type A and B diverge arrangements or represent any delay at them,

[27] Creating Growth, Cutting Carbon Making Sustainable Local Transport Happen: Department for Transport: January 2011
[28] Present Value of Benefits
[29] Present Value of Costs
[30] Net Present Value
[31] Benefit Cost Ratio

the TUBA assessment will not contain any of the costs associated with such delays[OCC/53 para2.2]. The assessment of the SGSR with either the Type A or B arrangements therefore could represent an over assessment of the likely benefits of the SGSR.

3.79 The economic benefits that the CLR would deliver include journey time, fuel and carbon emission benefits. This benefit would be some £20m greater than that for the SGSR[OCC/106]. This would be because the CLR would result in greater traffic reduction than the SGSR and the weighting that the TUBA methodology gives to the reduction of congestion. The traffic and economic analysis is therefore firmly in favour of the CLR.

Deliverability

3.80 In contrast to the SGSR, which would require additional junction improvement work to reach its full potential, the CLR can be delivered now, subject to the approvals of the Secretaries of State. The SGSR would need further development before planning could be considered, and relief to Witney would be many years away. The SGSR also requires land from Mr Walker, who has stated at the Inquiry that he would be unwilling to sell. Should the Orders not be confirmed, the Council would however progress the SGSR at the earliest opportunity.

Non-Motorised Users

3.81 As the CLR would be superior to the SGSR in reducing traffic on sensitive streets[OCC/60], there would be fewer vehicles on those streets, giving greater scope for works that would encourage sustainable travel modes. Furthermore, pedestrian space would be improved through a reduction in traffic noise and an improvement in air quality. Cyclists would also benefit from the lower traffic flows which would improve road routes as a consequence. This encouragement towards more sustainable travel modes would accord with current policy and the NPPF[OCC/108].

3.82 The CLR would also provide additional infrastructure for non-motorised users. The footway and cycleway that would be provided adjacent to the CLR would facilitate access to the Witney Lake and Meadows Country Park. This would allow onward travel northwards to Langel Common, where the path would return to Cogges or the town centre. The path would also link to the extended area of the country park via a pedestrian bridge to be constructed over the east branch of the River Windrush. These proposals are fully costed and incorporated into the approved plan for the CLR[CD01 drawing B0800100/B3200 RevA].

Public Transport

3.83 The improved journey time reliability through the town centre would also apply to buses, and there would be additional scope for the provision of enhanced infrastructure which could help to promote the existing services. The desire for more reliable bus journey times and support for the CLR is expressed by Stagecoach[INQ/4/02]. The S1 and S2 services, which provide a service between Carterton and Oxford via Witney, would particularly benefit from the greater network resilience from less traffic using Bridge Street[OCC/9/4].

Summary

3.84 From all of the above, it therefore cannot be concluded that the CLR and SGSR are alike. There is a very clear and important series of traffic related advantages with the CLR that are reflected in the economic results.

Landscape

Existing Context

3.85 The topography of the area is characterised by the low lying Windrush river valley, which lies below 80m AOD[32] [CD40 & CD60]. Land, which is of ordinary quality with low sensitivity, rises eastwards towards a more sensitive ridge east of Cogges, and Witney town centre lies on a low ridge to the west at just over 80m AOD [CD40 & GW XC]. Public rights of way provide access within the river valley linking Cogges, the country park and the town centre. The focus and the majority of the area of the country park is however to the south of the A40, where there is a lakeside walk, information boards and seats. This area to the south is accessed by the Windrush Path, an A40 underbridge at Avenue Two and from the A415 junction on the A40 to the west.

3.86 The small visual envelope of the CLR would be well defined by the urban edge of Witney, the rising land to the east of Cogges and the A40 with its associated planting. Intervisibility along the valley is also limited due to vegetation which renders theoretical zones of visual impact inaccurate.

Effects

3.87 The Council relies on its LIVA[33] for the assessment of effects[CD35]. The 1.8km CLR has been designed to integrate with the form of the landscape, as detailed in the LEMS[34], which would include the provision of 9,800 trees and shrubs and 2.8km of hedgerow[CD42A]. The most significant impact would be over a 200m length through a hay meadow section of the country park, in an area where good access from the town centre using Farm Mill increases its current landscape value[GW XC & XX]. This area also provides an important part of the setting of Witney[CD54 para4.2.17].

3.88 The vertical alignment of the CLR would however minimise the height of the embankment across this part of the lower Windrush valley which is locally important in landscape terms[CD60 para12.18 & GW XX]. Embankment and cutting slopes would also be restricted to 1:4 to sympathise with the landscape context, and the maximum embankment height would be 5.5m compared to some 10m high buildings to the south of Station Lane[GW RX]. Furthermore, public footpath 15 and the permissive Windrush Path would pass beneath the CLR River Windrush bridges to provide connectivity through the country park. The absence of street lighting along the route, with the exception of the Oxford Hill, Cogges Hill Road and Witan Way junctions, would ensure that the rural edges of Witney and Cogges would be unaffected in this regard.

[32] Above Ordnance Datum
[33] Landscape and Visual Impact Assessment
[34] Landscape and Ecological Mitigation Scheme

3.89 The CLR would however be visible at close quarters where it would curtail longer north/south views across the country park and have an adverse impact on the tranquillity of the area[CD54 para4.2.20 & OCC/3/1 fig26]. The CLR would also require the removal of the scrubby vegetation within the CA between the country park and Witan Way. This scrubby vegetation however has a poor landscape value, and significant taller vegetation in this area, which was part of the justification for the extension of the CA here, would be retained and replaced[GW XX & RX]. The impact of the CLR on the river valley would be moderate/slight adverse in 2013 falling to neutral[GW RX]. This impact takes into account the increased area of the country park due to the exchange land and the burial of overhead lines which are currently intrusive.

3.90 Much of the remaining route of the CLR would lie in a cutting between Stanton Harcourt Road and Oxford Hill in an area of poor landscape quality. Here, the CLR would include false cuttings to minimise visual impacts from the adjoining residential areas of Cogges, although views would still be foreshortened[GW XX]. The CLR would also locally significantly change the character of public footpaths. This part of the route would have a residual impact of slight adverse or neutral. Overall, therefore the net residual impact of the CLR would be slight adverse.

3.91 In terms of the landscape character impact of the SGSR, any lighting columns and signs would have an impact on the landscape character of the area in daylight and night time hours[MT/3/1 para3.3.1]. This would be due to their contribution to the urbanisation of an otherwise agricultural and largely tranquil landscape with dispersed settlements[CD60 para11.8].

3.92 The SGSR would also include 6-8m cuttings into a landform that is identified as sensitive to change[CD60 para10.12]. Trees, which were planted to integrate the existing A40 junction into the landscape, would also be lost. The landscape character impact in Year 1 would therefore be moderate adverse falling to neutral as a residual impact[CD35].

3.93 With regard to visual impact, the effect on most residential properties would be slight adverse or neutral in 2013, and most would experience neutral impacts by 2028. Street lighting would however result in a residual moderate adverse impact for 18 properties. From all of the above, the impact of the SGSR would be broadly comparable to the limited impact of the CLR.

Noise and Vibration

Introduction

3.94 Between Witan Way and a point 200m west of Stanton Harcourt Road, the CLR would be situated on an embankment and would continue at grade for approximately 200m up to Stanton Harcourt Road. It would then continue eastwards in cuttings and at grade up to Oxford Hill Road. The CLR would include extensive and false impact mitigation cuttings between it and the housing in Eton Close. Reduced noise road surfaces would also be used on all sections of the CLR, although the effect of this cannot be quantified and therefore has not been included in the noise predictions[OCC/6 para8.1.1 & CD42B]. In the Council's evidence, all noise levels are $L_{A10\ 18h}$ unless otherwise stated.

Without the CLR or the SGSR

3.95 The present road network affects significant areas of housing, particularly areas that are closest to Witan Way, Woodstock Road, Bridge Street, Mill Street and High Street. This affects residents, visitors and shoppers who use these areas which include the Witney and Cogges CA. The areas contain over 250 dwellings that are exposed to noise levels of 66dB or more, most of which are in the CA. Without the CLR or the SGSR, this situation would not noticeably change, and indeed some further increases in noise levels could occur due to traffic growth in future years.

3.96 The A40 is also a significant source of noise, together with some noise from vehicles on Stanton Harcourt Road, Jubilee Way, Newland, Oxford Hill and Cogges Hill Road. In particular though, the A40 affects housing in the area of the CLR.

3.97 In 2013, without the CLR or the SGSR, over 52% of all of the Witney Lake and Meadows Country Park would be exposed to noise levels of more than 55dB$_{[OCC/6/5\ Tbl7.3]}$. This is expected to increase to over 60% by 2028. Such levels would be some 2.5 to 3dB above the 55dB $L_{Aeq\ 16h}$ WHO[35] and PPG24[36] desirable level to prevent significant community annoyance$_{[CD65\ annex2\ para4\ \&\ MW\ XC]}$. The WHO guidance also suggests that existing quiet outdoor areas should be preserved, and the ratio of intruding noise to background sound should be kept low$_{[MT/6/3\ AppC\ Tbl1\ \&\ MW\ XX].}$ The use of the 55dB $L_{Aeq\ 16h}$ level here is however more appropriate than a change in noise level, as people do not become used to noise above this level$_{[MW\ XC]}$.

3.98 In 2013, without the CLR or the SGSR, all of the existing Eton Close POS would be subjected to noise above the 55dB $L_{Aeq\ 16h}$ level, and noise levels would continue to rise up to 2028$_{[OCC/6\ Tbl7.4]}$. There are also some parts of the POS that would be above 70dB in 2013. In 2028, without the CLR or the SGSR, the cemetery on Oxford Hill Road would experience noise levels of up to 55dB.

3.99 In 2028, without the CLR or the SGSR, 313 dwellings would be affected by increased impacts of airborne vibration, where up to 10% of people would be affected. 85 dwellings would however benefit from reduced impacts where up to 10% of people would otherwise have been bothered.

CLR Operational Noise

3.100 In 2013, with the CLR, more than 280 dwellings in the detailed study and the wider areas would be affected by quite small noise level increases of 3dB or more, and most of these would lie outside the CA$_{[OCC/6\ para8.2.2\ \&\ MW\ XC]}$. Just fewer than 370 dwellings would however benefit from decreases of 3dB or more, and many of these would be within the town centre and would comprise large parts of the CA$_{[OCC/6\ para8.2.2]}$. These calculated predictions are based on traffic change, which is susceptible to a degree of error$_{[MW\ XX]}$. The $L_{A10\ 18h}$ noise levels are however not disputed by the SO$_{[OCC/26\ para3.1]}$.

[35] World Health Organisation
[36] Planning Policy Guidance 24: Planning and Noise

3.101 In 2028, with the CLR, areas that would be within 600m of the CLR and where noise levels would be below 60dB in 2013 without the CLR, would tend to be subject to increased noise [OCC/6 Tbl8.3, OCC/6/2 AppB, CD69, MT15, CD69A, CD72 & MW XC]. These increases would take a number of dwellings over the 50 and 55dB $L_{Aeq\ 16h}$ WHO and PPG24 thresholds for moderate and serious community annoyance[MW XX]. The majority of these areas are away from the town centre and the CA.

3.102 Some of these areas however, within the town centre and the CA and where there would be traffic relief on roads nearby, would benefit from a reduction in noise. Furthermore, those areas that are currently affected by noise levels above 60dB, particularly dwellings in the town centre and the CA where levels are 69dB or more, would show at least a perceptible decrease in noise.

3.103 In 2013, with the CLR, those parts of the country park to the north of the A40, that are affected by noise levels of 55dB or more, would increase in area. This would be to the extent that all of the park to the north of the A40, which is the most used and currently relatively quiet, would be so affected, resulting in significant community annoyance[OCC/6/5 Tbls 7.3 & 8.4, CD65 Ann2 para4 & MW XX]. This effect would also extend to the exchange land. The area of the park to the south of the A40 however, including the lake, would be virtually unaffected as a result of the CLR.

3.104 The replacement area for the Eton Close POS would be significantly quieter than the existing POS and located within the Council's critical distance of the area to be replaced[OCC/77]. In 2028, with the CLR, almost all of the replacement area would be exposed to levels of less than 70dB with approximately 35% remaining below 55dB[OCC/6 Tbl8.5]. In 2028, with the CLR, the cemetery on Oxford Hill Road would however experience noise levels of between 55 to 60dB, an increase of between 3 to 10dB being due to the CLR[OCC/6/1 fig7 & MW XX]. The situation would however be similar with the SGSR[MW RX].

CLR Vibration

3.105 Airborne vibration would only affect properties within 40m of the road under consideration[MW XC]. In 2028, with the CLR, 283 dwellings would be affected by increased impacts of airborne vibration that would affect up to 10% of occupiers. A further 25 dwellings would be affected by impacts that would bother 10% to 20% of occupiers. 297 dwellings would however benefit from reduced impacts where up to 10% of occupiers would otherwise have been bothered.

SGSR Operational Noise

3.106 The SGSR would utilise the existing A40, which would not have a reduced noise surface, and no other noise mitigation measures would be provided. In 2013 with the SGSR, within the detailed study and the wider areas, approximately 210 dwellings would be subject to noise level increases of 3dB or more[OCC/6 Tbls9.1 & 9.3]. This would be less than, and markedly different to, the case with the CLR[OCC/6 Tbls8.2 & 9.1 & MW XX]. Fewer than 370 houses would benefit from 3dB or greater reductions, and many of these properties would lie

within the town centre and would comprise large parts of the CA[OCC/6 Tbls9.1 & 9.3]. This would be similar to the effects from the CLR.

3.107 In 2013 and 2028, the SGSR would have adverse impacts on the country park but, unlike the CLR, the effects to the north of the A40 would not result in significant community annoyance[MW XX]. The adverse impacts would however extend to the south of the A40 over the whole length between the Shores Green and A415 junctions, including the lake area.

3.108 In 2013 and 2028, with the SGSR, the Eton Close POS would remain above 55dB throughout. Within the POS, noise levels would be 1dB higher than with the CLR or without either the CLR or the SGSR.

SGSR Vibration

3.109 In 2013, with the SGSR, 299 dwellings would be subject to increased impacts from airborne vibration that would affect up to 10% of occupiers. 10 dwellings would be affected by impacts that would bother 10% to 20% of occupiers, and one would be affected by impacts that would bother 20% to 30% of occupiers. 234 dwellings would however benefit from reduced impacts where up to 10% of occupiers would otherwise have been bothered. Whilst airborne vibration in these dwellings would be reduced, the numbers that would benefit would be less than those with the CLR[MW XC].

Summary

3.110 The increases in noise levels with the CLR in the country park to the north of the A40, in comparison to the SGSR, are broadly balanced by the increases caused by the SGSR in the country park to the south of the A40. This is particularly the case when the CLR extension of the country park to the north of the A40 is taken into account. The CLR will have a better effect than the SGSR on the CA and other areas beyond the detailed study area. The CLR will have a beneficial effect on POS in comparison to the SGSR. Within the detailed study area, the relevant increases from the CLR are in respect of properties situated on a major distributor road. These are thus of far less significance than the benefits deriving to the CA and the POS.

Biodiversity

CLR

3.111 Wildlife interest and biodiversity on the route of the CLR is mainly restricted to the semi-natural habitats of the River Windrush channels and meadow grassland. These features are within the Witney Lake and Meadows Country Park and provide a green gap between the Witney and Cogges urban areas. The major part of the CLR would cross cultivated arable farmland and grasslands to the east of Cogges. These are species-poor, grass-dominated swards of a type indicative of considerable modification in the past with low current botanical interest. Hedgerows and scrub provide the main biodiversity interest in the farmland. Together with an area of amenity grassland, these farmland habitats of limited biodiversity interest comprise 83% of the area which would be impacted by the CLR.

3.112 The direct impacts of the CLR within the country park would result in the loss of grassland, river bank side vegetation, tall herbaceous vegetation, a pond, scrub and trees. The pond is overgrown with very little diversity in vegetation [OCC/7/2/8.1]. Its main interest is in respect of water beetles, but these could be easily translocated[MJ XC]. Three channels of the River Windrush would be crossed and hedgerows would be severed, resulting in potential fragmentation impacts.

3.113 PPS9[37] sets out a clear order to minimise impacts, that is to firstly mitigate the harm and then compensate if required, although these matters require equal consideration[MJ XX & RX]. The CLR impacts would be mitigated against and compensated for as a result of the implementation of the following measures. Compensation would be required, as the harm could not be fully mitigated against[MJ XX]. The measures form part of the LEMS [CD42A] which is the subject of a planning condition on the CLR. Whilst the CLR would change a number of habitats, the measures would result in gains for biodiversity as a result of habitat creation and enhancement[MJ RX].

3.114 Positive and sensitive design would mitigate against the potential for impacts from fragmentation and severance by incorporating clear span bridge crossings. Mammal ledges would also be incorporated into culverts and maintained by the EA as part of their watercourse core duties[MJ XX]. The crossings would therefore allow for the easy passage of otters, water voles, badgers and bats. Bat bricks and boxes would be incorporated within the bridges, and mammal culverts would be provided at Hardwick Brook and Farm Mill together with the creation of two otter holts and a spawning area for fish[OCC/28].

3.115 The CLR would be protected by otter exclusion fencing to the west of a point 100m to the east of the eastern branch of the River Windrush, to reduce the likelihood of road casualties[OCC/28]. The use of fencing without an overhang has been agreed with the EA[38], as otters in this location are less likely to attempt to breach the fence[OCC/74]. This fencing would also form a barrier to badgers. To the east of this section of the CLR, the A40 carriageway represents the main casualty area for badgers. If the remainder of the CLR was fenced, this would funnel badgers towards the A40. The EA, NE[39] and wildlife organisations have been involved in, and have not objected to, the fencing strategy. The CLR would however result in a slight increase in the risk of road casualties, with the risk to badgers being the greatest, but any increase in risk would not be significant in comparison with the effect of the existing A40[OCC/28 & MJ XX].

3.116 The planting design would minimise gaps in existing hedgerows and provide additional hedgerow planting alongside the CLR that would create new wildlife corridors. There would be an overall gain in hedgerow length of over 2km. In the areas of land around the bridges, the reinstatement of habitat would be required following construction. Rhizomatous tall fescue turf would be laid

[37] Planning Policy Statement 9: Biodiversity and Geological Conservation
[38] Environment Agency
[39] Natural England

under the bridges, and has been chosen because it is hardy and drought and shade tolerant.

3.117 Two permanent wire mesh dormouse bridges would be installed on the existing Stanton Harcourt Road bridge over the A40[MJ XC]. These would enhance connectivity for dormice in the wider landscape by linking existing habitats. One permanent dormouse underpass would also be installed at the new CLR bridge over the eastern channel of the River Windrush and a further two dormouse bridges on the new CLR bridge at Stanton Harcourt Road. This would provide mitigation for the severance of habitat by the CLR. Dormice may still attempt to cross the CLR, but any impact in terms of fragmentation would not be significant due to they being nocturnal and the low speed of vehicles on the CLR[MJ XC].

3.118 The construction of the CLR could cause disturbance to breeding birds through noise and visual intrusion, particularly to birds associated with quieter habitats such as the yellowhammer. This would be likely to have a short term minor negative impact [OCC/7/2/8.7]. The breeding success of common bird species with territories identified in a 2008 survey, and assumed to extend into the site, has been shown to be negatively affected by road related noise[OCC/47 & MT/22]. Such species include pheasant, great spotted woodpecker, garden warbler, wood warbler, goldcrest, magpie and chaffinch. Road related noise from the completed CLR would therefore have a long term minor negative impact, notwithstanding the provision of a reduced noise road surface[OCC/28].

3.119 There would be the potential for indirect impacts such as pollution, disturbance, nutrient enrichment, dust generation, soil compaction and the spread of non-native invasive species. Control measures would be implemented to minimise or remove the potential for indirect impacts. For example, protective fencing erected around retained habitat would ensure that no indirect impacts arise from damage or soil compaction. Pollution prevention would also be considered throughout the CLR, which has been designed with reference to PPS23[40][CD88].

3.120 The principle of replacing habitat lost to the proposal has been adopted. Such habitat would be replaced on a like-for-like basis or better. The areas created would seek to provide enhancement over the existing baseline conditions. The first five years of habitat creation and management would be undertaken under the construction contract, and it is envisaged that the management of the extended country park would be undertaken by Witney Town Council[MJ XC]. Detailed proposals are still being developed.

3.121 Protected species such as dormice and water voles are present in the area around the CLR route. Both these species would require mitigation measures to be carried out under the appropriate licences. Consultees have not suggested that the necessary licences would be difficult to obtain[MJ XC]. The mitigation would require habitat creation and enhancement which would also benefit a wide range of other wildlife species.

[40] Planning Policy Statement 23: Planning and Pollution Control

3.122 Habitat creation would include the provision of 11 new ponds[MJ XC]. One large pond, which is currently under construction, would provide additional sedge bed habitat for water voles[OCC/28]. These have been recently re-introduced into the River Windrush corridor, and now comprise a robust population. A series of 7 ponds and scrapes would be created as compensation for the loss of a pond in the country park. These could receive translocated water beetles.

3.123 A balancing pond would also be constructed in connection with the highway drainage system. Some surface water discharges would be directed through ditches and swales before entering the main River Windrush channels. These features would be designed to be as wildlife friendly as possible. They would include appropriate aquatic and marginal planting in and around the balancing pond and a reed bed, a UK Biodiversity Action Plan habitat, together with nearby species-rich grassland and an area of native fruit trees[MJ XC]. The grassland would be of the nationally rare Southern England floodplain type, an example of which is found at the Ducklington Mead SSSI[41] some 2km from the CLR. The creation of this grassland would result in a net gain in species richness.

3.124 A species-rich meadow would be created as compensation for the loss of part of the northern meadow within the country park. Roadside verges would also be seeded to provide a botanically-rich grassland throughout the CLR, with the largest areas on verges within the country park.

3.125 Where hedgerows would be subject to direct impacts from the CLR, they would be translocated. This would offset habitat loss and fragmentation impacts on dormice by providing rapid re-growth in new targeted locations along the CLR route. Dormouse boxes would also be provided. Hedgerows directly to the east of Cogges would be isolated by the CLR, but they are already isolated from the wider environment by the A40, the B4022 Oxford Hill and the housing in Cogges[OCC/7/2/8.2 para 4.2.1 & MJ XX]. Any fragmentation would therefore not be significant, and mitigation would be provided along the CLR verges.

3.126 Whilst hedgerows between the CLR and the A40 in the valley of the River Windrush would also be isolated, the main wildlife routes follow the river corridor, and this would offset any impacts from fragmentation. An ancient hedgerow bisected by the CLR would be translocated into an adjoining area of woodland to provide enhancement for dormice[OCC/7/3 pg 7]. The woodland would also be subject to a management plan to ensure appropriate future management together with tree, shrub and wildflower planting under a woodland grant scheme to aid implementation.

3.127 Hedgerow planting and ditches alongside the CLR would provide new corridors for wildlife to use as links to other nearby habitat, to aid species dispersal and connect animal populations. The appropriate planting of native flora of local origin would also be used in the planting scheme.

3.128 The junctions between the CLR and Witan Way, Oxford Hill and Cogges Hill Road would be served by street lighting[OCC/28]. These areas are subject to existing lighting, and the use of flat glass and sharp cut off lights would

[41] Site of Special Scientific Interest

minimise any impact of pollution on the surrounding areas. There would therefore be no significant change in lighting.

3.129 A wide range of animals would benefit as a result of the extensive programme of aquatic and terrestrial habitat creation and translocation. These would include the existing populations of water vole, dormouse, grass snake, otter, badger and fish. Once the created habitats have reached maturity, there would be a net overall gain in biodiversity, notwithstanding the changes to a number of habitats[OCC/28 Tbl1].

SGSR

3.130 The SGSR would impact on two outlying badger setts. Casualties have been reported in the area of the SGSR, and the scheme would increase the risk of further casualties. The scheme would also lead to an increased risk of barn owl casualties due to nesting proximity[OCC/7/2 pg5]. Notwithstanding that the SGSR would have a smaller footprint than the CLR, the scheme would proportionally have a greater effect in terms of hedgerow severance than the CLR[OCC/28 Tbl1 & MJ RX].

Summary

3.131 In overall terms, the larger footprint CLR, excluding the effect of any mitigation and compensation, would have a worse impact than the SGSR in terms of ecology and biodiversity[MJ XX]. The CLR would also result in greater construction impacts than the SGSR[OCC/7/3 & MJ XX]. The biodiversity enhancements with the CLR would however be so comprehensive and fulfil so many BAP targets that the benefit to biodiversity would be overwhelming in terms of the enhancement of the lower Windrush valley[MJ XX].

Air Quality

Approach

3.132 The Council's evidence comprises a baseline and predictions for future years air quality using central traffic growth conditions and actual traffic flows without any intervention, with the CLR and with the SGSR[CD85]. The use of central growth and actual flows complies with TAG[42] advice and is more representative than the SO's air quality model which uses high growth and demand flows[PT XC]. The Council's model accounts for street canyons on relevant sections of Bridge Street, Mill Street, Corn Street, West End and Narrow Hill[OCC/4/3 para2.4.2]. It also performs to a more reliable standard of verification than that of the SO[OCC/4/3 para2.3.3].

3.133 The Council's evidence has compared the CLR and the SGSR using consistent data and assessment methods and including traffic management complementary measures. This is because the complementary measures would be put in place alongside either scheme[OCC/4/3 para2.2.5]. The evidence has focused on an opening year, in 2013, as this would reflect the highest pollution concentrations when compared with any other future year, due to the impact

[42] Transport Analysis Guidance

of vehicle technology improvements. Design year results have been predicted for 2028[OCC/4/1 App10].

3.134 The evidence focuses on annual mean concentrations of NO_2[43] in the air, using the UK criteria limit for protecting human health of 40µg/m^3. In line with Defra guidance, exceedances of hourly standards are inferred from these. Evidence is also provided on the changes in mass emissions across the study area, in terms of NO_x[44] and carbon.

3.135 Assessments have been undertaken only where there could be relevant exposure to the local population. The predictions are described in accordance with the IAQM[45]/EPUK[46] recommendations on attributing significance. The definition of significance is firstly whether or not the criteria for the annual mean NO_2 concentration above 40µg/m^3 would be exceeded. Then, to demonstrate and understand the changes in annual means relative to whether there would be exceedances or not.

Baseline Conditions

3.136 The Witney AQMA was declared in 2005 for annual mean NO_2, and incorporates Bridge Street, and its junctions with New Yatt Road, Newland, Mill Street and High Street. In the context of local air quality policy, the CLR is a traffic relief scheme to improve the town centre environment by reducing the amount of traffic on Bridge Street. It is an integral part of the WODC's Air Quality Action Plan and is enabled through the Oxfordshire LTP3, which includes policies to deal with areas where air quality problems have been identified[CD93 & OCC/17].

3.137 There are five monitoring sites within the Council's study area, comprising four diffusion tubes and one continuous analyser. All were used in the assessment of air quality, with two, at Early Road and Abbey Road, used to derive a local background concentration component. The remaining three, at roadside locations within the AQMA, were used in verification of the base year model.

3.138 The derived base year background NO_2 concentration is 18.5µg/m^3. Within the AQMA, monitoring results show persistent NO_2 exceedances of the 40 µg/m^3 level by a large margin over the last 6 years. This provides strong evidence that the CLR is required, without which substantial reductions in annual average NO_2 levels could not be achieved in a timely fashion.

3.139 The 2010 base model performs within the requirements of Defra in LAQM TG(09)[47] after appropriate adjustment[CD87]. It is however likely to tend to overestimate values in the wider Witney area outside of the AQMA. Results for 2010 show large NO_2 exceedances in the AQMA on Bridge Street and Mill Street, but no exceedances elsewhere in wider Witney, either at residential receptors or POSs. On this basis, exceedances would not be expected in the opening year of the CLR outside of the AQMA.

[43] nitrogen dioxide
[44] oxides of nitrogen
[45] Institute of Air Quality Management
[46] Environmental Protection UK
[47] Local Air Quality Management: Technical Guidance (09)

Air Pollution Effects

3.140 In 2013, without the CLR or the SGSR, there would still be NO_2 exceedances in the street canyons of Bridge Street and Mill Street in the AQMA, although there would be less of them than now. Traffic relief is therefore clearly required to resolve these exceedances. Concentrations of NO_2 elsewhere, in residential areas and public open space, would be below the criteria of 40µg/m^3.

3.141 In 2013, with the CLR, NO_2 concentrations would reduce substantially in Witney town centre and the AQMA, such that all exceedances would be removed. Moreover, there would be no exceedances at any location assessed within the study area. The Bridge Street area of the AQMA would have a substantial beneficial impact, whilst the High Street and Mill Street areas of the AQMA would have slight beneficial to substantial beneficial impacts. The Cogges estate would have a slight adverse impact. All other areas assessed, including Shores Green, would have a negligible impact.

3.142 Both the country park to the west, and the hay meadow to the east, of the eastern branch of the River Windrush would have slight adverse impacts immediately adjacent to the CLR. Nevertheless, the existing, revised and replacement POSs show no exceedances of the relevant criteria. All other POSs would have a negligible impact.

3.143 In 2013, with SGSR, NO_2 concentrations would also reduce substantially in Witney town centre and the AQMA, such that all exceedances would be removed. The Bridge Street area of the AQMA would have a substantial beneficial impact, whilst the High Street and Mill Street areas of the AQMA would have slight beneficial to substantial beneficial impacts. Corn Street would have a negligible to slight beneficial impact. The Oxford Hill area, to the west of Jubilee Way, and the Shores Green area would have a negligible to slight adverse impact.

3.144 In summary, in 2013, both the CLR and the SGSR would have a substantial beneficial effect on the AQMA, whilst slight adverse effects would occur at the Cogges Estate, under the CLR, or at Shores Green and Oxford Hill west, under the SGSR. The CLR would result in a larger reduction in NO_2 concentrations in the AQMA in Witney town centre at Bridge Street and High Street than for the SGSR, and this is the key area requiring mitigation for air quality. This gives greater confidence that reductions will in fact be achieved$_{[PT\ XC]}$. NO_2 concentrations in the Mill Street area of the AQMA would be lower with the SGSR than with CLR. Any risk of spare highway capacity in the AQMA being taken up would apply equally to the CLR and the SGSR$_{[OCC/4/3\ para3.7.1]}$.

3.145 In 2013, with the CLR, NO_2 concentrations at the replacement for the Eton Close POS would be lower than concentrations at the current POS$_{[OCC/4\ Tbl6-6]}$. This is principally because the current POS is affected by emissions from the nearby A40, whereas the replacement POS would be over 200m from the A40. In 2013 and 2028, with the CLR, concentrations at the replacement POS would be lower than concentrations at the existing POS, with the SGSR$_{[OCC/4/1\ TblA10-4]}$. In 2028, with the SGSR, NO_2 concentrations at the existing POS would also be higher than in 2028 without either the CLR or the SGSR. All other areas assessed, including the Cogges estate and existing POSs, would have a

negligible impact. As the annual mean concentrations would be well below 60ug/m^3, the one-hour mean for NO_2 would not be exceeded at the relevant locations assessed.

3.146 In 2028, where predicted NO_2 concentrations would be likely to be overestimates, there would be no exceedances with or without the CLR and the SGSR. This is due to envisaged emissions improvements to vehicles on the highway network[PT XC]. The maximum NO_2 concentration would be just over 28µg/m^3 on Bridge Street, compared to the criteria of 40µg/m^3. Whilst the differences between the air quality improvements for the CLR and the SGSR in 2028 would be less than predicted in 2013, the 2013 predictions are more robust, being less dependent on the effect of future air quality factors[PT XC]. Overall however, there are no material differences between the assessments regarding the impacts of CLR and the SGSR on local air quality in 2013 and 2028[OCC21 para9].

Mass Emissions

3.147 In terms of mass emissions, the SGSR would increase vehicle distance travelled by more than the CLR between 2013 and 2028 and would therefore increase carbon and NO_x emissions much more than the CLR. The increases would be 18 and 28% in 2013 and 2028 for NO_x, compared to 10% for both for the CLR, and 15 and 20% in 2013 and 2028 for carbon, compared to 11 and 13% for the CLR. The CLR would therefore be more beneficial in terms of the Government's commitment, by the Climate Change Act 2008, to cut carbon emissions by at least 80% by 2050.

3.148 Whilst the DMRB only requires a regional impact assessment of mass emissions, the term regional is not defined. It is best practice, particularly where options are under consideration, to carry out a local study such as the Council has undertaken here[MT/12 para3.31 & PT XX]. TAG also suggests that the impact on regional air quality should be reviewed for each scheme, which is what has been done here under DMRB[MT/13 para1.6.2 & PT XX]. Although the identified differences would not be of regional significance, they would be relevant, and the lesser increases would be more beneficial towards carbon reduction intentions[PT RX].

3.149 The carbon difference, in relation to the WODC area, would however be extremely slight as a percentage change[PT XX]. The mass emissions assessment has included all roads which would satisfy with the DMRB change criteria[OCC/24 & PT XX]. These would however not necessarily be all those roads on which traffic conditions would change, and the inclusion of further roads would reduce the percentage increases[MT/14 & PT XX].

Summary

3.150 The CLR would achieve the intended AQMA mitigation extremely well and generally better that the SGSR. It would not create exceedance problems elsewhere as a result, with impacts outside of the AQMA generally being negligible. It would therefore be the more favourable traffic relief scheme in terms of air quality.

Flood Risk

Preliminary Matters

3.151 This Inquiry is not to consider planning matters. The principle of the development, including its effect on flood risk, has been accepted by the Council and the EA, and planning permission has been granted for the development. To satisfy the imposed planning condition 11, the CLR should be the best that can be achieved on the site. There is no prospect, particularly given the EA's position, that condition 11 would not be discharged.

3.152 The EA's clear position is that the CLR would be acceptable, but that it wishes to have some further details on a limited number of aspects[EA/1]. The EA had been provided with a sequential assessment and had approved it[OCC/109 secn7]. The EA's subsequent note to the Inquiry did not suggest any change from the assessment of the acceptability of the sequential and exception test analysis[EA1].

The Council's Flood Risk Assessment

3.153 The Council's assessment has demonstrated, following very substantial reviews by the EA on a number of occasions, that the CLR would have no unacceptable effect on flood levels. The EA has previously required further work to be carried out, and this has been completed[OCC/54].

3.154 The EA has confirmed that the model is fit for purpose, and it has also been assessed by an independent reviewer who verified its validity[OCC/5/1 appB]. This is independent and impartial advice which the Secretary of States can take into account [EA/1]. The EA would not signify its agreement with the FRA[48] and the CLR unless it was satisfied that the public would be adequately protected.

3.155 Development of the model has subsequently progressed, following the receipt of further information, and this has ultimately led to a model which is better than that which the EA declared fit for purpose. The model also validates very well against the significant numbers of photographs presented to the Inquiry[OCC/54 & OBJ/29/2]. The latest model, with the use of a Manning's n value of 0.05, produces an even closer match to the photographic evidence than earlier versions.

The SO's criticisms of the Council's Flood Risk Assessment

3.156 The SO is of the view that the 2D modelling should have gone further north and into the Witan Park Industrial Estate. Neither the EA nor its reviewer however required that to be undertaken. There is also no justification for the SO's position that a flood protection bund adjacent to the estate should not be taken into account. This is because there is a riparian responsibility to repair the bund and the EA has powers to require a landowner to repair a flood defence. The EA has also indicated that it would be taking the bund into account as a flood protection measure[OCC/78 para25]. This is consistent with

[48] Flood Risk Assessment

the fact that the bund has fulfilled its function, in that no actual flooding of the estate has been reported.

3.157 If the Cd[49] value in the model is changed, the flow at certain nodes changes direction from being a flow onto the floodplain to a flow into the river[MT/26 pg4]. This does not however indicate instability but simply that, given the location of the particular node, the flow which had formerly left the river under a chosen Cd would return under a different Cd[CC/78 para42]. The EA's independent reviewer also dealt with the question of model stability and was satisfied with it[OCC/5/1 appB].

The SO's Flood Risk Assessment

3.158 The findings of this assessment are that the total extent of the additional flooding which it is alleged would be caused by the CLR would be very minor[MT/5/1 para7.1.3 & MT/27]. Moreover, properties in Cogges would experience no increased risk of flooding in the design event[CW XX]. With a peak flow of 29.3m^3/s, the only additional flooding shown would be to the immediate west of the Eastern Windrush and a small area to the east of the Hardwick Brook[MT/27 pg4].

3.159 The first issue, and perhaps the primary difference, between the main parties is an appropriate value for Manning's n for the main Windrush channels[CW XX]. Flooding of the Witan Way Industrial Estate is only shown to occur if the SO's n value of 0.08 is applied, but not for the Council's 0.05. As there is no evidence of flooding of the estate, the SO's n value of 0.08 is inappropriate. There are also no significant obstructions to the Windrush channel and the Australian example of Merriman's Creek, which the SO identified with a 0.08 n value, is quite different to the Windrush[OCC/32 & 58].

3.160 The SO's model also shows that the floodplain was inundated for four days after the peak of a significant flood event in July 2007, when observations showed that there was very little flood water remaining in this area[MT/16]. This is clearly due to the n value of 0.08 being too high.

3.161 The second issue is the SO's removal of all flooding, shown in the flood extent figures, which would be at a depth of a 100mm or less. The claim that a 100mm depth would have evaporated is extraordinary, since the ground comprises a clayey topsoil overlying a clay layer and is not relatively permeable[OCC/35 & 78]. This artificial removal means that a level of flooding, even greater than that shown on the extent figures, would have occurred as a result of the SO's inputs and assumptions, and the SO's position is therefore even more unrealistic.

3.162 Thirdly, the SO's original model assessment identified flooding in locations, such as in the area to the east of the East Windrush channel and the industrial estate to the west, that did not flood four days after the peak of the event [OCC/31].

3.163 The fourth issue is the extent of the SO's model. In order to properly set up a model, it is necessary to address the relationship between flows and flood

[49] Spill Coefficient

water levels at the boundary of the model[CW XX]. That relationship is dealt with by flow water level curves, or stage discharge relationships, in order to express the relationship between the study area and the characteristics of the next unit downstream.

3.164 The SO's model was derived from the three part EA model, but initially used just one of the parts which extended only as far south as the A40[MT5/9 fig3.1]. There is however an interaction between flood levels to the north of the A40, those at the embankment orifices and the flood levels to the south of the A40[CW XX].

3.165 The EA model used an n value of 0.035 to the south of the A40, which was incompatible with SO's use of 0.08 to the north of the embankment. This incompatibility was managed by raising the downstream levels by some 0.3m at the embankment, in order to achieve some sort of consistency in the model. It was however an arbitrary approach which affected water levels generally to the north of the A40[CW XX].

3.166 Further modelling was then undertaken to the south of the A40 using the Council's 1D model, as had been done for the floodplain, with selected n values. Stage discharge curves for the downstream boundary were derived from a run of the Council's model without the CLR. That meant that, should flow proportions vary with the CLR, the SO's model would produce inaccurate results.

3.167 The fifth issue is that the further modelling undertaken, to include the designs included in the revised FRA, was not complete as it did not include the 300mm lowered invert level of the Hardwick Brook under the CLR[OCC/50 para5.2 & MT/27]. The effect is that upstream modelled water levels would tend to be too high.

3.168 The sixth issue concerns spill coefficients. The SO's model used coefficients of up to 1.5 and a modular 'm' value of 0.9 for the Windrush banks rather than the Council's figures of 0.2 for both, which have been accepted by the EA [MT/16 secn3]. The use of the SO's values incorrectly models the Windrush banks as formal weirs in line with the channel flow, when they should be treated as side weirs[OCC/78 paras28-44].

NSOs' Comments on Flooding

3.169 A considerable number of NSOs have expressed concerns about the CLR exacerbating the risk of flooding in Witney. A number of issues, in addition to those already covered, are dealt with as follows.

3.170 Dr Kinchesh contends that flows of the Madley Brook into the Windrush have been omitted[OBJ/118/2 para1]. Intermediate flows into the Windrush have however been taken into account[OCC/76 para4 & OCC/81 pg4]. He also suggests that the flooding of Blakes School in 2007 has not been properly understood, particularly by reference to the potential effect of Madley Brook[OBJ/118/2 pg2]. Surface and flood water however contributed to flooding within the vicinity of the school, and the key issue is that the CLR would not make flooding any worse in either location[OCC/76 para8].

3.171 The Council's modelling validates well against Mr Devonald's photographs of the July 2007 flooding[OCC/80]. The photographs do however relate to a number

of locations that would not be affected by the CLR but have been affected by drainage surcharge. There would be a contribution from local drainage flows which has not been modelled. While local drainage can add to fluvial flood flows on the periphery of the floodplain, such additional flooding is not within the model because the question is whether the model shows a change in water levels caused by the CLR. It has been demonstrated that it does not.

3.172 The CLR would also protect some 30 properties on the east side of the Cogges Estate by discharging drainage flows to the Hardwick Brook[OCC/9 para7.21]. It would also enhance the drainage system of the retained part of the Eton Close POS which was not designed to accommodate climate change[OCC/9 para7.25].

Sequential and Exception Tests

3.173 The CLR would represent essential transport infrastructure partly located within, and which would have to cross, a Zone 3b functional floodplain, where water has to be stored in times of flood[CD22 pgs21 & 22]. It does not have the benefit of a local plan allocation and is therefore required to pass the sequential test set out in PPS25[50]. In terms of this test, any preferable alternatives in Zones 1 or then 2 must be suitable, developable and deliverable.

3.174 The SGSR would not provide the sort of suitable benefits which the CLR would and is not developable or deliverable, as it has not been demonstrated that control of all of the required land could be obtained. The SGSR does not therefore represent a proper alternative to the CLR. There are thus no reasonably available sites in flood Zones 1 or 2, and the test is therefore passed.

3.175 As the CLR would be essential transport infrastructure within the functional floodplain, the exception test should also be applied. The CLR would provide significant sustainability benefits in terms of traffic, air quality, ecology and noise, and flood risk would not be increased. Given the absence of an increased flood risk, the wider sustainability benefits plainly outweigh flood risk. There are no reasonable alternatives on developable previously developed land, and the development would be safe without increasing flood risk elsewhere. This test is therefore also passed.

Summary

3.176 In summary, it can be concluded that: the CLR passes the sequential and exception tests; the Council's fluvial flood risk model can and should be relied upon; the model demonstrates that there would be no additional flood risk from the CLR compared to the 1 in 100 year event plus 20%; and that the SO's alternative assessment is wrong and should be rejected.

Conclusion

3.177 The CLR is plainly a better scheme than the SGSR. Following a detailed Inquiry considering a raft of criticisms and objections to the CLR scheme, it

[50] Planning Policy Statement 25: Development and Flood Risk

cannot be rationally concluded otherwise. No other scheme comes close to achieving the benefits associated with the CLR. The Council therefore asks the Secretary of States to confirm the CPO and make the ancillary orders.

4. THE CASES OF THE SUPPORTERS

The material points are:

Mr M Chattoe

4.1 192 households have a direct frontage onto the A4095 in north west Witney[INQ/4/03]. These households suffer inconvenience, noise, vibration, fumes, compromised safety and a poor environment due to town centre bound traffic that would be re-routed with the CLR. The SGSR would not provide a viable alternative route to the town centre for this traffic and would not provide relief for these households. The physical issues with the CLR could be adequately addressed, and indeed the CLR would open up the Windrush valley, a hidden asset of Witney, to the wider public which would be a positive step in landscape terms. The CLR would also represent good value for money as developer contributions are in place

Mr M Walker

4.2 The land owned by Walker Machinery of Lindsey Farm, High Cogges, at the B4022 slip roads at Shores Green is not for sale or the subject of any option or arrangement[INQ/4/07]. Any attempt to purchase it would be resisted.

Other Supporters

4.3 Other representations of support towards the CLR were submitted to the Inquiry[INQ/4/01-09]. The content of these 9 representations generally followed the case made by the Council.

5. THE CASE FOR THE STATUTORY OBJECTOR

The material points are:

The Law and Policy

Orders and Application

5.1 It is a fundamental principle of our constitutional law that no citizen is to be deprived of his land by a public body against his will unless it is expressly authorised by Parliament and the public interest decisively so demands[51]. The taking of a person's land against his will is a serious invasion of his property rights, and so the use of statutory authority for the destruction of those rights must be most carefully scrutinised[52]. It is also a settled principle that the courts should impose a strict interpretation of statutes authorising the expropriation of private property[53].

[51] Prest v. SoS for Wales (1982) 81 LGR at p.193 per Lord Denning MR at 198
[52] Prest v. SoS for Wales (1982) 81 LGR at pp.211-2 per Tasker Watkins VC
[53] R. (Sainsburys Supermarkets) v. Wolverhampton City Council [2010] UKSC 20 per Lord Collins at [9]

5.2 These principles of law apply to CPOs and are reinforced by Circular 06/2004. The principal test is whether the Council has established a compelling case for the CLR in the public interest. The CPO would fail this test if, for example, the Secretary of State concludes that: the environmental impacts of the CLR would outweigh the benefits; there is an adequate or better alternative available, so that there would be no need for such a radical solution to the traffic problems of Witney; or that the benefits of the CLR, or any alternative such as the SGSR, would not be likely to be adequately 'locked in' or preserved for the future so that the costs of the provision of any such scheme, whether in financial or environmental terms, would outweigh the potential benefits.

5.3 The principal test of a compelling case should be considered in the light of the following matters. These are whether the CLR or SGSR would be accompanied by adequate complementary measures and, if so, whether there would be a sufficient balance of advantage associated with the operation of the CLR over the SGSR to justify the CPO. In relation to the exchange land, the question is whether the compensation land would be as equally advantageous to users of the country park. It is accepted that the exchange land would be more extensive than that taken and is proposed to be vested in an appropriate manner.

5.4 In terms of permutations, the CPO and SRO march together. If the Secretary of State does not confirm the CPO, then it would not be appropriate for him to confirm the SRO. Furthermore, if the Secretary of State does not confirm the exchange land certificate, the required POS could not be the subject of a CPO. There is no indication that the exchange land could be acquired voluntarily or that the required land could be declassified. In the absence of the necessary exchange land therefore, the CPO could not be confirmed.

The National Planning Policy Framework

5.5 The NPPF remains in draft. The consultation has closed, but a summary of responses is not yet available. The document does not signal a radical shift in direction for planning policy, but a refinement in the way planning guidance is provided.

5.6 The central thrust of policy based around sustainable development remains. The NPPF continues to promote the facilitation of sustainable modes of transport and emphasises the need to minimise potential conflict between car borne traffic, cyclists and pedestrians. It accords with the need to avoid severance and the unsustainable consequences of encouraging the use of the car for short trips. Accordingly, the NPPF does not represent a return to the car orientated predict and provide policies of the 1980s.

5.7 In relation to flooding, the NPPF continues to steer development to areas of lower flood risk, and seeks to ensure that, if development is necessary in areas of high risk, it should not increase flood risk elsewhere. Furthermore, valued landscapes should continue to receive protection. The valley of the River Windrush is also a heritage asset for the purposes of the NPPF, by virtue of the protection accorded by LP Policy WIT3.

5.8 In relation to ecology, the document maintains that the correct approach to ecological harm is that it firstly should be avoided by locating development on a

less harmful site. Only if that is not possible, mitigation and then, as a last resort, compensation should be considered. Overall therefore, whilst the NPPF can only be accorded limited weight, it does not favour the CLR[MT/1/1 secn3].

Traffic

Introduction

5.9 The CLR was first justified as a measure to: achieve a significant reduction in the traffic flows in the Bridge Street area; reduce the adverse impact of motorised traffic within the town as a whole and particularly in the most sensitive parts of the CA; and to reduce the level of air pollution in the AQMA to below the target set by legislation[CD/32 para1.5.1]. These issues must however be considered in the context of the existence of the SGSR as an alternative to the CLR.

5.10 In detail, the principal questions that must be asked are how the two schemes compare in terms of: meeting the concerns that lead to the identification of the need for any such scheme in the first place in relieving the AQMA and the historic core from traffic congestion; their wider traffic effects; the complementary measures required; meeting successive policy requirements as to the promotion of sustainable modes of travel; and cost benefit analysis and value for money.

Need

5.11 The slowest average speed on a Witney route is 11mph over 700m on Newland northbound in the am peak[OCC/84 para1.8 & IM XC]. This is not unreasonable for an urban network given the limited distance involved, and to base any justification on routes such as this overstates the need for the CLR.

5.12 Moreover, some 30 to 40% of trips on Bridge Street at peak times are less than 2 miles. Furthermore, this is based on a drive distance and not the shorter and more direct walking or cycling distance achievable from Cogges and West End to the town centre[OCC/61 Figs7.5 to 7.7]. The CLR would cater for these vehicular trips which are identified within PPG13 as those for which walking and cycling are considered to be viable and preferable alternatives. The principle of the CLR is therefore, in this respect, flawed and contrary to policy for the promotion of non-car modes.

5.13 There are thus significant opportunities for modal shift from the car. Indeed, the January 2011 White Paper suggests that many journeys of under five miles could be easily cycled, walked or undertaken by public transport[OCC/18 page7 para4]. The document also seeks to encourage choices that will deliver this shift in behaviour in many more local journeys. Indeed, a degree of congestion in the peak periods is commonplace in urban areas, and may be a good thing in encouraging modal shift[TD XX].

5.14 The CLR would also provide a new link into the town centre and cause traffic into the centre to increase by making car travel to the centre more convenient. The increased capacity would become available on the day of opening and, without alternative measures being provided to encourage non-car use, people would choose to use the car to access the free town centre parking stock. There is therefore a need for parking restraint[CD47 para7.2.4 & CD30 paras 11.2.1 & 11.2.2].

5.15 There has been no effort made by the Council to follow this approach to manage car travel to the core of the town[MT/32 para9.2.8]. The failure to deliver alternative measures in a timely fashion would undermine any attempt to increase non-car travel and lead to increased levels of delay and congestion on the network in the future. This impact would then be more problematic to remedy later as travel patterns would have been learned and capacity, once provided, would not be easily removed[MT/2/3/10].

5.16 The Council has used DIADEM[54] variable demand modelling software for the assessment of the likelihood of modal shift and induced traffic[MT/32 section9.3]. It cannot however include for modal choice between walking or cycling and the car, nor can it include time period choice where journeys retime into the peak from outside the peak when capacity is available. The software is therefore not appropriate for small schemes of the type and scale of the CLR or SGSR, on the basis that non-vehicle modes would have a greater impact on trip making habits than public transport.

5.17 The Council should have recorded non-car movement to the town centre. This could have been used to consider the likely modal transfer that would be experienced with either scheme in place. It would also have been possible to consider the likelihood of time period change for cars travelling in the shoulder peaks. This would have identified an increase in demand for car travel at peak times, unless there was a rigorous demand management regime implemented in the town centre, linked to matters such as car parking restraint and charging.

5.18 There is the potential for a scheme to be introduced in the short term to relieve the impact of congestion on the town centre. This would make use of measures proposed and accepted as appropriate in the scenarios for both the CLR and the SGSR. The principal elements would be: reduced on street parking; parking charges; a Farm Mill pedestrian and cycle link with a Witan Way toucan crossing; a Ducklington/Station Lane roundabout; the removal of the Staple Hall roundabouts; and the reallocation of road space on Bridge Street and the High Street. Apart from the last item, they could all be funded from existing identified and available sources. Such a scheme would however rely upon the demand restraint, but this would be compliant with local and national policy.

SATURN Modelling Concerns

5.19 Various aspects of the Council's SATURN traffic model give cause for concern. On Stanton Harcourt Road, traffic flows in the model are unreasonably high and represent undeliverable numbers as the road is fundamentally unsuitable for accommodating traffic flows greater than currently experienced. It is single track with limited passing places and significant lengths where there are no passing places or adequate forward visibility.

5.20 These flows on Stanton Harcourt Road, between areas to the south and north east of Witney, cannot be appropriately accommodated on the road[IM RX]. They would therefore need to use Bridge Street, but are not currently shown using it on the model. This undermines the credibility of the model.

[54] Dynamic Integrated Assignment and DEmand Modelling

5.21 On Oxford Hill and the existing Shores Green junction, traffic flows in the SATURN model are unreasonably low and bear little resemblance to current flows or anything that may be considered reasonable in the future. This brings into question the validity of the base routing and again undermines the credibility of the model.

5.22 The Council's traffic monitoring programme has shown there to be 4% AADT growth between 2005 and 2010[OCC/84 para1.14]. Traffic growth in the SATURN model has been forecast in the am and pm peaks as 20 and 22.6% between 2005 and 2013 and 12.4 and 15.1% between 2013 and 2028[OCC/84 para2.43]. The forecasts therefore show little relevance to the current trend and represent a serious overestimate[IM RX]. Had the forecasts been lower, the requirements for complementary measures and the benefits in the economic assessments would have been lower.

5.23 On Bridge Street, at the end of the am peak, there would need to be a residual queue of traffic for the southbound movement to reflect the difference between the SATURN 2010 forecast demand flow, derived from the 2005 base, and a 2011 counted flow[MT/32 section2 & MT/38 page1]. This queue would need to have a length of some 460 vehicles, or 2.65km in total, on the combination of routes into the Staple Hall junction from Newland, Woodgreen Hill and West End. Such queues do not exist, and therefore the demand flow is a significant overestimate. Similarly, for the pm peak, the 190 vehicle queue would extend to 1.1km in total, and again this scale of queuing does not exist[MT/38 page2].

5.24 If the forecast traffic flows, particularly in the am peak, were more realistically related to the 2010 position, there would be a reduction in demand across Bridge Street[MT/32 section2]. Under the SGSR, movements across Bridge Street and the A40 both represent a demand to cross the River Windrush and would thus be interrelated. The Bridge Street reduction in demand would therefore also result in a reduced demand for travel, via the SGSR, to the A40 junction with the A415 in 2013. There is also an overestimate, between the SATURN 2010 demand flow and a 2010 counted flow, of the am and pm peak flows on the A40 westbound exit slip road at the A415 junction. There is therefore a combined baseline overestimate of demand for travel southbound across Bridge Street and therefore on the A40 westbound exit slip road in the order of 580 and 360 vehicles in the am and pm peaks[MT/38 pages1 & 2].

5.25 The use of more realistic flows, than those in the model for 2028, would thus represent a significant reduction in the predicted use of the A40 westbound slip road. Moreover, the impact of further TEMPRO growth, of more than 12% from 2013 to 2028, would increase the absolute difference between the actual and the predicted flow year on year. Furthermore, these reductions could apply throughout the network and could delay the introduction of complementary measures on the CLR and SGSR[IM XX].

5.26 It can however be reasonably assumed that the overestimated 580 and 360 am and pm peak vehicle numbers would at least remain constant between 2013 and 2028[MT/38 pages1 & 2]. Furthermore, in 2028, Bridge Street would be likely to continue to be the shortest and most appropriate route for town centre trips from the northern and eastern sides of Witney, even after encouraging modal

shift. Flows on Bridge Street should therefore remain as the SATURN model 2028 predictions.

5.27 Under these assumptions, and if the model predictions for the A40 westbound exit slip road flows at the A415 junction are reduced by the overestimate of vehicle numbers, the 2028 am and pm peak flows would be 808 and 947 vehicles[MT/38 pages1 & 2]. If the slip road flows were reduced by 50% of the overestimate, they would be 1,039 and 1,032 vehicles. These flows would be instead of the Council's 1,389 and 1,307 vehicles. The SATURN model overestimate therefore has a significant impact on the predicted westbound A40 traffic flows which would exit at the A415 junction.

Operation of the A40 with the SGSR

5.28 Relevant guidance suggests that, at the A40 westbound exit for the A415 junction, a two lane slip road would be required for exit traffic flows greater than 800vph [MT/32 para7.4.6 & fig7.1 & MT/40]. For flows greater than 1,200vph, a two lane Type A diverge would be required, instead of the current single lane Type A. This could then need to be upgraded to a Type B at higher flows.

5.29 The SATURN model overestimates flows on the slip road. If these were reduced by the overestimate, or even by 50% of the overestimate, the slip road would need to be widened to two lanes, which can be accommodated within the highway, but there would be no requirement to change the existing diverge[MT/32 paras7.4.7 & 7.5.5].

5.30 Even with the Council's higher predicted flows, they would be very much at the lower end of the scale for grade separated junctions. The very low through flow on the A40 would result in the guidance not giving any clear prescription for the diverge type, the provision of which would be discretionary[MT/32 para7.5.1]. Here, using the Council's flows, an improvement to a two lane Type A diverge would be appropriate.

5.31 The minimum existing forward visibilities on the A40 westbound exit diverge and slip road for the A415 junction are 90 and 130m for the full envelope and high level cases due to a crest in the road[MT/38 page5 & IM XC]. The full envelope is from viewpoints between 1.05 to 2m above the carriageway to objects at 0.26 to 2m high, and the high level case is between viewpoints and objects at 1.05m above the carriageway.

5.32 In the 2028 pm peak, the minimum visibility on the approach to the rear of the maximum slip road queue for the A415 roundabout would be 200 and 255m for the full envelope and high level cases[MT/38 page4 & IM XC]. The difference from the existing case is due to the horizontal and vertical alignments of the slip road. This maximum queue length is however based on the Council's over predicted flows, and shorter queues would have increased visibility[ID XC].

5.33 At design speeds of 70 and 120kph, the desirable SSDs[55] would be 120 and 295m[OCC/87 tbl1]. With a one step departure from the standard however, which the Council finds acceptable, the SSD for a 120kph road would be 215m[OCC/87 para5.6]. At the rear of the queue, the object would be the last vehicle, and the

[55] Stopping Sight Distances

high level case would therefore be relevant in terms of highway safety. Furthermore, the diverge and slip road would be an area of reducing vehicle speeds from 120kph. On this basis, the available high level visibility at 120kph would exceed the one step departure SSD and the full visibility at 70kph would exceed the desirable SSD. The existing diverge and slip road would therefore be adequate in terms of highway safety.

5.34 The A40, which was formerly a trunk road, is now a county route[IM XC]. This has reduced the likelihood of future capacity improvements to either side of the Witney dual carriageway section. The road is therefore never likely to operate at capacity. The SGSR, together with the Council's Downs Road junction scheme to the west of Witney, would use this wasted capacity and provide a bypass for Witney between the two junctions. This would be a benefit in terms of sustainability and would accord with the Local Transport Plan[OCC/10 para5.29].

5.35 The A40 Hill Farm bridge and junction is located where the eastbound carriageway of the A40 merges into a single lane and the westbound carriageway widens, approximately 500m from the end of the Shores Green east bound entry slip road. The Hill Farm bridge and junction, which was only designed for accommodation use, carries a significant level of traffic at peak times[MT/2/3/12]. The nearby SGSR would reduce the level of traffic using it, and this would result in a highway safety benefit.

Sensitive and Distributor Roads

5.36 The Council has classified various roads in Witney as sensitive or distributor roads[OCC/37]. MfS[56] and MfS2[57] however refer to streets having a higher place or movement status[MT/2/3/5 & 6 & MT/32 section5.3]. MfS is also quite clear that, even where vehicle movement is the key function of a street, pedestrians and cyclists need to be considered. All streets are therefore sensitive[IM XC].

5.37 MfS2 identifies that successfully balanced centres have prioritised pedestrian and cycle movement within their core, while making it straightforward to get from the centre to the edge by other modes. This requires busier routes around the edge to be easily crossed by pedestrians and cyclists and not form a barrier. The document also expresses concern that relief or ring roads are likely to sever communities and disrupt pedestrian and cycle movement to town centres.

5.38 This severance would be the case on the Witney network with the CLR, particularly between the town centre and Cogges, Madley Park, the country park and the employment area to the south of Station Lane[MT/2/1 figsIDCM-1 to 4, MT/32 para5.8.5 & IM XC]. The CLR would therefore be contrary to the aspirations of MfS and MfS2[IM RX].

5.39 Notwithstanding the above however, in 2028, the SGSR and the CLR would provide effectively the same level of traffic relief to sensitive roads[MT/32 para5.4.2]. The AADT flows, on all existing distributor roads in 2028, for the SGSR, CLR and

[56] Manual for Streets: Department for Transport: 2007
[57] Manual for Streets 2 - Wider Application of the Principles: The Chartered Institution of Highways and Transportation: 2010

without either would however be 94,347, 129,145 and 93,417 vehicles[MT/32 para5.6.3 & IM XX]. Such an increase from the CLR would be inappropriate and contrary to MfS and MfS2, bearing in mind that these roads need to be used and crossed by pedestrians and cyclists[IM XC].

5.40 When that part of the CA around the Witan Way roundabout into which the CLR would connect is included, the SGSR would remove more traffic from the CA than with the CLR[MT/32 section5.8]. In 2028, the SGSR would also result in a reduction in cross town traffic of 18% compared to an increase of 4% for the CLR against a scenario without either scheme. The difference would be particularly apparent in Station Lane east where the SGSR, CLR and without either AADT flows would be 17,688, 26,756 and 20,970 vehicles[MT/32 section5.7]. Whilst Station Lane has a higher movement than place status in terms of MfS2, it should still be considered as a street, and the CLR would therefore result in unacceptable severance and delay for pedestrians crossing the road[MT/2/3/6 pge567 & IM XC, XX & RX] .

Station Lane

5.41 The VISSIM actual 2028 am westbound peak flows on Station Lane east from the CLR Witan Way roundabout and between Avenues Three and Four would be 1,652 and 1,705 vehicles[MT/32 para4.3.13]. These would exceed the busiest direction of flow maximum sustainable guidance capacity of 1,300 vehicles for this type of road[MT/32 pge121 & IM XX]. This capacity can however vary by up to 25% depending on the mix of traffic and junctions.

5.42 The am and pm two way peak VISSIM actual flows west of the CLR Witan Way roundabout would be 2,277 and 2,387 vehicles, and those between Avenues Three and Four would be 2,336 and 2,474 vehicles[MT/32 para4.3.13]. All of these flows would exceed the two way capacity of 2,170 vehicles, which is based on 1,300 vehicle capacity being 60% of the two way flow. Furthermore, if an additional pedestrian crossing was installed to reduce severance, it would increase the risk of westbound queuing back to the Witan Way roundabouts and the leisure centre crossing.

5.43 With the SGSR, the two way am and pm peak actual flows between Avenues Three and Four would be 1,372 and 2,034 vehicles, which show that the road would be operating within capacity and easier to cross than with the CLR[MT/32 para4.3.14].

5.44 The Council has suggested that, for the two way demand flow on Station Lane east in the pm peak, there would be little difference between the 2,523 vehicles with the CLR and 2,357 vehicles without either scheme[OCC/105 & IM XX]. These are however demand flows, and the above exceedances of capacity are based on actual flows which would be lower, as they take into account the cumulative effect of junctions and congestion on traffic flows[IM RX].

5.45 The 2004 Local Plan Inspector's Report suggested that Station Lane would be an appropriate road on which to absorb increased traffic flows. This document however pre dates MfS and MfS2, which provide part of the current policy context for the road network[MT/1/3/8 pge237 para8.13]. The weight that can be attributed to this suggestion should therefore be reduced accordingly.

Economic Assessment

5.46 On the CLR, there is no issue with the Council's cost estimates for construction, land acquisition, preparation, supervision, developer funding or complementary measures at: Staple Hall; the Ducklington Lane roundabout; the A415 widening; the Cogges Hill Road roundabout; the Sainsbury's exit to the Witan Way roundabout and the Witan Way toucan crossing [OCC/106 tblA1 & IM XC]. In terms of preparation, 75% or £2.2m had been spent to 2010 and, on this basis, there would be a CLR funding gap of £5.705m[OCC/2/1 app6]. Other complementary measures would however be required, and these would comprise a CLR toucan crossing with a link to Avenue Four and the widening of Station Lane[OCC/106 tblA2]. If these essential and appropriate measures are included, the funding gap would be £7.246m.

5.47 The CLR toucan crossing would be required as there is no footway between the CLR and Avenue Four on the eastern side of Station Lane, and traffic flows would make crossing Station Lane or its use by cyclists difficult. The widening of Station Lane would be necessary due to it exceeding capacity in the am peak in 2028.

5.48 On the SGSR, the construction cost estimate for a lower impact design than that initially suggested by the Council would be £3.842m[MT/2/4 para4.2.2 & OCC/106 tblA3.1]. A further £1.458m could be saved if the arisings were disposed of at a local quarry where there is a requirement to reduce the extent and depth of open water due to its proximity to the flight path into RAF Brize Norton[MT/32 para8.3.5]. The risk of bird strikes makes it likely that this saving would be achieved, but the saving would not be certain and its effect has thus not been included in the estimates. The lower cost of the SGSR would also reduce the risk of construction cost overruns.

5.49 There is no issue with the Council's cost estimates for land acquisition on the SGSR. The Council's estimate for preparation however, at £1.25m, seems high, and a figure of £0.64m would be more realistic. The Council has also suggested that the developer contribution that would cease to be available after January 2013 would be lost. A proportion of it could however be used towards complementary measures that would be common to both the CLR and SGSR, such as the A415 widening[OCC/106 tblsA3.3 & A3.4]. For complementary measures that provide for the widening of the A40 westbound exit slip road at the A415 junction and excluding the £2.2m spent to 2010, the funding gap would be £3.54m. If the diverge was also widened to two lanes, the gap would be £3.914m.

5.50 The various COBA runs undertaken demonstrate that the outputs are hugely sensitive to inputs[OCC/106 & IM XC]. All the BCR outputs for both schemes however are extremely high in relation to the high category threshold of 2. The parties' PVB values lie between £70 to 78m for the CLR and £51 to 56m for the SGSR, and these are relatively close[IM XX].

5.51 Part of the benefits from the CLR, which would be a maximum of £78m in total, would arise from economic efficiency, and these would be linked directly to traffic flows[IM XC & XX]. If flows were lower than those predicted, and indeed short trips should be subject to modal shift, the benefit would be reduced. The COBA methodology however is not able to consider modal shift. A reduction in flows

would not have the same impact on the economic efficiency benefits from the SGSR, which would be a maximum of £56m in total, as the proportional impact would be less.

5.52 The Council's economic assessments use a local accident data approach that does not comply with the relevant guidance[OCC/106 Tbl 3.1 & OCC/92]. In this approach, the accident data for Jubilee Way, with an AADT of some 4,000 vehicles, has been uncritically applied to the assessment of the 26,000 vehicle CLR resulting in a low accident rate for the CLR[OCC/92]. Moreover, 700 vehicles have been modelled as using the SGSR westbound exit and entry slip roads, whereas in practice they would remain on the A40 through the junction[IW XX]. These factors result in a higher accident rate for the SGSR.

5.53 Even with extensive diverge improvements, at £4.598m against the SO's position of either £0.3 or 0.6m, the SGSR would still return a BCR of 10.379, which would be substantially over the proposed DfT very high category[OCC/106 Tbl4.1 & MT/32 appIDCM J]. With the £0.3 and 0.6m diverge costs, the SGSR would return BCRs of 23.088 and 20.959, which would be some 33% better than the Council's latest position for the CLR, notwithstanding the higher accident rate for the SGSR in relation to the CLR.

5.54 Moreover, all the CLR flows are excessive as they have been subject to compounded inflation in terms of the 2010 observed flows and growth. The applied growth between 2005 and 2013 has been 16.8 and 18.5% in the am and pm peaks compared to an observed increase of 4% from 2005 with observed flows being largely in decline since 2007[MT/32 secn9.1, OCC/60 tbl2:1 & OCC/84 para2.42]. It is absurd to suggest that there has been traffic growth to any measurable degree from 2010, or that there is any real prospect of increases between now and 2013. The Council's use of these growth rates exaggerates the use of the CLR which favours it in the economic assessment and increases the need for complementary measures associated with the SGSR. The rates also reduce the economic efficiency of the SGSR on the A40.

5.55 In terms of the availability of developer funding, the Council has committed a public purse contribution of £4.62m to the CLR[MT45 para46]. With the widening of the A40 exit slip road at the A415 junction, at £0.3m, and a reduced developer contribution after January 2013, the deficit to the public purse from the SGSR would be £4.745m, a figure similar to that committed[OCC/106 tbl A4.1]. Even with improvements at the diverge, at an additional £0.3m, an SGSR deficit of £5.045m would not be far from the committed figure.

Summary

5.56 The CLR is a scheme born out of its time, when the construction of highways was seen to be the solution to current and future traffic capacity issues. It is predicated on the basis of 'Predict and Provide'; a process whereby future traffic demand is identified and the highway capacity necessary to accommodate that demand is then provided. Transport proposals now need to identify the quantum of travel movement that will occur, before the correct solutions for providing for such movement can be ascertained. This must be a 'first principles' exercise. That is, to look at total travel demand by all modes, and then provide policies and infrastructure to minimise travel demand and maximise travel by non-car modes before identifying any highway scheme.

5.57 This approach has not been followed for the CLR, as the Council has sought to defend a long term scheme, without truly investigating the options for managing demand. The CLR would also encourage inappropriate driving speeds into the town, increasing the level of peak period traffic and acting to reduce existing travel to the town centre by non-car modes. The CLR is therefore contrary to national travel policy and has failed to remain valid as an approach to solving the transport issues of Witney.

5.58 In terms of the initial justification for the CLR, the differences between it and the SGSR in reducing traffic flows in the Bridge Street area, the central CA and the AQMA would be marginal. The SGSR would however be the superior scheme to the CLR in terms of its ability to remove traffic from the town centre as a whole. It would also have greater policy compliance by promoting sustainable modes of travel compared to the CLR.

5.59 On the principal questions, although the Bridge Street and AQMA traffic level differences would be marginal, the wider effects of the SGSR would be better. The complementary measures for each scheme would be reasonable, feasible and affordable. The SGSR would however better meet policy requirements on the promotion and "locking in" of sustainable modes of travel. It would also give better value for money having a higher BCR than the CLR, a significantly lower demand on the public purse and a lower level of risk. There is also an interim position that could be adopted prior to the implementation of the CLR or the SGSR. On traffic grounds therefore, the SGSR is to be preferred to the CLR.

Landscape

Character

5.60 The approach and methodology for landscape assessment has been agreed between the Council and the SO[OCC/27 para2.1.1].

5.61 Using the landscape character types and areas of the Council's LVIA[58], which generally follow the West Oxfordshire Landscape Assessment, the areas affected by the CLR would be as follows[CD35 & 40].

5.62 In the Lower Windrush Valley and Eastern Thames Fringes: Floodplain Pasture area, the landscape is of good quality with a medium to high sensitivity. This is notwithstanding the fact that views of surrounding buildings and power lines detract from the quality of the landscape[CD60 para12.16 & CG XX]. The area also benefits from specific policy protection.

5.63 The 200m length of the CLR in this area would have adverse effects on a number of landscape character features within the valley, with significant effects on the floodplain landscape. There would be the loss of sections of the River Windrush, including the mill channel, and Hardwick Brook together with associated vegetation. Meadow land and farmland, wooded areas and hedgerow boundaries would also be lost.

[58] Landscape and Visual Impact Assessment

5.64 The magnitude of change from the CLR would therefore be major, rather than the moderate assessment in the Council's LVIA. This is because there would be a notable change in landscape components over the full width of the floodplain with new and uncharacteristically conspicuous features and elements. The overall impact significance would then be large to very large adverse in 2013. As mitigation planting would be avoided within the central floodplain area, as this is characteristically open, this impact significance would remain in 2028.

5.65 In the Lower Windrush Valley and Eastern Thames Fringes: Semi-enclosed Flat Vale Farmland area, the landscape is of ordinary quality, rather than the poor quality assessment in the Council's LVIA. This is because characteristic elements such as the flat and low-lying landform, hedgerows and semi-enclosed character are still evident and distinguishable. The sensitivity is medium to low rather than low, as the large degree of change due to the type of features proposed would be detrimental to the landscape character.

5.66 The magnitude of change from the CLR would be moderate, rather than slight, due to the moderate change in landscape components and the partial loss of characteristic features. Where the CLR would run in tandem with the A40, it would also create a combined highway infrastructure width of some 75m. The impact significance would then be moderate to slight adverse in 2013.

5.67 In 2028, the mitigation planting should be well established. The impact significance would however remain as slight adverse. This is because the CLR would add urbanising elements on an elevated landform and separate areas of farmland creating a further fragmented landscape. These effects could not be fully mitigated.

5.68 In the Eynsham Vale: Open Rolling Vale Farmland area, the landscape is of ordinary quality. The sensitivity is medium to low rather than the low assessment in the Council's LVIA, as the large degree of change due to the type of features proposed would be detrimental to the landscape character. The magnitude of change would be as found for the Lower Windrush Valley and Eastern Thames Fringes: Semi-enclosed Flat Vale Farmland area.

5.69 In summary, the landscape character impacts of the CLR would be large to very large adverse within the floodplain, and moderate adverse in other areas for 2013. The moderate adverse impacts would reduce to slight adverse in 2028. Whilst these impacts would be less than previous housing proposals put forward by the SO for the area outside the floodplain, the large to very large adverse impacts would remain within the floodplain.

5.70 The areas affected by the SGSR would be the Eynsham Vale: Open and Semi-enclosed Rolling Vale Farmland areas[CD40]. The landscape qualities for both of these areas are as described previously for the open area. The magnitude of change for both areas would be moderate due to the moderate change in landscape components and partial loss of characteristic features. The impact significance would then be moderate to slight adverse at 2013. As a result of the mitigation planting and context of the slip road within an existing highway corridor, the impact significance would reduce to neutral at 2028 once vegetation had become established. The Council is in agreement with this residual impact assessment[OCC/3 para7.15 & CG XC]

5.71 The SGSR would therefore have no significant effects on landscape character, and would only result in the loss of limited areas of roadside vegetation and hedgerow. The CLR would be far more damaging to the character of the landscape, with effects that could not be mitigated. The scale of the CLR would also be far larger than the SGSR, with landscape character effects therefore being more widespread.

Visual Impact

5.72 The CLR would have adverse visual impacts, with some significant impacts at 2028 which could not be mitigated. In 2013, almost 40% of the 16 viewpoints would have a large adverse visual impact, with over 12% being moderate adverse and 50% slight. In 2028, whilst just over 60% of impacts would remain at either neutral or slight adverse, 25% would be moderate adverse and over 12% large adverse.

5.73 The SGSR however would have no such significant impacts, despite its setting within a prominent and sensitive ridge which provides an important backdrop to views of the town from the west[CD40 page101, CD60 para10.12, CD8 para9.55 & CG XX]. In 2013, for the 10 viewpoints, 70% would have a moderate adverse or less impact and 30% moderate to large or large. In 2028, 60% would be neutral and 40% slight adverse.

5.74 The CLR would impact on a wider number of receptors due to its greater VE[59], whereas the SGSR would be relatively isolated with a smaller VE affecting fewer receptors. The CLR would also reduce the length of viewing opportunities for many receptors. This would be most significant along the open valley of the Windrush, in Landscape Type 8, where views would be severely restricted[CD54 para4.2.17 & fig2]. The CLR would also be detrimental to the setting of the town, particularly in views from the south east, as well as impacting upon the landscape which is significant to the setting of the CA and particularly the Church of St Mary[CD53 para1.4.3 & fig52 & CG RX]. The CLR would also supplant a rural setting in views from the rear of properties on Cogges Hill Estate. The SGSR would avoid all such harm.

General Impact

5.75 The street lighting impacts of the CLR would also be greater than those of the SGSR, which would have 6 to 8 columns with a height of 8m[CG XC]. The Witney Landscape Assessment suggests that the introduction of lighting at the SGSR roundabout would be particularly damaging[CD60 para11.9 & CG XX]. The area is however subject to prominent headlights and, over time, vegetation would assist with the screening of potential lighting at the SGSR roundabout with the B4022.

5.76 The CLR would impact upon a number of rights of way, some more significantly than others, dramatically and negatively altering the experience for users along the route, some of which cannot be mitigated. Although the SGSR would also impact upon a number of rights of way, the effects would be less significant and

[59] Visual Envelope

could be fully mitigated in the long term once vegetation had become established.

5.77 The CLR would also conflict with planning policy and, in particular, the following LP Policies. The supporting text to Policy NE3 identifies the sensitivity of the river valleys crossing the district and especially land associated with watercourses[CD8 para3.122]. It also draws attention to the difficulty in accommodating large scale structures in these areas without serious harm to the landscape. Moreover, it advises that the West Oxfordshire landscape assessment and the Windrush in Witney project report should be taken into account where appropriate[CD40 & 54]. In relation to Policy BE4, the text emphasises the recreational value of open spaces[CD8 para3.38]. For Policy WIT3, it identifies the Windrush valley through Witney as being a fundamental component of the town's attractive character, a matter taken forward in the Draft CS[60] [CD8 para9.58 & CD9 PolicyCS24]. Indeed, the CA Character Appraisal describes the Windrush valley as a precious component and a highly attractive rural corridor[CD53 para2.1.6].

5.78 The CLR would result in visual impact on the country park in a number of significant ways, including impacts on visual amenity for recreational users and the restriction of long distance views over the floodplain. This would be notwithstanding the underground routeing of the existing overhead power lines. The CLR would introduce urban elements into the rural floodplain with moving traffic visible on the embankment, which would sever the park both visually and physically from the wider floodplain to the north and south. Currently, vegetation is very important in screening views of buildings and traffic from the floodplain[MT21 Feature 10].

5.79 The severance that the CLR would cause to the country park was viewed as particularly important by the 2011 Local Plan Inquiry Inspector who suggested that a Shores Green/Newland Link should be pursued ahead of the CLR[MT/1/3/8 para9.37 & 9.47]. This was primarily because of the environmental impact of the CLR on the Windrush valley and that it would seriously compromise the value of the country park north of the A40 and conflict with LP Policy WIT3[MT/1/3/8 para9.182 & 9.183].

5.80 The Farm Mill Lane entrance is recognised as the principal entrance to the country park and forms a hub for a network of footpaths to the north and south, as well as from the town centre, business premises and local homes. The CLR would impact upon the perceived connectivity between the footpath routes and open space network as a whole, which is valued and recognised as forming a green corridor through the town. By comparison, the SGSR would have no impact on the country park.

Exchange Land

5.81 The country park exchange land would be severely affected by visual intrusion from the CLR and the A40, and it would be somewhat disconnected from the main valley and the existing country park. It therefore would not be as equally advantageous to recreational users compared to the existing park.

[60] Core Strategy

5.82 The Eton Close POS, which includes a children's play area, would be significantly reduced in size as a result of the CLR. This would have a negative impact on its amenity value and negate its buffer function between the residential properties along Eton Close and the A40. Whilst a play area would be retained at Eton Close and provision would be made for the replacement of the lost open space on an area of exchange land, the facilities would then be separated. This would not offer the shared benefits of the existing open space.

Conclusion

5.83 Notwithstanding any previous support by the SO for the CLR, it would have long lasting landscape, visual, recreational and amenity adverse effects. These effects would not be in the public interest[OCC/48 & CG XX]. The harm caused to these aspects by the CLR would very substantially outweigh that which would flow from the construction of the SGSR[MT/45 para135]. Furthermore, whilst exchange land would be provided, it would not be as equally advantageous to users in terms of the perceptual and physical characteristics of the land. These factors are relevant to, and supportive of, the SO's case that the Orders should not be made, and that a Section 19 certificate ought not to be issued.

Noise

Country Park to the North of the A40

5.84 The northern part of the country park is the quietest due to its distance from the A40, which is the prevailing source of noise. This part of the park is well used, is close to the town centre and is the most important in terms of the setting of Witney. The introduction of the CLR would cause a substantial change in noise levels across this part of the park. Without the CLR, 58% of this area remains below 55dB, the level accepted by the Council as the threshold for serious community annoyance whereas, with the CLR, none of this area would fall within that band[MT/6/3 appC paraxv].

5.85 The minor benefits that the CLR would introduce in the exchange land for the Eton Close POS would not compare to the harm it would inflict upon the country park[OCC/6/3 tbl7.4, 8.5 & T9.6]. Even allowing for the additional area in the park which would be provided by the CLR exchange land, all of which would be affected by noise levels equal to or higher than 55dB, the area in that part of the park affected by levels above 55dB would increase by more than 40,000m^2 in 2013[OCC/26 para8.1 & figSoCG2]. In contrast, the SGSR would increase that area by only 3,740m^2[OCC 26 para8.2].

5.86 The CLR would therefore mean that: the relatively quiet areas of the park would receive the highest absolute and highest increases in traffic noise levels; there would be a substantial difference to the prevailing noise conditions in the northern area of the park; and the difference in noise would have a substantial impact on users of the country park, leading to a risk that the land would be sterilised in terms of its beneficial use[MW XX]. Whilst the Council and the SO have used different methodologies for noise assessment, the conclusions are substantially similar in relation to the substantial impact that the CLR would have upon this part of the park.

Land to the South of the A40

5.87 The greater area of land which would be affected by the SGSR to the south of the A40 does not have the same value, in terms of its location and use, as the prime country park land to the north of the A40. The area of increased noise would also be closely located to the curve of the A40, with a very limited increase in the width of the noise envelope[DS XC & OCC/26 SoCG fig1 & 3].

Residential Receptors

5.88 Applying DRMB guidance with the CLR in 2013, there would be: 740 properties with a minor increase in noise of less than 3dB and 475 with a decrease; 57 with a moderate increase of 3-4.9dB and none with a decrease; and 184 with a major increase of greater or equal to 5dB and none with a decrease[MT/15 & OCC/6 tbls3.2 & 8.2]. 981 and 475 properties would therefore experience negative and positive short term changes, but none of the positive changes would result in reductions of 3dB or more. The result is a substantial comparative disbenefit against a scenario without the CLR.

5.89 In 2028 with the CLR, there would be: 895 properties with a negligible short term increase in noise of less than 3dB and 667 with a decrease; 98 with a minor increase of 3-4.9dB and none with a decrease; and 212 with a moderate or major increase of greater or equal to 5dB and none with a decrease[MT/15 & OCC/6 tbls3.3 & 8.3].

5.90 With the SGSR in 2013, there would be: 350 properties with a negligible increase in noise of less than 3dB and 337 with a decrease; 175 with a minor increase of 3-4.9dB and none with a decrease; and 2 with a moderate or major increase of greater or equal to 5dB and none with a decrease[MT/15 OCC/6 tbl9.1] .

5.91 In 2028 with the SGSR, there would be: 969 properties with a negligible increase in noise of less than 3dB and 714 with a decrease; 159 with a minor increase of 3-4.9dB and none with a decrease; and 18 with a moderate or major increase of greater or equal to 5dB and none with a decrease[MT/15 & OCC/6 tbls8.3 & 9.2].

5.92 The CLR would therefore result in a substantially greater impact than SGSR in the category of moderate or major impact, where the CLR would affect at least 10 times the number of properties affected by the SGSR.

Conservation Area

5.93 The Council's noise evidence for the CA is dependent on traffic flows. It is common ground that noise level differences of less than 1dB are imperceptible. The Council's figures are rounded so that, for example, 1.6dB would be rounded to 2dB.

5.94 The predicted changes in noise levels due to the CLR and SGSR on the CA roads identified by the Council do not differ by more than 2dB[OCC/6 para9.2.19]. When Witan Way south and Station Lane east, both of which lie within the CA, are included in the predictions, the CLR would reduce noise compared to the SGSR on four of the roads inside the CA, with two of these at a 2dB change.

Neither of the roads indicating a 2dB change are however within the sensitive historic core as identified by the Council. The SGSR would however reduce noise on five of the roads inside the CA, with three of these at a 2dB change including Corn Street. There is therefore a broad similarity between the CLR and SGSR in terms of their impacts, both positive and negative, on the CA.

Summary

5.95 The SGSR is clearly preferable to the CLR in terms of its more limited impact on the most important area of the country park, and the substantially lesser number of residential properties exposed to substantial increases in noise levels. The exchange area provided in relation to the park cannot be considered to be equivalent to the areas lost, both in terms of its location next to the A40 and in terms of the noise levels that would affect the area compared to the noise levels across the lost area of the park. Moreover, the minor improvements in the small area of land that comprises the Eton Close POS cannot outweigh those substantial harms.

Biodiversity

CLR

5.96 The local planning context provides strong support for the conservation and enhancement of biodiversity. The River Windrush valley is clearly seen as being of particular importance within West Oxfordshire, and LP Policy WIT3 seeks to protect and enhance the biodiversity interest of the valley[CD8]. Guidance on how this can be done is also provided.

5.97 The CLR would result in the following principal impacts and effects on ecological receptors [OCC28]:

i) habitat fragmentation arising from the CLR restricting movement through the Windrush floodplain (the fragmentation effects would vary from slight to high depending on the species affected);

ii) an increased risk of road mortality along the CLR (species at increased risk would include barn owls, other birds, bats and small mammals and reptiles. The increased risk would vary from slight to high depending on the species affected);

iii) increased light pollution at the roundabouts at either end of the CLR and Stanton Harcourt Road, but all areas are subject to existing lighting;

iv) increased traffic noise along the route of the CLR with potential effects on use of roadside habitats by song birds and passive listening foraging bats such as the brown long-eared bat, particularly in the retained and replacement country park areas [OCC26, MT22 & PS XC];

v) the loss of potential foraging habitat for badgers beneath the footprint of the CLR, moderate habitat fragmentation and a high increased risk of road mortality;

vi) a potential small loss of bat tree roosts (although none found to date), a temporary loss of foraging habitats (watercourses and hedgerows), a permanent loss of scrub and pond, the severance or restriction of commuting routes and an increased risk of road casualties;

vii) the loss of reptile habitat in terms of scrub, riparian habitat, ponds, floodplain grassland and hedgerows together with the partial restriction of movement through the landscape and an increased risk of road casualties;

viii) the loss of watercourses for otters due to the imposition of culverts and temporary disruption and disturbance together with a slight increased risk of road casualties if fencing or ledges are not maintained;

ix) the loss of watercourses for water voles due to the imposition of culverts and temporary disruption and disturbance with trapping and translocation required;

x) the loss and increased fragmentation of dormouse hedgerow habitat;

xi) the loss of watercourses for aquatic ecology due to the imposition of culverts, temporary disruption and disturbance, an increased risk of pollution during construction and operation, and changes to small sections of river habitat due to shading from bridges; and

xii) the temporary loss of breeding bird nesting and foraging habitat together with potential impacts from direct mortality, habitat loss, habitat fragmentation and disturbance.

5.98 PPS9 sets out a clear order to minimise impacts; that is to firstly mitigate the harm and then compensate if required[PS XC]. This order is reflected in the Council's habitats and species overview, the RTPI[61] five point-approach to planning decisions for biodiversity, and the RS[62] [MT/23, OCC/44, OCC/52, PS XC & PS XX]. The impacts would be mitigated against and compensated for by the implementation of the measures described in the LEMS[CD 42A]. Compensation would be required as the harm could not be fully mitigated against[PS XC].

5.99 A number of these measures could however be implemented in the absence of the CLR, in accordance with the nature conservation objectives of the Windrush in Witney Project[CD62]. In particular, these include:

i) the provision of otter holts and the construction of ledges beneath the existing A40 bridge;

ii) the provision of invertebrate log piles;

iii) the provision of bird and bat boxes;

iv) the provision of dormouse boxes;

v) the provision of reptile hibernacula;

vi) the removal of japanese knotweed and himalayan balsam;

vii) the enhancement and management of all existing habitats in appropriate ownership;

viii) the conversion of arable land into grassland, although this would require agreement with the land owner; and

ix) the construction of new ponds.

[61] The Royal Town Planning Institute
[62] The South East Plan – Regional Spatial Strategy for the South East: May 2009

5.100 In terms of funding support: the HA[63] and EA have duties in relation to the A40 bridge ledges; a recent Government White Paper[64] identifies developer contributions for habitats in terms of biodiversity offsetting; and Defra are introducing Nature Improvement Areas[PS XC]. These present opportunities to fund Windrush valley enhancements, particularly in the light of the Windrush in Witney Project and its nature conservation management objective Policy NC01[CD62]. This seeks to encourage the restoration and enhancement of unimproved natural grassland in the Windrush valley.

5.101 The remaining mitigation and compensation measures described in the LEMS[CD 42A] would not be required if the CLR were not constructed. In addition, there is no definitive evidence base on the effectiveness of the proposed dormouse rope bridges[PS XX]. As such, and notwithstanding the improvement in connectivity across the A40, there is a degree of uncertainty as to whether these measures would be effective in combating the isolation of dormouse habitat. Whilst the hedgerow and woodland planting and the boxes would provide compensation for the impact on dormice, the proposed bridge design could expose dormice to increased risks of predation by rats and domestic cats and vandalism[PS XX]. Furthermore, dormice will cross open gaps and roads and, whilst this perhaps reduces the potential impact of fragmentation, it does raise the potential for dormice to be killed trying to cross the CLR.

5.102 The design for the bat cave at the Stanton Harcourt Road bridge would represent an enhancement to bat habitat[CD 42A Fig10 & PS XX]. It would however be unlikely to be effective in attracting a good number or range of hibernating bats, as it would be too small to be effective. Even if it was successful, the location of the cave and the two other hibernating structures to the north and south of the A40 would pull bats into the road corridor. This is because the cave and the structures would have different environmental conditions, and bats would move between them during hibernation. It is however accepted that there would be an overall gain in bat foraging habitat[PS XX].

5.103 The mammal exclusion fencing is not proposed for the full length of the CLR, and only one badger crossing would be provided for the eastern section of the CLR in association with the Hardwick Brook culvert. The presence of two outlier setts in the northern embankment of the existing Shores Green slip roads suggests that badgers are active in the land to the east of Cogges. The ledge within the Hardwick Brook culvert may not function during a significant flood event, and badgers then may seek to go round the badger fencing and cross the CLR with the resultant risk of collision. Furthermore, the fence to the east of the bridge over the eastern branch of the River Windrush would not adequately direct badgers towards the underbridge CLR crossing point[OCC/7/2/8.12 & PS XC].

5.104 The LEMS would include the creation of a traditional flower rich hay meadow characteristic of MG4 communities between the CLR and the A40. This would be a finely balanced community, strongly influenced by drainage and water retention[PS XC]. It would require the correct hydrological conditions in spring

[63] Highways Agency
[64] The Natural Choice: Securing the Value of Nature: 7 June 2011

and early summer. The ground underlying this area however includes clay that would render these conditions very difficult to achieve, although the underlying ground could be readily removed and replaced[PS XX].

5.105 The Council's breeding bird survey has not specifically considered noise disturbance to bullfinch, house sparrow, reed bunting, skylark and yellowhammer, all of which are Red List[65] and UK BAP[66] priority species[OCC/7/2/8.7 & PS XC].

5.106 The CLR would require extensive mitigation and compensation measures, to reflect the scale and variety of its impacts on local ecology, and it is accepted that these measures would enhance habitat for various species[PS XX]. Despite the suite of mitigation and compensation measures however, the residual effects would remain as already set out. The effectiveness of the measures would also depend upon appropriate maintenance in perpetuity.

SGSR

5.107 The SGSR would result in the following principal impacts and effects on ecological receptors [OCC28]:

i) whilst there would be no permanent severance of hedgerow connections, the slip roads would widen the A40 road corridor in terms of habitat fragmentation;

ii) a potentially increased risk in relation to road collision at high speed for some species including include barn owls, other birds, bats, small mammals and reptiles[PS XX];

iii) an increase in light pollution on the southern side of Shores Green roundabout;

iv) the loss of potential badger foraging habitat and two outlier setts;

v) the potential loss of bat tree roosts and the temporary loss of foraging habitat in terms of plantations and hedgerows but no severance of commuting routes;

vi) the loss of potential grassland and edge reptile habitat and an increased risk of road casualties, but no increase in habitat fragmentation;

vii) a temporary loss of sub-optimal dormouse habitat, but no permanent habitat fragmentation; and

viii) an increased risk of pollution during construction and operation.

5.108 No detailed mitigation proposals have been developed for the SGSR. However, in relation to habitat loss, the new cuttings could be planted with native trees and shrubs in a mosaic with verge grassland. This would provide replacement habitat for the suite of species currently using the embankments. The loss of hedgerow would not result in increased fragmentation, and it therefore could be readily compensated for by the additional planting of woodland and scrub or indeed new hedgerows. The loss of arable farmland, improved grassland and

[65] RSPB Red List of Birds of Conservation Concern
[66] Biodiversity Action Plan

species-poor semi-improved grassland would not result in a significant impact that would require compensation measures.

5.109 In relation to species mitigation and compensation, the replacement of habitats that would be lost would provide compensation habitat for breeding and foraging birds, foraging bats, reptiles and dormice. All mature trees known to support roosting bats could be retained and protected during construction. The loss of the two outlier badger setts would not normally require the provision of a replacement sett, as the loss would have a minimal impact on local badger populations.

5.110 The loss of small areas of potential reptile habitat could be readily compensated for by the creation of new areas of grass verge within and adjacent to the embankments. Given the very small area of suitable reptile habitat that would be affected, this would not result in a significant impact on reptiles. Potential impacts arising from construction activity could be mitigated by the implementation of a construction management plan.

5.111 The indirect effects of nitrogen deposition and noise would be unlikely to increase current base levels significantly, as the use of the SGSR would only change to a relatively minor degree. Should lighting be installed around the roundabout, the effects of this could be mitigated to a degree by the use of directional lighting techniques.

5.112 The SGSR would require the replacement of lost habitat through new planting. Whilst the SGSR would not have as beneficial an effect on certain habitats, it could include a greater area of new habitat compared to the current situation depending on the final mitigation design details[PS XX]. At the very least however, there could be a like for like replacement of embankment habitat and no residual effects of habitat fragmentation, nitrogen deposition, noise or risk of road casualties compared to the current baseline. The cost of mitigation would also be significantly less than with measures proposed to off-set the impacts of the CLR, as they would entail simple replanting of trees and shrubs and potentially the construction of a replacement badger sett.

5.113 In conclusion, the SGSR would have a much lower, although still significant, impact on ecological resources than the CLR, both in terms of construction and residual effects[PS XX].

5.114 The CLR and the SGSR would have the potential to affect species afforded legal protection by the Conservation Regulations 2010 (European Protected Species). In particular, these species would include all species of bat, dormouse and otter. The proposals could not proceed unless an EPSL[67] was obtained. The granting of such a licence requires the consideration as to whether there would be a satisfactory alternative to the proposal and whether the proposal would maintain the favourable conservation status of the species. In this sense, the SGSR would be much less harmful to existing habitats and species, with only temporary impacts, than the CLR. This is because the CLR would have a much more significant impact in terms of habitat fragmentation

[67] European Protected Species Licence

and on-going risks of mortality, despite its mitigation and compensation measures.

5.115 In addition, the effectiveness of the connectivity mitigation measures for dormice is uncertain, and they therefore may not maintain the favourable conservation status of the dormouse. Moreover, dormice will cross roads and are therefore at risk of increased mortality from traffic with the CLR. No mitigation measures would be required for the SGSR to maintain connectivity, as this could be achieved by re-planting the hedgerows and scrub that would be temporarily lost during construction. Although NE has not objected to the CLR, if the SGSR would be a satisfactory alternative to the CLR, then the SGSR would be more likely to maintain the favourable conservation status of the dormouse[PS XX].

Summary

5.116 In summary, the Council accepts that the CLR would involve substantial compensation as well as mitigation. In terms of the balance of ecological harm and risk, the balance would therefore lie strongly in favour of the SGSR[MT/45 para136].

Air Quality

Relevant Air Quality Policy

5.117 The 2007 Air Quality Strategy[CD90] established the policy for ambient air quality in the UK. It includes NAQOs[68] for NO_2 [MT/4/3 Tbl1]. Local authorities are not required to achieve the objectives, but have to work towards them. The SO's evidence focuses on annual mean NO_2 concentrations. The annual mean objectives or limit values are more stringent than the one-hour values, and are therefore more likely to be exceeded.

5.118 WODC declared the Witney AQMA in March 2005 due to predicted exceedances of the annual NO_2 objective [MT/4/3 Fig1]. WODC issued a draft Air Quality Action Plan in 2010 which outlined a range of options aimed at reducing NO_2 concentrations, including a relief road[CD93].

Methodology

5.119 The assessment undertaken has used, as far as is possible, the same data and methodology as that used in the Jacobs 2008 Air Quality Assessment that supported the ES[69][CD42C & CD79]. This has included the use of high growth traffic conditions[CH XC]. Annual mean concentrations of NO_2 have been modelled at 69 receptors, including 8 in the AQMA[OCC/69]. There is a risk that the complementary highway measures may not be implemented at the same time as the CLR, and therefore this option has also been assessed.

5.120 Recent evidence has shown that, in many urban locations, NO_2 concentrations are not declining as rapidly as predicted and, in some instances, have actually increased[CD94]. This is not however reflected in the LAQM tools provided by

[68] National Air Quality Objectives
[69] Environmental Statement

Defra. The assessment has therefore assumed that the background value for NO_2 remains constant from 2010 to 2026[MT/4/3 App4]. Bridge Street has also been modelled as a street canyon, with varying dimensions due to the nature of the buildings and a curve in the street alignment, whereas the Council's canyon model run assumes constant dimensions[MT/4/3 Fig4, OCC/69 & CH XC]. The reduced dispersion of the vehicle exhaust emissions due to the imposition of the street canyon understandably results in higher predicted concentrations[MT/4/3 App5].

Current Air Quality in Witney

5.121 Concentrations at NO_2 monitoring stations in Bridge Street and Mill Street have exceeded the annual mean objective/EU limit value of 40µg/m^3 each year since 2005, with the exception of Mill Street in 2009[MT/4/3 Fig3 & Tbl8]. Concentrations have exceeded the objective value by up to 16µg/m^3 in Bridge Street, and there does not appear to be a clear improvement over the monitoring period. This supports the use of a constant background level[CD 94]. The annual mean NO_2 concentrations are however below the objective value outside the Witney AQMA.

Modelled Impacts of the CLR and the SGSR

5.122 The CLR and the SGSR are predicted to significantly improve air quality within the AQMA, with NO_2 concentrations reduced to below 40µg/m^3 at the facades of the buildings along Bridge Street. The differences between the SO's and the Council's modelling are small and largely due to the set up of the model, particularly the street canyons which can be difficult to model[CD87 paraA3.55, CD92 Tbl1, OCC/69 & CH XC]. Such differences mean that comparisons within a particular model are more accurate than between models[OCC/69 & CH XC]. Similarly, it cannot be concluded that the benefit of the CLR is more resilient than that of the SGSR, due to variations in the setting up of the model[OCC/4 para6.1.2 & CH XC].

5.123 The CLR is predicted to have a slight adverse impact at two of the modelled receptors, at 107 Eton Close and close to the CLR. In 2013 and 2028 with the CLR, the replacement POS in Cogges would also have a slightly higher annual mean NO_2 level than the existing POS whereas, with the SGSR, the existing POS would have a slightly lower annual mean NO_2 level than it currently has[OCC/4 Tbl6-6, OCC//4/1 TblsA10-2 & A10-4 & CH XX]. POS should however be assessed on the basis of a 1hr objective, and this is usually taken to be an annual exposure of 60 µg/m^3. The difference between the replacement POS with the CLR and the existing POS with the SGSR would have a medium magnitude of change, and would be well below the objective/EU limit value. The difference would therefore be of negligible significance and not material. The SGSR is thus not anticipated to have any slight or greater than slight adverse impacts.

5.124 There are however a number of uncertainties regarding the deliverability of the modelled air quality benefits as a result of the traffic data used to populate the model. These include:

i) that spare capacity on Bridge Street would be rapidly filled due to suppressed traffic demand in the area which has not been accounted for in the model[CD47 paras 3.3.1 & 3.6.5];

ii) that the Staple Hall junction, part of the complementary traffic management measures, would be unworkable[MT2/1]; and

iii) a lack of commitment to deliver the Staple Hall junction.

5.125 Half the air quality benefits of the CLR are estimated to be probably due to the proposed complementary measures. If these are not implemented, then the 40µg/m^3 NO_2 value may not be achieved.

Mass Emissions

5.126 In terms of mass emissions, NO_x can travel long distances and take time to combine, and the location of CO_2 generation is irrelevant as its measurement relates to global effect[CH XC]. Mass emission calculations are therefore fairly crude, and results are dependent on the extent of the study area[MT/4/4 para3.1.1]. Furthermore, one of the primary objectives for the CLR was to improve local air quality, whereas impacts on regional and global air emissions were not considered as such[MT/4/4 para3.5.3].

5.127 A sensible approach can however be to assess the change in emissions, particularly NO_x, associated with alternative transport schemes [OCC/70 para1.1.1 & CH XX]. This logic would also apply to carbon emissions, although other factors would have a bearing in terms of mass emissions. Moreover, Government policy suggests that the contribution of individual projects is critical to achieving a reduction in carbon emissions[OCC/67 & 68].

5.128 That said, the carbon emissions from the CLR would be some 2.0% of the total 2008 WODC area emissions, whilst those from the SGSR would be some 2.1%[mt/4/4 para3.5.5]. A similar situation would occur with NO_x [MT/31]. These differences are thus not material.

Summary

5.129 The benefits of the CLR and the SGSR, in terms of air quality as a whole would therefore be virtually identical.

Flood Risk

Preliminary Matters

5.130 Flooding is an issue of fundamental importance to the people of Witney, to the proper planning and use of land, and to the CLR. It bears strongly on the issue of where the public interest lies and whether the Council has demonstrated a compelling case in the public interest for the compulsory acquisition of land including that of the SO. The SO's land itself stands to be affected by increased flood risk if the CLR is constructed.

Modelling

5.131 In terms of the SO's modelling of the design event, it has used the most up to date software which provides a 2D model of the floodplain. This removes the need for operator judgment, and error, in the creation of floodplain contours. It also removes the need to specify spill coefficients, another potential source of judgement error.

5.132 The Council's spill coefficients are difficult to explain, having regard to the ISIS system guidance[MT/16 secn3 & MT/26 secns2 & 3]. Moreover, the SO's witness had particular expertise in this regard, having worked on the ISIS spill unit program. The SO's model is thus more objective in these key respects, and the improved accuracy is recognised in EA guidance[MT/5/10 pg7/30 & MT5/13 paras8.1 & 8.2]. ISIS is a software package for river modelling which is used for flood forecasting, flood alleviation scheme designs, flood risk mapping, FRAs and catchment management planning.

5.133 The Manning's n values are perhaps the most important coefficient that applies to the 2D model. The SO's model produced a far more accurate simulation of the July 2007 flooding event than the Council has been able to provide, without specific fixes to their model. It also accords far more closely with the physical characteristics of the relevant parts of the River Windrush than with the values chosen by the Council[MT/5/1 paras3.5.9-15, MT/5/13 paras2.5-9 & OCC/32].

5.134 The Council's model has not been calibrated locally in any substantive way, but has relied on the evidence relating to events after the peak flood. Such evidence is however weak compared to the clear evidence of the extent of actual flooding during the event. The flooding of the Council Depot, Blakes Primary School, Farm Hill Lane, and flooding to the narrow field immediately to the west of the Cogges Estate have been used to inform the SO's model[MT/5/1 paras3.5.8, 4.2, 4.3, 5.4.1 & 5.4.2 & MT/16 secn2].

5.135 Even using the Council's n value of 0.05, which it accepted as an upper bound, the design event would cause a substantial predicted effect on third party land including the Council Depot, the industrial estate and land held by the SO[MT/16 pgs6-8 & MT/27]. The SO's sensitivity testing has shown that the results most representative of the July 2007 event occurred with a peak flow rate of 29.3m^3/s and an n value of 0.08[MT/16 para4.1.6]. It has also shown that the proposed mitigation measures would be ineffective, even at return periods as low as the 20 year event[MT/16 secn6].

5.136 The extent of this flooding is however likely to be conservative for two reasons. Firstly, the assessments use the July 2007 hydrograph, which substantially understates the volume of water in the design event. Secondly, in relation to land to the east of the Hardwick Brook, the extent of flooding is constrained by the model and would have been likely to have extended further east closer to the Cogges Estate without that constraint.

5.137 Nor can the extensive predicted flooding to the industrial estate be ignored. The bund that the Council relies upon to protect the estate is not a formal flood defence, the landowner has not been identified and its maintenance cannot be guaranteed. In any event, the Council has failed to comply with PPS25 by not modelling the consequences of its failure[CD22 AnnexE].

5.138 In addition to the above, the CLR would not provide level for level flood water mitigation in conflict with PPS25 and the clear expectation of the EA[MT/5/13 para8.4 & CD22 para3.74]. The mitigation proposed would amount to digging large holes in the existing floodplain, which would be a fundamentally unsatisfactory solution[MT/1/3/15]. Moreover, one of these holes would fill to capacity well in advance of the peak of a flood, such as in the 2007 and the design events, due

to the shape of its hydrograph[MT/5/12 secn8.2]. This area therefore would not provide any additional storage during the peak of an event.

5.139 The EA is content for the Inquiry to assess the merits of the criticisms made by the SO, and thus the sufficiency of the Council's modelling[EA/1]. During the Inquiry, the Council undertook to provide the SO with copy correspondence between Council and the EA, to achieve transparency and allow proper and informed comment on the proposed solutions as they evolved. The need for transparency was important given the stance taken by the EA and the significance of the issue to the public interest. On Day 14 of the Inquiry however, the Council began the retreat from that approach, and by Day 17 the Council was simply not prepared to disclose its continuing dialogue with the EA. The Council's position was that it did not want to burden the Inquiry further. On this key issue however, that provides no answer for failing to disclose the material to the Inquiry for analysis.

5.140 This was an extraordinary, and defensive, position to take at a CPO Inquiry. It leaves the Inquiry in the position where the Inspector simply cannot assess whether the latest proposals have satisfied the EA, and he cannot judge the strength of criticisms that might be made of those proposals, because they have not been provided for assessment. It is not clear whether the FRA would meet the minimum requirements set out in Annex E of PPS25. In those circumstances, the Council cannot demonstrate the compelling case it requires to justify compulsory acquisition.

Sequential and Exception Tests

5.141 The CLR would be partly located in Flood Risk Zones 3a and 3b and thus, in part, lying in the functional flood plain. It would therefore be sequentially the worst area in which to locate development in terms of flood risk. The CLR would amount to the building of a dam in the floodplain and, if the CLR was designed from a flooding perspective, it should be on stilts so as to allow proper conveyance across the floodplain. The SGSR would be at the other end of the spectrum in Zone 1.

5.142 If the SGSR represents a reasonably available site, that would be appropriate for this kind of development and in an area with a lower risk of flooding, the CLR cannot satisfy the sequential test[CD22 para16]. The aim of this test is to steer new development to areas with the lowest probability of flooding. This is also plainly consistent with public interest in relation to areas of Witney which are known to have been severely affected by flooding in the recent past. Moreover, a precautionary approach should be taken towards the management of flood risk.

5.143 The Council has sought, as it was required to do, to justify the CLR by reference to the exception test set out in PPS25. The exception test, insofar as it was considered before the grant of planning permission, was undertaken in a summary and unsatisfactory way and by reference to an FRA that has been superseded. It thus now falls to be considered in circumstances where no EA approved FRA exists.

5.144 If the SO's modelling is preferred, then CLR would not pass the exception test because third party land would be affected by increased flood risk. It is not

necessary to show an increased extent of flooding in order to show an increased risk of flooding[MT/5/1 secn7 & MT/27]. An increase in the likely frequency of flooding of an area is also an increase in flood risk. Both are disbenefits recognised by policy, which also does not distinguish for those purposes between land and property [CD22 para3, appB pgs168 & 170].

5.145 It is also clear that policy requires consideration of what the consequences would be if even formal flood defences fail[CD22 E3]. The CLR mitigation measures would include culverts under the highway embankment, to allow water to be conveyed as intended across the floodplain, together with flapped outfalls. These can be left poorly maintained and suffer from blockage or inefficient discharge. They thus have associated risks of failure, and hence the EA have preferred the removal of engineered solutions. Their use in the CLR would represent an unnecessary risk to the proper functioning of the floodplain. Moreover, the Council has not secured an approved FRA from the EA based upon the latest modelling of the road and proposed mitigation measures.

5.146 A failure to meet the exception test would mean that the CLR could not meet key elements of national planning guidance which must mean that the applicable test for compulsory purchase could not be satisfied in the absence of an overwhelming case in terms of traffic or other benefits.

Summary

5.147 In summary, it is clear that the CLR would increase the risk of flooding and that the SGSR would provide a solution which should be preferred to the CLR on the issue of flooding in terms of both planning policy and the public interest.

Conclusion

5.148 There is no compelling case in the public interest sufficient to justify the acquisition of the SO's land by CPO, and the Orders should be refused [MT45 para141]. The exchange land is also not of equal value, and that is a further reason why the Orders should not be confirmed.

6. THE CASES OF THE NON-STATUTORY OBJECTORS

The material points are:

Mr N Wilcock

6.1 The SGSR is the only viable alternative to the CLR[OBJ/2/1]. Following the flooding of July 2007 and increasing public awareness of the environmental detriment to the country park and the floodplain which would result from the CLR, support for the SGSR has grown and is now very substantial. Whilst the CLR would reduce traffic levels on Bridge Street, this would be at the expense of significant increases on Witan Way and Station Lane. The SGSR would provide a similar reduction on Bridge Street but with the significant benefit of reduced traffic on Witan Way and Station Lane at a fraction of the cost of the CLR[OBJ/2/2]. Likely development at the redundant Buttercross Works and further development of the Station Lane industrial estates would increase future traffic levels on Station Lane in any event[OBJ/2/5].

The SGSR, which would remove through traffic from Station Lane, must therefore be preferable to the CLR.

6.2 The existing junction between Oxford Hill and Jubilee Way includes two toucan crossings. The proposed roundabout would only provide uncontrolled pedestrian refuges and would be less safe than the current arrangement.

Mr D Condon

6.3 Mr Condon presented evidence on behalf of the Witney Branch of CPRE and also submitted a petition to the Inquiry[OBJ/39/3]. The less environmentally damaging SGSR, which was favoured by the 2004 Local Plan Public Inquiry Inspector, would take the existing Bridge Street traffic completely out of the town[OBJ/39/2]. Traffic volumes on Station Lane can be high at peak times, and the delay in getting onto the lane from side roads can be several minutes. Increased traffic from the CLR would cause gridlock, and would simply have moved the traffic problem from one side of the town to the other.

6.4 The CLR would also destroy an area of environmentally sensitive hay meadow and necessary floodplain. The Pitt Report of 2008[70] sought to direct development to areas with the least risk of flooding and recommended that building on floodplains should be the absolute exception and only where there is no alternative land available. Here, the SGSR is available. The hay meadow is used for recreation by many thousands of local people every year and is an important public asset, particularly as the population of Witney has doubled over the past 40 years.

6.5 The walk from the entrance to the country park to the exchange land would involve passing one and under another of the 5m high 26m wide CLR road bridges which would carry 15,000 cars and 300 HGVs daily. Visitors to the exchange land would never be more than 150m from either the elevated A40 or CLR, and it would not be a pleasant or tranquil area in which to relax.

Mr W Devonald

6.6 Floodwater entered 7 residential properties and Blake's School on the Cogges estate in 2007, and Mr Devonald provided many photographs of flood events together with details of their locations[OBJ/29/1].

6.7 The CLR would be built across the historic Windrush functional floodplain in conflict with Government guidelines in PPS25. It would: increase the likelihood of further flooding in Witney; dramatically raise traffic levels on Witan Way and Station Lane; double noise levels for Cogges residents; dramatically increase pollution levels in the country park and destroy part of the historic River Windrush floodplain[OBJ/29/2].

6.8 The SGSR would: not be built on a functional floodplain; be far less environmentally damaging; not destroy the historic Windrush water meadows; and be substantially cheaper. The loss of POS in the Windrush hay meadow and at Eton Close, which are utilised by the people of Witney all year round, would also be unacceptable. Mr Devonald was also concerned that,

[70] The Pitt Review: Lessons Learned from the 2007 Floods: 25 June 2008

even though their properties would be affected by the CLR, residential occupiers on the Cogges estate did not have the benefit of being SOs.

Cllr D Enright

6.9 Cllr Enright is a councillor on Witney Town Council but did not represent the town council. Most local people support the SGSR, and indeed there are posters against the CLR which are displayed in Bridge Street. Farm Hill over the A40 is well used by those in east Witney for A40 access to and from the west. The replacement Cogges POS would also be surrounded by roads.

Mr T Walker

6.10 The CLR would result in a loss of amenity at the hay meadow, a much used and loved recreation area[OBJ/26/1]. It would also have a far greater impact than the SGSR due to its wider scope and the richer and more diverse environments that would be affected. The construction of the CLR would be tantamount to building a dam across the Windrush floodplain, and it is hard to see how this would not aggravate flood risk in the town.

6.11 The CLR would simply move congestion from Bridge Street to Station Lane. The use of the, not particularly busy, A40 in conjunction with the SGSR would represent a better solution in the short and particularly the long term following the further expansion of Witney. The SGSR would represent a saving over the CLR and, in these difficult times, less expensive alternatives should be properly considered.

Dr J Maxwell

6.12 Dr Maxwell has been a GP in the local area for 15 years and is now a Director of Public Health[OBJ/61/2]. The need to shift transport from the car to alternative modes of travel such as public transport and active travel is important. Witney is ideally suited to promote such a shift, including a potential park and ride at Shores Green.

6.13 Constructing the CLR, so that north Witney residents could use their cars to travel 1.1km to the town centre, does not make sense. Building the CLR, that would effectively cut off the whole community of Cogges and expose it to increased noise and air pollution and reduce access to pleasant green open space, would be an anathema. Access to green spaces has been shown to improve mental and physical health, whereas car use communities are more obese. Witney has higher rates of those overweight and obese than the rates of Oxfordshire or England as a whole. Building a road which would increase car use at the time of peak oil prices is short term thinking.

Mrs G Salway

6.14 Mrs Salway presented evidence on behalf of the Oxfordshire branch of CPRE as Vice-Chair of the Oxfordshire branch and Chair of the West Oxfordshire branch[OBJ/20/1]. The CLR would have an adverse effect on an area of undeveloped countryside close to the centre of Witney which is important to the setting of the town. It would reduce the tranquillity of this area and severely compromise the enjoyment of the country park. The proposed route of the CLR would not remove through traffic from the town and would not substantially

reduce town centre traffic levels. The country park exchange land would form a triangle bounded on two sides by busy roads and accessed through an uninviting underpass. It would be subject to noise and pollution, and users would find it difficult to distance themselves from the impact of traffic.

6.15 The SGSR would provide almost the same relief for Bridge Street but at less cost and with less damage to the environment[OBJ/20/3]. The NSOs have come from different backgrounds with different agendas, but have been united in their opposition to what is a needlessly expensive and damaging so called solution to the traffic problems in Witney.

Ms F Basson

6.16 The name of Witenie in the Doomsday Book of 1086 means Witta's Island and suggests that Witney is no stranger to flooding[OBJ/37/1]. The CLR would create a third dam, the others being the A40 and the old railway line, thus backing flood water up into the town centre. Station Lane is already saturated with traffic at peak times, and the CLR would considerably increase traffic on Station Lane and Witan Way. The CLR would also slice through the significant ecological resource of the Windrush valley, which includes precious areas of grassland and water meadows. The SGSR would be considerably cheaper than the CLR, and the saving in cost should be used to support other overstretched services in the area.

Mr J Aldous

6.17 The CLR would cut into Cogges Hill, thus separating an important public amenity from the Cogges neighbourhood and Witney town[OBJ/31/1]. The Windrush river, together with its water meadows, provide an outstanding natural setting to the town and are as precious as the historic core of the town itself. The impact of the CLR on the Windrush Valley would contravene LP Policy WIT3, which designates the Windrush in Witney as an area for special protection. Not much could be done to overcome the impact from the CLR on a high embankment in terms of visual intrusion, noise, pollution and general loss of tranquillity[OBJ/41/3]. In effect, it would condemn a significant area of the Windrush valley to a place where no one would wish to go.

6.18 The alternative SGSR would deliver significant traffic benefits, including the removal of much of the town's through traffic. It would also be cheaper and cause little environmental damage.

Mrs P Triggs

6.19 Mrs Triggs gave a detailed account of her experience of the 2007 flood event, with various photographs[OBJ/44/1]. The CLR would take up a considerable volume over an area which flooded in 2007. The proposed mitigation would not be adequate for an event such as the 2007 event. The CLR would also effectively form a dam with two relatively narrow bridge openings.

Mr O Edwards

6.20 The existing POS at the southern end of the Cogges estate in Eton Close is extensively used by local residents and is a safe area for children to access and use for play. Children from Blakes Avenue and Eton Close can access the area

without the need to cross Cogges Hill Road or Stanton Harcourt Road, or walk along any roads not provided with footpaths.

6.21 The Eton Close exchange land would be located at the northern end of the Cogges estate and sandwiched between Cogges Hill Road and the CLR. It would lie adjacent to an existing area of POS between Wadards Meadow and Oxlease which already serves the northern part of the estate. The exchange land would not be equally advantageous to the residents of the southern part of the estate as there would then be no significant area of POS at the southern end of the estate some 750m away using the routes through the estate.

6.22 The Cogges estate includes: over 900 dwellings; a 400 pupil primary school; a neighbourhood centre with a GP surgery, pharmacy, veterinary surgery, foodstore; take away food premises; and the main car park for a 30,000 visitor per year museum. All of the traffic associated with these uses would have to pass the Eton Close exchange land on a road, without a footpath on the side of the exchange land, making it far less safe to access than the existing POS.

6.23 The CLR would be constructed wholly on green field land and over the River Windrush floodplain with only two under bridges for floodwater. It would result in an increase of some 80% in traffic on Station Lane and Witan Way, unlike the SGSR which would reduce such traffic by diverting through journeys further away from the town centre. The SGSR would make use of the underused A40 and would not result in the loss of any POS or affect the floodplain.

6.24 The country park exchange land would be sandwiched between the CLR and A40 embankments and would not be as equally advantageous, notwithstanding its additional area. Mr Edwards also presented a petition on behalf of Max Edwards and read the written submission from Mr and Mrs Harness[OBJ/03 & OBJ/69/3].

Dr K Jennison

6.25 The CLR fails to separate long distance from local traffic, unlike the SGSR[OBJ/74/5]. The use of Hill Farm bridge demonstrates that there is a demand to travel west from Shores Green that would be possible with the SGSR. Whilst the Council has designated Station Lane and Witan Way as distributor roads, they adjoin: residential development; retirement homes; a leisure centre; a large and well used POS; an artificial turf sports pitch; a proposed estate of 185 homes; and a large number of workplaces. In view of the complexity of the CLR route around the town centre, HGVs would be likely to choose Bridge Street and Mill Street instead of the CLR but the SGSR instead of Bridge Street.

Mr M Kavanagh

6.26 The fields to the rear of houses in Cogges Hill Road have flooded in 1993 and 2007[OBJ/128]. These fields are some 1.5m above the ground level at the site of the CLR embankment which would cross the floodplain. With such a frequency of flooding, the CLR would be disastrous for Witney and the Windrush valley.

Mr Fletcher

6.27 From past experience, the CLR would result in a significantly increased flood risk for the Cogges estate and the lower parts of Witney[OBJ/113/1]. The SGSR however would pose no such risk. Whilst Bridge Street requires traffic relief at peak times, traffic flows through it without problem at other times. The CLR would retain the Bridge Street traffic within the town centre unlike the SGSR.

Dr P Kinchesh

6.28 The FRA model should be supported by clear validation evidence, and it should faithfully reproduce the 2007 flood event without the CLR[OBJ/118/1]. It should also include an appropriate contingency for error. Neither of these matters have been satisfactorily addressed in the Inquiry. The CLR would rely on flood mitigation measures designed on the basis of a seriously flawed model, whereas the SGSR would not have to rely on any flood mitigation measures[OBJ/118/5].

Other Non-Statutory Objectors

6.29 The remainder of the written submissions did not raise any material issues not already reported.

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7. CONCLUSIONS

7.1 Bearing in mind the reported submissions and representations, the following conclusions are reached, reference being given in subscript to earlier paragraphs where appropriate. These conclusions initially set out the context for the tests concerning the Orders and Application in relation to legal matters and policy. They then identify and reach conclusions on each of the main considerations which inform the judgement on each of the relevant tests. From the content of the submissions and representations, the main considerations are: traffic; landscape; noise and vibration; biodiversity; air quality; and flood risk. The conclusions are then drawn together into recommendations on each of the Orders and the Application.

Legal Matters and Policy

7.2 It is a matter of common ground, between the Council and the SO, that the statutory and principle test to be applied to a CPO is whether it is supported by a compelling case in the public interest. In this case, the SGSR could be considered to be an available alternative, as the route of the CLR is only safeguarded in the LP, although the SGSR may require a CPO, as is the case with the CLR. From statute and case law, the issue is therefore which, on balance, would be the better scheme, taking account the evidence before the Secretary of State, and this again is a matter of common ground. In view of the safeguarding of the CLR route in the LP, the need for a solution to the traffic problems that the CLR would seek to address has the full support of the development plan. The need for such a solution is therefore not an issue for this report. 3.1-3.13, 5.1 & 5.2

7.3 The assessment of the evidence should be undertaken as a value judgement with each scheme considered on merit. The assessment can include their effect on traffic flow, whether each scheme would be required in its particular form and location, their effect on amenity and the environment, and questions of time and cost. Furthermore, for an alternative to succeed, it would not be sufficient for it to have equal merit to the CPO scheme, it must be better, and therefore, for the SGSR to succeed, it must prove itself over the CLR. 3.5, 5.2 & 5.3

7.4 It is also necessary to consider the tests applied by Circular 06/2004. On human rights, if there is a compelling case for the CPO in the public interest, the CLR would comply with the relevant parts of the Human Rights Act. The remaining tests in the circular relate to the availability of funding and whether there would be any impediment to the scheme. 3.15 & 3.16

7.5 For the SRO to be confirmed, there must be a reasonable alternative available for all road users. In this case, the CPO includes for the acquisition of POS, and compensation land must therefore be provided under a Section 19 Application. In this regard, the compensation land must be as equally advantageous to those with rights to the land which is being acquired or the general public. 5.4

7.6 Whilst there may be overlapping issues, each of the Orders and Application must be considered on its own merits against the appropriate tests.

This exercise has the potential to give differing outcomes in relation to each of the Orders and the Application. The SRO and the CPO are however interdependent, and it would be inappropriate for the SRO to be confirmed without the necessary CPO[4.4]. The justification for the CPO is provided by the SRO, and therefore the CPO could not be confirmed without the SRO. 5.4

7.7 There is also a relationship between the CPO and the Section 19 Application. The exchange land is necessary for the CPO and therefore, in the absence of any voluntary means of acquiring the land, the CPO could not be confirmed without the Section 19 Application being similarly approved. Finally, without the CPO, the Section 19 Application would have no effect, and it would be inappropriate to approve it. The recommendations for the SRO, CPO and Section 19 Application will be made in the context of these interrelationships. 5.4

7.8 The NPPF is, at the time of this report, still at consultation stage and therefore attracts limited weight. It is however of some relevance looking forward and the contents of the draft document have been considered, alongside existing policy, in these conclusions. The clear intention of the Secretary of State to revoke RSs has been also taken into account in this report insofar as the provisions of the Localism Act 2011 reflect this intention. Any revocation is however subject to the outcome of environmental assessments, on which consultation is now taking place. This matter therefore also attracts limited weight at this stage of the revocation process. 3.17 & 5.5-5.8

Traffic

Introduction

7.9 In terms of traffic matters, the principal questions that must be asked are how the CLR and SGSR schemes compare in terms of: policy requirements for the promotion of sustainable modes of travel; the concerns that lead to the need for any such scheme in the first place in relieving the AQMA, the Bridge Street area and the historic core from traffic congestion; their wider traffic effects; and cost benefit analysis and value for money. These issues must be considered in the context of the existence of the SGSR as an alternative to the CLR. 5.9 & 5.10

7.10 The SO has raised concerns in relation to the Council's future traffic growth projections. Whilst these appear high in relation to observed growth over recent years, the future growth rates used are derived from national guidance and policy, and thus are not a matter for consideration in this report. In terms of future growth, the Council's traffic modelling also specifically includes for the effect of significant proposed development. 3.24, 3.25, 3.37-3.42, 5.22 & 5.54

Congestion

7.11 The high level of existing congestion in the Bridge Street area of Witney is evident and accepted by both main parties. It results in disrupted traffic flow and a very poor street environment. A significant proportion of journeys that use Bridge Street are local. They are therefore prime candidates for demand management measures to encourage modal shift, in accordance with national and local policy, particularly as more direct routes for alternative modes are readily available. 3.19-3.21, 5.11 & 5.12

7.12 There is however little evidence of effective demand management measures having been implemented. The current use of time limited free parking does little to encourage modal shift for shopping and other short duration convenience trips. Furthermore, the availability of private parking negates the effect of the time limited parking on commuter trips. 3.22, 3.23, 5.14 & 5.15

7.13 The Council's traffic modelling does not address the issue of modal shift between the car and walking or cycling, or indeed off peak to peak changes in car journey habits if capacity should become available. This is despite modal shift having been suggested in the Council's submissions. Whilst the absence of modal shift modelling is a shortcoming in the traffic assessment, there remains a clear need for the re-routing of traffic from the Bridge Street area. 3.45, 3.82, 3.83, 5.16 & 5.17

7.14 The SO has suggested an interim scheme to reduce the demand for journeys through the Bridge Street area. Whilst this may indeed succeed, any reduction would be limited in view of the restricted number of measures involved, and the scheme would not be an effective alternative to the CLR or SGSR. 5.18

The Council's Traffic Modelling

7.15 The Council has used a SATURN traffic model to assess highway network performance in terms of 2013 and 2028 design year weekday peak flows in Witney and on a nearby section of the A40. The model satisfies the suggested calibration standard for the am peak, but not for the pm. In the pm peak, it is however only 1% below the standard which, on its own, is not sufficient to question the overall validity of the model. The SO has raised other issues of concern in relation to the accuracy of the model. Apart from one issue in the Bridge Street area however, which would affect a junction arrangement on the A40 and is dealt with later, they are somewhat anecdotal and are not material to these conclusions. 3.26, 3.28-3.32, 3.44 & 5.19-5.21

7.16 This one issue of concern relates to southbound queues approaching Bridge Street without either the CLR or the SGSR. Here, the model predicts queues, from a difference between 2010 modelled demand and 2011 actual counted flows, that are materially different to those which exist. This suggests that the model may be over predicting these flows approaching Bridge Street. 5.23

7.17 Generally, the model calibrates satisfactorily. Such an over prediction at Bridge Street however would directly affect the predicted flows on the A40 westbound exit slip road at the A415 junction, under the SGSR scheme, as this is a location to which the Bridge Street traffic would transfer. Furthermore, the 2010 modelled demand flows on the slip road also exceed 2010 counted flows, identifying a further over prediction. This combined over prediction has the potential to impact on the required slip road arrangement. 5.24

7.18 A midway position could however be reasonably taken, for sensitivity purposes, to subtract 50% of the 2011 over prediction, which would be 290 vehicles in the am peak, from the SATURN 2028 flow on the slip road. Whilst the SATURN 2028 flow would include traffic growth to 2028, the over prediction would not, and the resulting flow would thus be a higher and more conservative figure than its midway title would suggest. 5.25 & 5.27

7.19 The Council has used a VISSIM model to assess the performance of key junctions within the SATURN model area. The VISSIM model creates more realistic flow conditions, by including the effects of upstream junctions and other highway characteristics on traffic flow. The model shows that overall, in the 2028 am peak, the key junctions would operate more effectively with the CLR than with the SGSR. The difference between the two schemes would however not be major. 3.59 & 3.62

7.20 In the 2028 pm peak, the CLR would result in lower junction delays than with the SGSR, although generally all junctions would have an LOS of D or better with both schemes. Westbound travel time would also be 2mins quicker with the CLR than with the SGSR, and the annual peak travel time saving would be 300veh km hrs. Whilst the VISSIM model shows some benefits from the CLR over the SGSR, the differences would all be marginal, and would not give any material weight to either side of the balanced judgement between the schemes. 3.64-3.67

7.21 The junction between Ducklington Lane and Station Lane however would exhibit some difficulty in 2028 am peak with the SGSR, with queuing durations of over 3min approaching the junction from the north. This would be due to some 1,200 vehicles making a right turn at the roundabout from Ducklington Lane into Station Lane which would conflict with traffic approaching from the north. These vehicles however would include many of those travelling to Station Lane which would have used the A40 westbound off slip road at the A415 junction and would thus be subject to the over prediction previously suggested. Any reduction in the slip road flow would therefore reduce the right turning flow and thus the approaching queue length from the north. Furthermore, queuing for some 3min would not be unusual for an urban area. The junction would therefore be likely to operate satisfactorily until the design year of 2028 without any need for traffic signals on the roundabout. 3.51, 3.63, 3.68 & 5.25

Sensitive and Distributor Roads

7.22 Whilst the Council's use of sensitive and distributor road categories has no basis in guidance or policy, it is an acceptable differentiation mechanism, subject to the guidance in MfS and MfS2. The reduction of traffic on sensitive roads would be greater with the CLR than with the SGSR. The difference however would only be some 5%, with both schemes effectively giving the same extensive level of relief to 2028. 3.46 & 3.47, 3.49, 3.50, 3.81 & 5.39

7.23 The CLR would increase traffic flows on distributor roads. These are partly routed around the south and west edges of the town centre. The additional traffic would increase severance of residential, recreational and employment areas from the town centre, and this would conflict with the guidance in MfS and MfS2. The previous Local Plan Inspector found no fault with increases in traffic on these roads. This view however was taken before the publication of MfS and MfS2, and was not therefore taken in the context of current policy on the role of streets in encouraging modal shift. It thus attracts limited weight. The SGSR would re-route some of the Bridge Street traffic onto the A40, as opposed to the town distributor roads, resulting in less severance. 3.48, 3.50, 5.37-5.40, 5.45, 6.1, 6.3, 6.11, 6.18 & 6.25

7.24 There is no convincing evidence that, by increasing traffic on the distributor roads, the CLR would provide more penetrative, sustainable and better routes into the town centre as the Council suggests. The SGSR, on the other hand, would take a different approach, in that it would reduce cross town through traffic by generally re-routing it onto the A40. This would release town centre street space for alternative and more sustainable modes than the car. Furthermore, as some of the removed traffic would be through traffic, it would not be counter intuitive to re-route this traffic around Witney on the A40, which is a county route. 3.52, 3.54 & 5.34

7.25 It has also been put to the Inquiry that pedestrians and cyclists would find the proposed roundabout at the junction of the CLR and Jubilee Way difficult to cross. The roundabout would however have islands at each approach, the entry and exits would only have two lanes and visibility would be good. Whilst the roundabout may not be as easy to negotiate as the current traffic signals for non-motorised road users, it would not present any particular crossing difficulties, and would therefore be satisfactory in this regard. 6.2

Station Lane

7.26 The CLR would use Station Lane east to distribute traffic to and from the western end of the CLR itself. In the 2028 am peak with the CLR, westbound traffic flows on Station Lane east would be more than 25% greater than the capacity of the road, and the two way flow would exceed the capacity of the road. Moreover, this is not a demand flow but a lower flow from the VISSIM model that takes into account other constraints on the highway network. In view of the extent that Station Lane east would be over capacity, particularly as westbound this would exceed the midway over prediction at Bridge Street previously identified, it would be reasonable to assume that, to operate satisfactorily with the CLR, it would need to be widened. 5.41, 5.42 & 5.44

7.27 Such heavy traffic would also cause severance between the town centre to the north of Station Lane east and the employment and Witney Lakes recreational areas to the south. Any measures to overcome this severance, such as additional formal crossings, would increase congestion in this area of the highway network. With the SGSR, Station Lane east would operate within capacity in 2028. 5.42 & 5.43

Air Quality Monitoring and Conservation Areas

7.28 Both the CLR and SGSR would substantially reduce traffic levels in the AQMA. The Witan Way roundabout, at the western end of the CLR, lies within the CA. It is however within an obvious projection to the main body of the CA, and was added to the CA to preserve its setting in terms of the vegetation within this projection. It is the taller of the vegetation which provides part of the setting of the CA and, with the CLR, this would be retained. 3.55

7.29 The CLR would result in additional traffic within this projection, although the traffic would have little impact on the setting of the CA, as the setting is related to the much taller vegetation. If traffic in this projection is included, the CLR would remove less traffic from the CA than the SGSR. A more realistic approach however, is to exclude this traffic from any CA traffic level assessment, as the traffic would have a negligible impact on the CA. On this

basis, the CLR would result in a greater reduction of traffic on sensitive roads entering a realistic interpretation of the extent of the CA than would be the case with the SGSR. By 2028 however, there would be little difference between the two schemes. Overall therefore, there would be little difference between the CLR and SGSR in terms of a reduction in traffic in the AQMA and CA. 3.56-3.58 & 5.40

The Operation of the A40 with the SGSR

7.30 The required slip road arrangement on the A40 exit slip road at the A415 junction would be sensitive to traffic flows on the SATURN traffic model network. Using the reduced SATURN 2028 traffic flows on the slip road, as previously described, the Council's interpretation of the guidance suggests that the slip road should be widened to two lanes. Using the higher unadjusted SATURN flows, the existing single lane Type A diverge would also need to be widened to two lanes. This work could be carried out within the highway boundary. 3.44, 3.63, 3.76 & 5.29

7.31 The diverge could however remain as a Type A, rather than the more complex Type B that the Council suggest is required for the unadjusted SATURN flows. This is because the Council's interpretation of the guidance is not entirely correct as, with the predicted SATURN through traffic flows on the A40 being low, the choice of a Type A or B diverge is discretionary. Here, the unadjusted SATURN flows on the slip road would be unlikely to be exceeded, given the actual traffic conditions in the Bridge Street area. The provision of a Type B diverge at the slip road would therefore be an overly cautious position to take. 5.30

7.32 With low A40 through flows, there is no VISSIM evidence of merging or diverging difficulty and two existing lay-bys would be relocated to mid link positions. The Council's suggestion of potential traffic conflict on the A40 therefore also falls away. It would thus be reasonable to assume that, based on the unadjusted SATURN flows, a two lane Type A diverge and slip road would be satisfactory for the SGSR. 3.51

7.33 Forward visibility on the A40 exit slip road at the A415 junction is limited by a crest in its vertical alignment. Forward visibility would be necessary for exiting drivers to see the end of any queue for the roundabout at the junction. In this case, the required visibility would be from vehicle to vehicle, and the use of a high level visibility envelope would therefore be appropriate. 5.31 & 5.33

7.34 In the 2028 pm peak, using the high level envelope, the available visibility distance back from the rear of the maximum queue would exceed the SSD for 70kph and also the existing visibility over the crest on the slip road. Furthermore, the available visibility distance would exceed the SSD for 120kph, with a one step departure from the standard which has been judged to be acceptable by the Council. 5.33

7.35 This scenario however relates to the queue length for the unadjusted SATURN slip road flows. Shorter queue lengths, as would occur with the reduced SATURN flows, would result in increased available visibility distances, due to the position of the crest on the slip road. Moreover, the use of a 120kph design speed represents a cautious approach as, in practice, vehicles would be slowing

as they entered the slip road. The available forward visibility on the slip road, with its current vertical alignment, would therefore be satisfactory. 5.32

7.36 The A40 dual carriageway at Witney currently operates well below capacity. It would appear unlikely, given that its trunk road status has been removed, that the single carriageway sections to the east and west of the dual carriageway would be improved in the foreseeable future. With this in mind, the dual carriageway is likely to continue to operate below capacity, and the SGSR would make effective use of this spare capacity. 5.30

7.37 Apart from where Station Lane would operate over capacity, the CLR would make effective use of spare capacity on the Witney distributor road network. The use of the spare capacity on the A40 by the SGSR however would utilise the existing infrastructure without the negative effect of severance around the town centre. In this regard therefore, the SGSR would represent a more sustainable use of infrastructure than the CLR.

7.38 The Hill Farm bridge over the A40 and its associated junction is used as a shortcut for traffic to and from the west, in the absence of west facing slip roads at Shores Green. This is despite the bridge and junction being unsuitable for such use and their location close to the eastern end of the dual carriageway where traffic has to merge. The CLR would provide an alternative route through Witney for this traffic. The SGSR would however provide an alternative at effectively the same location as the bridge and junction and would therefore be more likely to eliminate the use of the bridge and junction as a shortcut. 3.34-3.36 & 5.35

Economic Assessment

7.39 Changes in accident rates have an effect on the economic assessment of highway schemes through their monetised benefit or disbenefit. Jubilee Way, on the eastern edge of Witney, is currently underused. 10 years ago it would have been even less used, as the housing accessed from it had yet to be built. The Council's future accident assessment for the CLR, and for Jubilee Way, has used the historic PIA rate per million vehicle km for Jubilee Way over the past 10 years. 3.69 & 3.70

7.40 The CLR, and indeed Jubilee Way with either the CLR or SGSR, would however carry some 6 times the current level of traffic on Jubilee Way. Notwithstanding the fact that the accident rates are expressed in terms of vehicle km, the likelihood of accidents on a much more heavily trafficked road would be greater than with lower flows. To use a rate based on such low historical use is therefore questionable. 5.52

7.41 Furthermore, the relevant guidance suggests that default, and not historic, rates should be used for new links and where changes in traffic flows are not normal. The CLR would be a new link, and the 6 fold increase in traffic flows would not be normal. The default rates used are for a link with junctions. The CLR would have a limited number of junctions, and the rate would therefore be reasonable. The use of the default rates for the link with junctions would therefore result in a more appropriate accident assessment than with the historic rates. 3.72

7.42 With the CLR, if the default instead of historic rates are used, the predicted change in the number of PIAs over 60 years would move from a decrease of 73 to an increase of 210. This would change the monetised effect in the economic assessment from a benefit of £1.463m to a disbenefit of £9.19m. With the SGSR, including the removal of incorrectly modelled westbound entry slip road traffic, the monetised effect in the economic assessment would change from a disbenefit of £6.241 to a disbenefit of £1.18m[3.99]. The weight of accident disbenefit in the balance between the schemes would therefore move from the SGSR to the CLR. 3.72

7.43 The economic assessments for the CLR and the SGSR use the TUBA methodology. The Council has drawn my attention to the fact that the January 2011 White Paper emphasises that transport is crucial to economic growth. The White Paper however also records that people who travel to shop on foot, by cycle or by public transport spend as much, if not more, than those using the car, and transport is therefore not the only factor seen as important to growth. 3.73 & 3.74

7.44 The Council has suggested that the CLR would have a BCR of 15.67. It would however be necessary, due to the increased volume of traffic on Station Lane, to introduce a toucan crossing at the western end of the CLR and widen Station Lane. With the addition of these measures, together with the increased accident rate as already set out, the BCR would reduce to 11.278. 3.75 & 5.47

7.45 It would be reasonable to assume that the SGSR should be assessed with a preparation cost of some 50% of that for the CLR, due to its much lesser scope, and with the increased accident rate. With the inclusion of these factors and the widening of the exit diverge and slip road to two lanes, to accommodate the unadjusted SATURN flows, the BCR would be 20.959. With the reduced SATURN slip road flows, which would require only the slip road to be widened, the BCR would be 23.088. 3.77 & 5.53

7.46 The Council has suggested that delays at the diverge could increase the costs in the SGSR assessment, as the SATURN model cannot assess delays. From the VISSIM flows and the diverge guidance however, a two lane Type A diverge would operate without difficulty, and any delay would therefore be unlikely. 3.78

7.47 The use of lower accident rates, including historic rates, and an equal preparation cost for the CLR and SGSR would not reduce the BCR for the SGSR to below the Council's suggested 15.67 for the CLR. Indeed, it would take a number of other matters to move towards the Council's position for this to be the case, and the exit diverge and slip road arrangement is therefore the most significant issue in this regard. 3.75

7.48 If a Type B diverge is necessary, the BCR for the SGSR could reduce to 10.379. From the guidance however, a Type B diverge only becomes prescriptive at diverge flows well in excess of the, possibly over predicted, unadjusted SATURN flow. Furthermore, in terms of the vertical alignment of the slip road, using the unadjusted SATURN flow queue length, there is a 40m difference between the 120kph one step SSD and that available. Moreover, speeds would be likely to be less than 120kph. The existing vertical alignment with a Type A two lane diverge and slip road would thus be likely to operate well within its capabilities

up to 2028, and its use in the economic assessment is therefore appropriate. 5.30, 5.32, 5.33 & 5.53

7.49 Whilst both the CLR and SGSR would have BCR values above the DfT high category threshold of 2, the SGSR would be materially better in terms of value for money than the CLR, and this could be by a factor of as much as two. The CLR would also be more sensitive to variations in traffic flows, as economic efficiency of the CLR is a greater proportion of the BCR calculation, at some £78m for the CLR against £56m for the SGSR. Any reduction in predicted flows, as has been seen in the Bridge Street area, would therefore have more of a negative impact on the BCR for the CLR than on the SGSR, as the SGSR benefit would be more influenced by its lower construction cost. 3.79, 5.50 & 5.51

7.50 The post 2010 funding gap for the CLR would be £7.246m. With the SGSR, for the unadjusted SATURN slip road flows, this would be £3.914m, and could be lower if a disposal area at a local quarry was available for use. 5.46, 5.48 & 5.49

7.51 The lead in time for the SGSR would exceed that for the CLR and would probably need to include a CPO. The SGSR however would be a smaller scale project, and the difference would be unlikely to be the many years suggested by the Council. Indeed, the Council has said that, if the Orders and Application for the CLR are not confirmed, then it would make an early start on preparations for the SGSR. 3.80

7.52 The benefit of some developer funding may have expired during the lead in to construction of the SGSR. It could however be possible to utilise this funding before its benefit expires on some of the complementary measures that would be common to both schemes. Even if this was not to be the case, the SGSR funding requirement of £5.045m for the unadjusted SATURN slip road flows would lie close to the Councils post 2010 CLR funding requirement of £4.62m. 5.49 & 5.55

Conclusion

7.53 The need for the CLR may have been overstated in relation to opportunities for modal shift, and there would be a degree of tension between the CLR and relevant policy in this respect. There is however a clear need for the re-routing of traffic from the Bridge Street area. There is also some evidence that the base flows at the Bridge Street junction may have been overestimated, with a consequential impact on junctions along the SGSR route. It would however appear that any practical difficulties on this route could be overcome. Any traffic overestimate though would have financial implications, particularly at the A415 junction, where the Council seems to have incorrectly interpreted guidance, and at the junction between Ducklington Lane and Station Lane.

7.54 The CLR would be likely to increase severance from higher levels of traffic on town centre distributor roads, and this shows signs of some policy conflict. The CLR would also have a significant impact on Station Lane, which would need widening and an additional crossing of the CLR with an associated footway. The accident rates used in the initial economic assessment were excessive, conflicted with DfT guidance and unfairly favoured the CLR over the SGSR. The economic assessment firmly favours the SGSR, particularly when its sensitivity to the variation of inputs is considered. The lower construction cost

of the SGSR would also generally allow the scheme to accommodate any reduction in developer funding after 2013. Furthermore, it is standard methods of assessment, rather than the somewhat anecdotal journey times, that should be used to ascertain the economic effectiveness and efficiency of schemes.

7.55 In view of all of these points, in terms of traffic matters, the submitted evidence points to the SGSR being a better solution than the CLR to the traffic congestion problems of Witney.

Landscape

7.56 The approach to and methodology for landscape assessment is agreed between the Council and the SO. 5.60

Character

7.57 The CLR would pass through the following landscape character areas described in the West Oxfordshire Landscape Assessment. They are the Lower Windrush Valley and Eastern Thames Fringes: Floodplain Pasture and Semi-Enclosed Flat Vale Farmland areas and the Eynsham Vale: Open Rolling Farmland area. 5.61

7.58 In the floodplain character area, the landscape is of good quality. The river is a significant feature, and the area is much used as it is the nearest part of the Witney Lake and Meadows Country Park to Witney town centre. The landscape sensitivity would therefore be medium to high, notwithstanding the presence of overhead cables. 3.85 & 3.87

7.59 The CLR would cross the entire 200m width of this landscape area with an embankment and two substantial bridges with new river channels. Even with the embankment height minimised between the bridges and gentle embankment slopes, the CLR would be incongruous and conspicuous in this otherwise flat landscape. The visual envelope for the CLR, whilst restricted by field boundary vegetation, would be dominated by the embankment and structures. The industrial buildings to the south of Station Lane would be of a similar height. They are however offset to one side of the character area and do not have the same effect on the area as would be the case with the CLR. 3.86, 3.88, 3.89 & 5.64

7.60 Such a comprehensive landscape change could not be considered to be moderate, and the magnitude of change would therefore be major. The landscape impact significance would therefore be very large adverse, with little reduction between 2013 and 2028, as mitigation planting would not be appropriate in this area of the country park. 5.64

7.61 The flat vale farmland character area comprises enclosed fields with historic boundary hedge lines. As these features still remain intact, the landscape has an ordinary quality, but not poor as suggested by the Council. The field boundaries create relatively discrete parcels of land, and the sensitivity of the area is therefore medium to low. 5.65

7.62 Some of these parcels of land would be interrupted by the CLR, and indeed the influence of traffic on the CLR embankment would extend beyond some of the field boundaries. The magnitude of change would therefore be moderate. As a result, the impact significance would be moderate to slight adverse in 2013.

In 2028, the impact would be restricted to the traffic on the embankment, and the impact significance would be slight adverse. 5.66 & 5.67

7.63 The rolling farmland area includes hedged fields and distant views of copses. There are no features to interrupt this landscape, which could have reduced its quality to poor, and therefore the landscape has an ordinary quality. It is a typical agricultural landscape, having a low sensitivity. The CLR would be cut into the slope of the land, and the magnitude of change would therefore be moderate. This would result in a moderate to slight adverse impact significance in 2013, reducing to slight adverse in 2028 following landscape mitigation. 5.68

7.64 The CLR would therefore have a very large impact on the sensitive floodplain which is identified as such in the CA character appraisal and Local Plan Policies NE3, WIT3 and BE4. It would also have a materially adverse effect on the flat vale farmland, where some of the impacts would be difficult to mitigate. 5.69 & 5.77

7.65 The SGSR would occupy parts of the Eynsham Vale: Open and Semi-Enclosed Rolling Farmland areas. The landscape quality of these areas is the same and has already been described. Their sensitivity is increased due to the presence of a prominent ridge. The magnitude of change would be reduced due to the limited area of construction but increased due to the imposition of lighting columns, although these would be few in number. On balance, the SGSR would have a very similar context and impact to those sections of the CLR in the Eynsham Vale character areas. 3.91, 5.70 & 5.75

Visual Impact

7.66 Half of the selected viewpoints for the CLR would have moderate to large adverse impacts in 2013, reducing to 40% in 2028. With the SGSR, these proportions would be 30% and zero. This is due to the increased isolation and smaller visual envelope of the SGSR affecting fewer receptors, together with the fact that, in 2028, the isolation would increase the effectiveness of the mitigation screening. 3.93 & 5.72-5.74

7.67 Both schemes would have similar impacts on local pubic rights of way. In the country park however, the CLR would result in a very large adverse impact due to the embankment with its vehicles, structures, natural river channel loss and severance. The exchange land would also be enclosed and dominated by the embankments of the CLR and the A40. This would create an artificial environment which would be disconnected from the remainder of the river valley and country park. At Eton Close, the loss of the POS would also result in the loss of a valuable landscape buffer between the housing and highway infrastructure. 5.76, 5.78, 5.80 & 5.82

Conclusion

7.68 The CLR would have a very large adverse impact on the sensitive Windrush valley. This is identified in LP Policies NE3 and WIT3 as sensitive and to be protected and treated with respect. The impact would affect its recreational capacity as green infrastructure which, under NPPF, should also be given protection. Furthermore, the country park exchange land would have a poor visual environment. None of these impacts would occur with the SGSR.

The SGSR would also have a smaller visual envelope affecting fewer receptors. On this basis, the SGSR would be better scheme in landscape terms. 5.83

Noise and Vibration

Introduction

7.69 High levels of noise currently affect the CA and the Bridge Street locality including significant housing and shopping areas. Noise from the A40 also affects housing areas. Levels are likely to get worse in future years due to traffic growth. 3.95 & 3.96

7.70 The CLR would be constructed partly in false cuttings and with a reduced noise road surface. Whilst these attributes would reduce noise levels, they have not been quantified in the noise assessment. Their effect however would not be significant. The Eton Close POS is currently subject to noise that is at a level likely to cause significant public annoyance. 3.94 & 3.108

The Country Park

7.71 In the well used part of the country park to the north of the A40, the CLR would result in a substantial increase in the area subject to noise levels likely to cause serious community annoyance. This would include all of the exchange land, and the noise would be likely to have a significant effect on the beneficial use of the park. Whilst, without the CLR, the area would be subject to some increase in noise over time due to traffic growth, this would not approach the extent of the impact that would result from the CLR. 3.98, 3.103, 5.84 & 5.85

7.72 The SGSR would result in increased traffic on the A40 which does not have the benefit of noise reduction surfacing or other mitigation measures. This traffic would also cause an increase in noise levels in the country park to the north of the A40. There would however be no increase in the extent of the area subject to likely serious community annoyance. The SGSR would therefore have much less impact than the CLR on the park to the north of the A40. 3.106

7.73 In that part of the country park to the south of the A40, the SGSR would have a greater impact than the CLR. This part of the park is however more distant from housing areas and the town centre than that to the north of the A40. It is therefore of less value, and this would reduce the significance of the impact to much less than that for the CLR to the north of the A40. In terms of noise in the country park as a whole therefore, the CLR would have a much greater impact than the SGSR.

The Conservation Area and Town Centre

7.74 Both the CLR and SGSR would reduce noise levels in the CA and the town centre to a similar extent. 3.106 & 5.94

Residential Receptors

7.75 There would be very little overall difference between the CLR and the SGSR in the number of residential receptors that would experience negligible or minor increases in noise of less than 5dB. The situation with moderate or major increases of more than 5dB would however be different. Here the numbers with the CLR would be far higher than those with the SGSR, and the CLR would

therefore have a substantially greater impact on residential receptors. 3.100 & 3.101, 5.88-5.92

Eton Close Public Open Space

7.76 The replacement POS for that at Eton Close which would be provided under the CLR would be significantly quieter than the current area. With the SGSR, the POS at Eton Close would be subject to a very slight increase in noise levels, although this increase may well not be noticeable. Whilst the replacement POS would satisfy the Council's critical distance from residential properties, its location would not be equivalent for many residents, particularly the young, in the southern part of the Cogges Estate. 3.104 & 3.108

Vibration

7.77 In terms of vibration, with the CLR in 2028, the numbers of properties which would experience an increase in vibration impacts that would affect up to 10% of occupiers would be similar to those experiencing such a reduction. The impact on a small number of properties would result in between 10 and 20% of occupiers being affected. In general, the effects of the SGRS would be similar. 3.105 & 3.109

Conclusion

7.78 The most important part of the country park would be far more affected by noise increases with the CLR than with the SGSR. Moreover, with the CLR, the country park exchange land would have noise levels above those likely to cause significant community annoyance. The number of residential receptors that would face a moderate or major noise increase would also be greater with the CLR than with the SGSR. Whilst the other noise effects of the two schemes, including their positive effect on the CA and town centre, would be broadly similar, the SGSR would be better than the CLR in terms of overall noise and disturbance.

Biodiversity

Introduction

7.79 The rationale for the protection of biodiversity under PPS9 is that harm should firstly be avoided, then mitigated if it cannot be avoided, and finally compensated for if it cannot be mitigated. 3.113 & 5.98

The CLR

7.80 The CLR would fragment badger habitat and could increase road mortality, although the proposed road crossing measures would mitigate against these impacts. It has been suggested that the road crossing measures would be subject to flooding. The timing of any such flooding would however coincide with periods when the floodplain around the CLR was also at risk of flooding, and any restriction on movement from road crossing flooding would not be uncharacteristic. The footprint of the CLR would also result in some badger habitat loss, although habitat improvement measures elsewhere would compensate for this impact. 3.111, 3.112, 3.114, 3.115, 3.120, 3.129, 5.97 & 5.100

7.81 The CLR would also cause bat habitat fragmentation and loss. This would involve watercourses, hedgerows, scrub and ponds. The CLR would however include measures to compensate for these effects, and there would be an overall gain in habitat, notwithstanding the location and size of the proposed bat caves. Similar habitat fragmentation and loss would occur in respect of scrub, ponds, grassland and hedgerows for reptiles, again with measures to compensate for these effects. 3.112, 3.114, 3.116, 3.120, 3.122, 3.123, 3.125, 3.127, 5.97, 5.102 & 5.104

7.82 Aquatic ecology and river bank vegetation are important to otters, and both these types of vegetation would suffer from fragmentation and loss with the CLR. Mitigation would include road crossing measures and roadside exclusion fencing. The fragmentation, loss and any pollution of watercourses would have an adverse impact on water voles, although alternative habitat creation would compensate for these effects. 3.112, 3.114, 3.116, 3.120, 3.122, 3.123, 3.125, 3.127, 5.97 & 5.99

7.83 Dormouse habitat would also be subject to fragmentation and loss, but again any adverse impacts would be mitigated by the creation of habitat and road crossing points. The proposed crossing points around Stanton Harcourt Road would be likely to result in an overall benefit to the species when assessed in combination with the proposed dormouse crossing of the A40. This would be because the A40 currently represents a significant obstruction to movement of the species. 3.116, 3.117, 3.120, 3.121, 3.125, 3.127, 3.129, 5.97, 5.101 & 5.115

7.84 Noise and disturbance would impact on breeding bird species. This would particularly occur in and around the country park where, although there is background traffic noise, the level would materially increase. Any disturbance could not be mitigated, but screen planting could provide compensation. Increased light pollution from proposed highway lighting would also be a source of disturbance, although this would be minimised through the use of directed light sources. 3.118, 3.128, 5.97 & 5.105

7.85 The CLR would have the potential to clearly harm ecological interests. Mitigation and compensation are however proposed, and overall gains in biodiversity are predicted. These would however be dependent on appropriate future maintenance. 3.113 & 5.106

The SGSR

7.86 The SGSR would result in the loss of two outlier badger setts and foraging areas. Although detailed mitigation and compensation measures have not been identified for the SGSR, a compensation sett could be provided. As the SGSR would run alongside the A40, it would not result in any additional fragmentation of habitat, and there would not be any materially increased risk of road mortality from additional traffic. 5.107, 5.108 & 5.112

7.87 The SGSR could result in the loss of bat tree roosts and foraging areas. Replacement habitat could however be provided as compensation. Again, there would not be any additional fragmentation of habitat or materially increased risk of road mortality from additional traffic. The situation would be the same for small areas of reptile and dormouse habitat. 5.107 & 5.110

7.88 Breeding birds would be affected by noise, disturbance and possible road casualties. Impacts however would be in areas close to the environment of the

existing A40, which would minimise their extent, and any road lighting impact would be minimal due to directed light sources. 3.128, 3.130, 5.107 & 5.111

Conclusion

7.89 In the context of PPS9, the SGSR would avoid impacts to a greater extent than the CLR, due to its less sensitive location and smaller area of disturbance. The SGSR would also better accord with LP Policy WIT3 which seeks to protect ecology in the Windrush in Witney policy area and the presumption in favour of sustainable development in the NPPF. The SGSR would be less dependent than the CLR on the success and future maintenance of mitigation and compensation measures to reduce the impact on biodiversity to an acceptable level. Whilst the CLR would provide a greater benefit to biodiversity, this benefit, and the avoidance of unacceptable impact, would be far more dependent on the success and future maintenance of mitigation and compensation. Moreover, some of the measures which would improve habitat and biodiversity, such as the water vole mitigation area currently under construction, could be undertaken in any event. As such, the SGSR would be less harmful and better than the CLR in terms of biodiversity and the guidance in PPS9. 3.130, 5.99, 5.100, 5.113 & 5.114

Air Quality

Introduction

7.90 Air quality in the Bridge Street area is poor and NO_2 levels have generally exceeded the annual mean objective/EU limit each year since 2005, notwithstanding vehicle emission improvements. The improvement of air quality in this area has been a clear aim of WODC for some years and has policy support. 3.134, 3.137, 3.146, 5.117, 5.118 & 5.121

7.91 The Council's air quality assessment has followed the Defra guidelines, and traffic flows have been appropriately determined on an actual basis using central growth rates. These growth rates are more representative than the high rates used in the SO's assessment. The Council's assessment has also used more extensive canyons than that of the SO and therefore better reflects the streets under consideration. 3.132, 5.119, 5.120 & 5.122

7.92 Much of the traffic relief in the AQMA depends on the complementary highway measures. These measures are however integral to both the CLR and the SGSR, and the air quality assessment should therefore include for their effect. From all of the above points, the Council's assessment is to be preferred over that of the SO. 3.133, 3.139, 5.119, 5.124 & 5.125

Modelling

7.93 In 2013, without either the CLR or SGSR, there would be exceedances of the NO_2 annual mean objective. Both the CLR and the SGSR would remove these exceedances and substantially improve air quality. In the key areas of Bridge Street and High Street, the improvement with the CLR would however be greater than with the SGSR, and this difference would result in the CLR, at 2013, being a more robust scheme in terms of air quality. The outcomes for 2028 would be similar except that the differences between the two schemes would be less. 3.140, 3.141, 3.143 & 3.144

7.94 In 2028 with the SGSR, air quality at the Eton Close POS would be worse than either with or without the CLR. The differences would however have negligible significance, as NO_2 levels would be well below the annual mean objective. In 2013 and 2028, air quality at the CLR exchange land for the Eton Close POS would also be better than at the existing POS with or without the SGSR. The CLR would however have a slight adverse impact on air quality in nearby parts of the country park. There would however be no exceedances of the NO_2 annual mean objective level. 3.142, 3.145 & 5.123

7.95 Policy suggests that, for mass emissions, each scheme should be reviewed to assess cumulative effect, notwithstanding that any percentage changes may be small. In the context of the Climate Change Act 2008, the CLR would therefore be less harmful than the SGSR in this regard. 3.147-3.149 & 5.126-5.128

Conclusion

7.96 Although some of the differences would be small, the CLR would generally result in better air quality than the SGSR and would therefore be the more robust of the two schemes in terms of the improvement of air quality. There would also be a material difference in mass emissions between the two schemes and this adds weight to the advantages of the CLR over the SGSR in respect of air quality. 3.150 & 5.129

Flood Risk

Introduction

7.97 Flooding is an issue of fundamental importance to the people of Witney given recent events, and it bears strongly on the issue of where the public interest lies. Part of the CLR would be located in the highest flood risk Zones 3a and 3b. The SGSR would be located at the other end of the spectrum in Zone 1. 5.130

7.98 The CLR has previously been subjected to, and passed, the sequential and exception tests of PPS25. The tests are not however a static hurdle in terms of time, as their context may change. Here, the CLR has undergone further design and flood modelling and additional work has been carried out on the SGSR alternative. 3.152

7.99 The Council, in justifying the CLR in terms of flood risk, has partly relied on the EA's position at the CLR planning application stage and the discharge of the EA's suggested planning conditions. The EA's submission to the Inquiry however suggests that the weight to be given to the SO's position is a matter for the decision maker, and the Council acknowledges that this Inquiry is not a planning inquiry. The PPS25 tests are also not insulated from changed circumstances or detailed review. In particular, any confirmation of the CPO involves a different test, that of a compelling case in the public interest. The fact that the planning condition could be discharged is therefore not the only consideration here, a point acknowledged by the EA in suggesting that it would be for the decision maker to attribute weight to objections to the Orders and Application. 3.151, 3.152 & 5.139

Modelling

7.100 The Council's FRA model has been independently verified, on behalf of the EA, as being fit for purpose. The model has been further developed, and the Council believes that it is now better that the version deemed to be fit for purpose. The SO is however still critical of the model, and in particular: the n and spill coefficient values; calibration; hydrograph shape; model extent; and predicted flooding at the Station Lane Industrial Estate. Moreover, no evidence has been put to the Inquiry concerning further verification or comment despite the Council acknowledging that further communications from the EA existed outside the Inquiry. On balance however, the model is likely to still be fit for purpose. 3.153-3.157 & 5.133-5.140

7.101 The avoidance of increased flood levels with the CLR would depend on culverts under the CLR embankment. These would carry a maintenance risk in relation to full or partial failure. It would also depend on the creation of effective flood storage, which is related to the shape of the hydrograph, a matter of dispute between the main parties. Whilst the model is fit for purpose in predicting that there would be no increased flood levels, there would be some residual risk in terms of the mechanisms which would allow that to be the case. Indeed, the EA's approval to some of these matters is still outstanding. 5.136, 5.138 & 5.145

7.102 Whilst the SO's model has used up to date software, the Council is critical of: the n and spill coefficient values; calibration; and the model extent . The predicted flooding however only shows very minor additional areas over those predicted in the Council's model. 3.158 & 3.167

7.103 Overall therefore, there is little to chose between the Council's and the SO's FRA models. There would also be no material increase in flood levels on the Cogges estate and indeed there may be some limited benefit from the CLR. This would however be dependent on flood protection measures which would be subject to the residual risk already described. 3.169-3.172

The Sequential and Exception Tests

7.104 The CLR is required to pass the PPS25 sequential test. For the CLR to fail, on the basis that the SGSR would be a lower risk alternative, the SGSR would need to be reasonably available and appropriate. Land for the SGSR would need to be acquired, and this would potentially require a CPO. The SGSR therefore is not directly available. CPO powers are however available to progress such a CPO, as have been invoked for the CLR. The SGSR would also be of a far smaller scale than the CLR, suggesting that its impact in terms of a CPO would at least be the same as the CLR if not less. The SGSR would thus be as available as the CLR and can therefore be said to be reasonably available. 3.173 & 5.141

7.105 There is no evidence that the SGSR would increase the risk of any property flooding, and this would not depend on protection measures. The appropriateness of the SGSR as an alternative to the CLR would however also be dependent on a number of other factors which are considered elsewhere in this report. The matter of appropriateness must therefore be left until the overall conclusion. 3.174

7.106 If however the SGSR does not represent an appropriate alternative and the CLR passes the sequential test, it must then pass the exception test. In this test: the FRA must demonstrate that the CLR would be safe, which it has; there must not be any reasonable alternative sites on previously developed land, which there are not; and the wider sustainability benefits must outweigh any flood risk. This last matter is again dependent on a number of other factors which are considered elsewhere in this report, and the matter of a wider sustainable benefit must therefore also be left until the overall conclusion.

Conclusion

7.107 The latest versions of the Council's and the SO's models have only shown a very minor addition to the predicted flooding with the CLR, and there is no reason to doubt that the Council's model is still fit for purpose. The predicted flood levels do however depend on flood protection measures which have some residual risk and are still subject to EA approval. Under the sequential test, the SGSR is a reasonably available alternative but it remains to be seen if it is an appropriate alternative to the CLR in the wider sense. In terms of the exception test, the CLR passes, with the exception of the wider sustainability and risk balance which will need to be undertaken over the CLR project as a whole.

Unilateral Undertakings

7.108 The effectiveness of the CLR would depend on the requirements of the Council's UU to WODC, and the values in the economic assessment for the SGSR would depend on the requirements of the SO's UU to the Council$_{[1.10]}$. Whilst, during the Inquiry, various areas of concern were raised by each of the parties on the UU from the opposing side, these were either dealt with by way of response or amendment to the document. There is nothing to suggest therefore that the UUs would not fulfil their purposes. Furthermore, notwithstanding that the Inquiry relates to a CPO, the Council's UU would be relevant, necessary and directly, fairly and reasonably related to the CLR and would therefore passes the tests in Circular 5/05[71]. There is also nothing to suggest that, given the need for traffic relief, a similar situation could not be reached in relation to the SGSR. $_{1.10}$

7.109 The SOs UU includes an offer of land for the construction of the SGSR and for the provision of a cycle and footway, at Farm Mill, that would replicate connectivity provided by the CLR should the SGSR proceed. It would however be for the Council to proceed with the SGSR if it wished to do so, and the absence of full legal effect in respect of any such land transfers does not therefore conflict with the purpose of the UU. $_{1.10}$

7.110 Whilst, in the absence of such a UU, the SO's land could be purchased by the Council, using CPO powers if necessary, such actions would affect the economic assessment$_{[4.55]}$. This would not however be to such an extent that would affect the overall balance between the two schemes, and it therefore

[71] Circular 5/05: Planning Obligations

would not affect the conclusion in respect of traffic matters. This part of the UU therefore fails the necessity test.

7.111 There would also be no specific need for the cycle and footway in connection with the SGSR, and similarly this element of the UU fails the necessity test in the circular. In view of these findings, the contributions towards the SGSR and the cycle and footway would not be directly related to the proposal and would also fail the tests of CIL[72] Regulation 122. Whilst the SO's UU would offer benefits to the Council, these benefits would not pass the tests of CIL and Circular 5/05, and therefore have not been taken further in these conclusions.

Overall Conclusion

Main Considerations

7.112 The conclusions in relation to the main issues that I have identified are as follows. On traffic and in terms of the primary objective to reduce traffic in the Bridge Street area, there is little to choose between the CLR and the SGSR. The situation is generally the same in respect of highway network performance. This apparent equality however hides some important matters of detail.

7.113 Firstly, while the CLR would remove traffic from the Bridge Street area, it would not remove it from the town centre as a whole. The re-routed traffic would use the existing distributor road network which would result in issues of severance and Station Lane east overcapacity. Secondly, the CLR would perform less well than the SGSR in terms of value for money under a range of scenarios. Finally, and on the other hand, there is the possibility that the SGSR would require a traffic signalled roundabout at the junction of Ducklington Lane and Station Lane.

7.114 On balance however the issues of value for money and severance weigh heavily against the CLR, and they are matters that could not be readily resolved through the provision of additional infrastructure. From the evidence presented therefore, on traffic grounds, the SGSR would be a better scheme than the CLR.

7.115 In terms of landscape, the CLR would have a significant adverse impact on the sensitive Windrush valley and country park in relation to character and visual impact, in conflict with LP Policy WIT3. This impact could not be readily mitigated due to the nature of the landscape. Such impact would not be present with the SGSR, which would be less obtrusive and situated in a less sensitive area. On landscape grounds therefore, the SGSR would also be a better scheme than the CLR.

7.116 Moreover, the CLR would occupy part of the country park which enjoys a sense of openness and some views across the flat river valley. The land to be provided in exchange would be somewhat sandwiched between the A40 and the CLR embankments, and it therefore would not be as equally advantageous as the land that would be taken.

[72] Community Infrastructure Levy Regulations 2010

7.117 In relation to noise and vibration, both the CLR and the SGSR would have a similar positive effect on the CA and the town centre. The CLR would have a greater negative noise effect on residential receptors than would be the case with the SGSR, although this would not be sufficient to tip the balance in favour of the SGSR. The CLR would however have a far greater negative noise effect on the country park and, in particular, the exchange land would have noise levels above those likely to cause significant community annoyance. On noise grounds therefore, the SGSR would be a better scheme than the CLR whereas in respect of vibration the schemes would be similar.

7.118 In respect of biodiversity, the CLR would provide a greater benefit to biodiversity. This would however result from extensive mitigation and compensation measures, some of which could be undertaken in any event. The SGSR, on the other hand, would result in less harm to biodiversity interests in the first place. When assessed in accordance with the protocol set out in PPS9, which priorities the avoidance of harm over mitigation and compensation, the SGSR would be a better scheme, in terms of biodiversity, than the CLR.

7.119 The CLR would generally result in better air quality than the SGSR and would therefore be the more robust of the two schemes. The CLR would also result in lower mass emissions than those of the SGSR. On air quality grounds therefore, the CLR would be a better scheme than the SGSR.

7.120 The issue of flooding has outstanding matters in respect of the appropriateness of the SGSR under the sequential test and whether any wider sustainability benefits would outweigh any flood risks under the exception test. The only area where the CLR would be a better scheme than the SGSR would be in terms of air quality. In this regard however, the difference between the two schemes would not render the SGSR an inappropriate alternative to the CLR. The SGSR would therefore represent an appropriate alternative, in a lower flood risk zone, to the CLR, and the CLR would thus fail the sequential test.

7.121 On this basis, the application of the exception test would not be necessary. For completeness however, the wider sustainability benefits of the CLR would be: the removal of traffic from the Bridge Street area, notwithstanding the increase in traffic on the existing distributor road network; the reduction in noise in the CA and the town centre, notwithstanding the increased noise in the country park and at residential receptors; and improved air quality. On balance, these benefits would outweigh the risk of flooding relating to the effectiveness of flood protection measures. If it were to be applied, the CLR would therefore pass the exception test. As the CLR has failed the sequential test however, the SGSR, on flood risk grounds, would be a better scheme than the CLR.

7.122 The SGSR would achieve the aims of the CLR on practical and policy grounds. The only issue on which the CLR would be a better scheme than the SGSR would be on air quality grounds. This would not be sufficient to outweigh the other benefits of the SGSR over the CLR, and the SGSR would therefore be the better scheme.

The Orders and Application

7.123 It is now necessary to consider the tests relating to the Orders and Application. For the SRO, the statutory test is that there must be a reasonably convenient route for highway users. The CLR would require significant changes to one of the roundabouts on Witan Way and new roundabouts at Jubilee Way and Cogges Hill Road. All reasonable efforts have been made to address routes used by non-motorised users and private means of access. The proposals for improving or stopping up the highways in question and for the stopping up of any private means of access in this SRO would be necessary to meet the objectives of the CLR. No other highway routes or private means of access would be necessary before the highways and any accesses are stopped up. The CLR would therefore pass the statutory test.

7.124 For the CPO to be confirmed, matters to which regard should be had are whether: the CPO is supported by a compelling case in the public interest; there is a clear idea for use of the land; the idea is achievable; funding is available; and that there is an absence of impediments.

7.125 There is no evidence of any proposal to purchase land or rights other than those necessary to implement the scheme, and the CPO therefore addresses no more land than is necessary. The Council has a clear idea of how it intends to use the land, and funding has been approved. If the CPO is confirmed, work would start promptly, for which reason no land is proposed to be acquired ahead of time, and the CLR would not be blocked by any impediment to implementation.

7.126 It has already been established that the SGSR is a reasonably available alternative to the CLR. It is also the case that, taking into account the evidence before the Inquiry, the SGSR would be a better scheme than the CLR. A compelling case in the public interest has therefore not been made for the CPO, notwithstanding the other relevant matters above. Moreover, there would be no justification for interfering with the human rights of those with an interest in the land. The CPO should therefore not be confirmed. Furthermore, any modification of the CPO would not result in a compelling case being made.

7.127 In relation to the exchange land certificate in respect of the country park, the compensation land would not be as equally advantageous to users of the park as a consequence of landscape and noise issues. This element of the certificate therefore should not be issued. The situation would be similar to that part of the certificate relating to the Eton Close POS, where the compensation land would not be as equally advantageous to users of the POS due to its separation from the existing POS and associated residential areas. The certificate as a whole therefore should not be confirmed.

7.128 From the representations, it is clear that, notwithstanding the outcome of the statutory test, it would be inappropriate for the SRO, with or without modification, to be confirmed without the benefit of a CPO. It is therefore the case that the SRO should not be confirmed.

8. RECOMMENDATIONS

I recommend that:

8.1 The Oxfordshire County Council (A4095 Witney: Cogges Link Road Classified Road) (Side Roads) Order 2010 is not confirmed.

8.2 The Oxfordshire County Council (A4095 Witney: Cogges Link Road) Compulsory Purchase Order 2010 is not confirmed.

8.3 The application to the Secretary of State for Communities and Local Government to issue a Certificate Under Section 19(1)(a) of the Acquisition of Land Act 1981 that he is satisfied that there has or will be given exchange land for the Order land is refused.

Stephen Roscoe

INSPECTOR

APPEARANCES

FOR THE PROMOTING AUTHORITY:

Mr D Holgate	QC, instructed by the County Solicitor, Oxfordshire County Council
Assisted by	
Mr M Reed	of Counsel

He called

Mr N Day BEng(Hons)	Senior Engineer for Atkins within the Oxfordshire County Council Partnership
Ms T Dow DipTP DipUD BA(Hons) MRTPI	Highways and Transport Manager – Policy and Strategy, Oxfordshire County Council
Ms T Rowley DipTP MRTPI	Representing West Oxfordshire District Council
Mr P Taylor BSc MSc MIEnvSc FIAQM CSci	Head of Technology for Air Quality and Greenhouse Gas Management, Atkins
Mr M Wright MIOA	Principal Acoustics Consultant, Atkins
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Mr G Woodward BA DipLA CMLI	Associate Director, Atkins
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Mr J Woods BA CMILT	Managing Consultant, Atkins
Mr M Hall BSc(Hons) MSc MIHT	Managing Consultant, Atkins Transport Planning and Management

SUPPORTERS:

Mr M Chattoe DipTP	Local Resident
Mr M Walker	Local Resident and Businessman

FOR THE STATUTORY OBJECTOR:

Mr M Lowe	QC, instructed by Mr C Whelton, Associate, Burgess Salmon LLP
Assisted by	
Mr W Beglan	of Counsel
He called	
Mr D Sharps CEng FIMechE FIOA	Acoustic Consultant, Sharps Acoustics LLP
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Dr C Holman BSc PhD CIWEM FIAQM FIEnvSc	Principal, Environ UK Ltd
Mr I McNeill BSc CEng MICE	Clarke Bond (South West) Ltd

NON-STATUTORY OBJECTORS:

Mr N Wilcock	Local Resident
Mr D Condon	Local Resident and Businessman representing Witney CPRE and Witney First
Mr W Devonald	Local Resident
Cllr D Enright	Witney East Ward Member of Witney Town Council
Mr T Walker	Local Resident
Dr J Maxwell BM MRCGP FFPH	Local Resident
Mrs G Salway	Chairman, West Oxon District Committee, Campaign to Protect Rural England

Ms F Basson	Local Resident
Mr J Aldous	Local Resident
Mrs P Triggs	Local Resident
Mr O Edwards	Local Resident
Dr K Jennison	Local Resident
Mr M Kavanagh	Local Resident
Mr Fletcher	Local Resident
Dr Kinchesh	Local Resident

DOCUMENTS

GENERAL DOCUMENTS

INQ/1 Orders and Application
INQ/2 Folder of Objection Letters
INQ/3 Folder of Objections – S19 Application
INQ/4 Folder of Supporters Letters
INQ/5 Email and letter dated 5 October 2011 from the Programme Officer to the NSOs and Supporters who have appeared at the Inquiry regarding document OCC/40
INQ/6 Letter dated 16 October 2011 from NSOs to the Inspector
INQ/7 Email and letter dated 20 October 2011 from the Programme Officer to the NSOs and Supporters who have appeared at the Inquiry regarding additional traffic evidence
INQ/8 Letter dated 26 September 2011 from the Council to the Programme Officer advising of Mr Kingston's replacement

CORE DOCUMENTS

CD01 General Layout Plan drawing Number B0800100/B3200A
CD02 Longitudinal Section on Centreline of Cogges Link Road Plan drawing number B0834600/Dwg/PA/CLR/04A
CD03 Department for Transport Declaration Certificate 353/NATTRAN/SE (Oxfordshire)/1
CD03A Minutes of the meeting of the Council's Cabinet held on 20 July 2010
CD03B Delegated decision of the Cabinet Member for Transport made on 11 October 2010
CD04 The Oxfordshire County Council (A4095 Witney: Cogges Link Road Classified) (Side Roads) Order 2010
CD05 The Oxfordshire County Council (A4095 Witney: Cogges Link Road) Compulsory Purchase Order 2010
CD05A Map showing the Witney and Cogges Conservation Area
CD05B Map showing the Witney Air Quality Management Area
CD06 Extracts from the Witney Local Plan 1987 showing paragraphs 3.4.8 and 3.4.9 on page 11, paragraph 3.4.15 on page 12, paragraph 3.5.3 on page 13, paragraph 5.5.13 – 5.5.18 on page 37, Policy TR2 on page 42, and the Proposals Map
CD07 Extracts from the West Oxfordshire District Council Local Plan 1997 showing Policy T9 on page 111, Witney Proposal 8 – Cogges Link Road on page 167, and inset map
CD08 West Oxfordshire District Council Local Plan 2011
CD09 West Oxfordshire District Council Local Development Framework Draft Core Strategy (January 2011)

CD10 Local Transport Plan 2011 Part 3 Section 21 "Major Projects" and Part 3 Section 29 "Witney"

CD11 Local Transport Plan 2006 Chapter 11 "West Oxfordshire"

CD11A Extract from Chapter 1 of the Local Transport Plan 2006 showing the Local Transport Plan objectives

CD12 Extract from the draft Local Transport Plan 2011 – 2030 showing Chapter 18 Witney Area Strategy

CD13 Witney Integrated Transport and Land Use Strategy

CD14 Oxfordshire Structure Plan 2016

CD15 South East Plan, Chapter 3 "Vision and Objectives" and Chapter 22 "Central Oxfordshire"

CD16 Regional Planning Guidance for the South East (RPG 9)

CD17 Oxfordshire Local Investment Plan 2010

CD18 Planning Approval Notice 7 April 2009

CD19 2005 Witney Traffic Model Local Model Validation Report (March 2007)

CD20 Traffic Model Forecasting Report (April 2008)

CD21 Supplementary Traffic Assessment Report (February 2011)

CD22 Planning Policy Statement 25 – Development and Flood Risk Practice Guide

CD23 Drawing number B0800100/CLR/EA/02 Rev A showing location of drainage consents and proposed drainage catchments

CD24 Drawing number B0800100/B1/01/P8 showing Cogges West Bridge General Arrangement

CD25 Drawing number B0800100/B2/01/P8 showing Cogges East Bridge General Arrangement

CD26 Drawing number B0800100/B3/01/P7 showing Spring Hill North Bridge General Arrangement

CD27 Drawing number HQ7888/F3106 showing Farm Mill Side Channel Diversion

CD28 Drawing number HQ7888/F3105 showing River Windrush Diversion

CD29 Drawing number HQ7888/F3107 showing Pumping Station (Hardwick Brook) Diversion

CD30 Complementary Traffic Measures Study (April 2008)

CD31 Options Report (April 2008)

CD32 TAG Assessment (April 2008)

CD32A Extract from the SAPCA Code of Practice for the Design, Construction and Improvement of Natural Sports Turf 1st Edition June 2010 (The Sports and Play Construction Association) showing paragraph 3.7 on page 103.

CD32B Extract from Comparative Sizes of Sports Pitches and Courts, February 2009 Rev.004 (Sport England) showing page 2, dimensions of a Five – A-Side Football Pitch

CD32C Active Design, Promoting opportunities for sport and physical activity through good design (Sport England)

CD32D Planning Policy Guidance 17 : Planning for open space, sport and recreation

CD32E Community Green : using local spaces to tackle inequality and improve health (Commission for Architecture and the Built Environment, 2010)

CD33 Design Manual for Roads and Bridges Volume 6, Section 2 Part 3 Technical Directive 16/07 Geometric Design of Roundabouts

CD34 Fluvial Flood Risk Assessment and Mitigation (August 2011)

CD35 Landscape and Visual Impact Assessment (April 2008)

CD36 Design Manual for Roads and Bridges Volume 11, Section 3 Part 5 Landscape Effects ("Part 5 Landscape Effects")

CD37 Guidelines for Landscape and Visual Impact Assessment

CD38 Countryside Character Volume 7 : South East and London

CD39 Oxfordshire Wildlife and Landscape Study (2004)

CD39A Examples of forms showing information obtained for the Oxfordshire Wildlife and Landscape Study (2004)

CD40 West Oxfordshire Landscape Assessment

CD41 English Nature Natural Area Profile, The Thames and Avon Vales

CD42 Habitats and Species Overview (April 2008)

CD42A Landscape and Ecology Mitigation Scheme

CD42B Noise and Vibration (April 2008)

CD42C Air Quality Assessment (April 2008)

CD42D Drawing number HQ22135/SOC/F01 Flood Mapping Comparison of 2011 EA Flood Map with Proposed Plots in Witney Lake and Meadows Country Park

CD43 Drawing number HQ7888/G3136 Witney Town Council Land; Land Identified for Flood Mitigation

CD43A PPS25 Sequential Test and Exception Test, and exchange of emails between Julian Hartless (Oxfordshire County Council) and Julian Smith (Jacobs)

CD44 West Oxfordshire District Council draft Strategic Housing Land Availability Assessment (January 2011) Settlement Summary – Witney and Map 1a Witney North and East

CD45 Extract from the West Oxfordshire Local Plan 2011 Inspector's Report (June 2005) showing paragraphs 9.124 – 9.131 on pages 214-215

CD46 Extract from the West Oxfordshire Local Plan 2011 Inspector's Report (June 2005) showing paragraphs 9.18 – 9.26 on pages 192-194

CD47 Witney Transport Study Final Strategy (March 2009) (Halcrow Report) (Report, Figures (13), and Technical Note)

CD48 Extract from draft Local Transport Plan 2011 – 2030 showing paragraph 5.29 in Chapter 5 "Congestion"

CD49 Planning Approval Notice 8 June 2011

CD50 Agenda for the meeting of The Oxfordshire County Council held on 5 April 2011

CD51 Minutes of the meeting of The Oxfordshire County Council held on 5 April 2011

CD52 Minutes of the meeting of The Oxfordshire County Council held on 17 May 2011

CD53 Witney and Cogges Conservation Area Character Appraisal

CD54 Management Strategy, Windrush in Witney Project

CD55 Report on the Inquiry into the application to register land at Witney Meadow as a town or village green

CD56 Interim Advice Note (IAN 135/10) Landscape and Visual Effects Assessment Nov 2010

CD57 Landscape Character Assessment Guidance for England and Scotland by the former Countryside Agency and Scottish Natural Heritage (2002)

CD58 Not Used

CD59 Not Used

CD60 Witney Landscape Assessment

CD61 CLR ES Recreation and Public Access Chapter

CD62 Windrush Valley Leaflets

CD63 Not Used

CD64 NPL Report CMAM16

CD65 PPG24 – Planning and Noise

CD66 BSI - British Standard 8233:1999 Sound Insulation and Noise Reduction for Buildings, 1999

CD67 World Health Organisation. Guidelines for Community Noise, 1999

CD68 National Physical Laboratory. Health effect based noise assessment methods: a review and feasibility study, 1998

CD69 Design Manual for Roads and Bridges Volume 11 – 1994

CD69A Design Manual for Roads and Bridges Volume 11 – 2011

CD70 TRRL – Traffic-induced vibrations in buildings report

CD71 TRRL – Traffic –induced ground-borne vibrations in dwellings report

CD72 Technical Memorandum: Calculation of Road Traffic Noise (HMSO) 1988

CD73 The Control of Pollution Act 1974; Section 61

CD74 Environmental Protection Act 1990; Sections 79, 80, 80A & 80ZA and schedule 15

CD75 Land Compensation Act 1973; Chapter 26

CD76 Noise Insulation Regulations 1975 (SI 1975/1763)

CD77 Noise Insulation (Amendment) Regulations 1988 (SI 1988/2000)

CD78 World Health Organisation 1980 - Environmental Health Criteria 12 – Noise

CD79 Environmental Statement (B0834600/Doc/PA/CLR/01 July 2008)

CD80 Not Used

CD81 'Cogges Link Road and Shores Green Slip Roads Viewpoint Location Plan and Photograph Panels'

CD82 National Character Area (NCA) 108 Upper Thames Clay Vales

CD83 Design Manual for Roads and Bridges Volume 12 – Part 1

CD84 Design Manual for Roads and Bridges Volume 12 – Part 2

CD85 WebTag 3.15.2 use of TEMPRO DATA

CD86 WebTag 3.15.5 Uncertainty in forecasting

CD87 Defra, TG(09) Local Air Quality Management, Technical Guidance LAQM.TG(09) (February 2009)

CD88 Office of the Deputy Prime Minister (ODPM) Planning Policy Statement 23: Planning and Pollution Control and Annex I (2004)

CD89 EPUK, Development Control: Planning for Air Quality (2010 Update) – Updated guidance from Environmental Protection UK on dealing with air quality concerns within the development control process

CD90 Defra, UK Air Quality Strategy 2007

CD91 Extract from the West Oxfordshire Local Plan 2011 Inspector's Report (June 2005) – Paragraphs 9.29 – 9.45, on pages 194-198

CD92 Institute of Air Quality Management Guidance on Significance Criteria, 2009

CD93 West Oxfordshire District Council (December 2010) Draft Air Quality Action Plan, Bridge Street, Witney, Oxfordshire

CD94 Trends in NOx emissions and ambient measurements in the UK. Version :3rd March 2011

OXFORDSHIRE COUNTY COUNCIL

OCC/1 Ms T Rowley: Proof of Evidence, Summary & Appendices: Planning Policy

OCC/1/1 Ms T Rowley: Rebuttal to The Mawle Trustees

OCC/2 Mr P Kingston: Proof of Evidence and Summary: Traffic and Economics

OCC/2/1 Mr P Kingston: Appendices: Traffic and Economics

OCC/2/2 Mr P Kingston: OCC Party Documents: Traffic and Economics
4.1 TUBA User Manual

	4.2 Cost Benefit Analysis
OCC/2/3	Mr P Kingston: Rebuttal to The Mawle Trustees
OCC/3	Mr G Woodward: Proof of Evidence: Landscape and Visual Effects: Volume 2 Text
OCC/3/1	Mr G Woodward: Proof of Evidence: Landscape and Visual Effects: Volume 3 Figures
OCC/3/2	Mr G Woodward: Summary Proof : Landscape and Visual Effects: Volume 1
OCC/3/3	Mr G Woodward: Rebuttal to The Mawle Trustees
OCC/4	Mr P Taylor: Proof of Evidence: Air Quality: Volume 1 Text
OCC/4/1	Mr P Taylor: Proof of Evidence: Air Quality: Volume 2 Figures & Appendices
OCC/4/2	Mr P Taylor: Summary Proof: Air Quality
OCC/4/3	Mr P Taylor: Rebuttal to The Mawle Trustees
OCC/5	Mr A Elder: Proof of Evidence: Flood Risk
OCC/5/1	Mr A Elder: Appendices: Flood Risk
OCC/5/2	Mr A Elder: Summary Proof: Flood Risk
OCC/5/3	Mr A Elder: Rebuttal to The Mawle Trustees
OCC/6	Mr M Wright: Proof of Evidence: Noise and Vibration: Volume 1 Text
OCC/6/1	Mr M Wright: Proof of Evidence: Noise and Vibration: Volume 2 Figures
OCC/6/2	Mr M Wright: Proof of Evidence: Noise and Vibration: Volume 3 Appendices
OCC/6/3	Mr M Wright: Summary Proof: Noise and Vibration
OCC/6/4	Mr M Wright: Rebuttal to The Mawle Trustees
OCC/6/5	Mr M Wright: Corrigenda to Volume 1: Text
OCC/7	Mr M Jennings: Proof of Evidence: Ecology
OCC/7/1	Mr M Jennings: Appendices: Ecology
OCC/7/2	Mr M Jennings: Party Documents: Ecology
OCC/7/3	Mr M Jennings: Rebuttal to The Mawle Trustees
OCC/8	Ms T Dow: Proof of Evidence: Transport Policy
OCC/8/1	Ms T Dow: Appendices: Transport Policy
OCC/8/2	Ms T Dow: Rebuttal to The Mawle Trustees
OCC/9	Mr N Day: Proof of Evidence: Design and Engineering
OCC/9/1	Mr N Day: Appendices: Design and Engineering
OCC/9/2	Mr N Day: Summary Proof: Design and Engineering
OCC/9/3	Mr N Day: Party Documents: Design and Engineering
	1.1 Ground Investigation Report, September 2009
	1.2 Geotechnical Design Report, June 2010
	1.3 CLR Geomorphology Study, April 2008
	1.4 DMRB Volume 6, Section 1, Part 1, TD 9/93, Highway Link Design

1.5 DMRB Volume 6, Section 2, Part 3, TD 16/07, Geometric Design of Roundabouts
1.6 DMRB Volume 6, Section 2, Part 6, TD 42/95, Geometric Design of Major/Minor Priority Junctions
1.7 TRL Report 615, "Development of a more versatile approach to flexible and flexible composite pavement design"
1.8 DMRB Volume 7, Section 2, Part 1, HD 24/06, Traffic Assessment
1.9 Interim Advice Note (IAN) 73/06 Rev 1 (2009) Design Guidance for Road Pavement Foundations (Draft HD25)
1.10 DMRB Volume 7, Section 2, Part 3, HD 26/06, Pavement Design
1.11 Planning Policy Statement 23: Planning and Pollution Control, Annex 1: Pollution Control, Air and Water Quality
1.12 Pollution Prevention Guidelines (PPG) 3: Use and design of oil separators in surface water drainage systems

OCC/9/4 Mr N Day: Rebuttal to The Mawle Trustees

OCC/10 Rebuttal to All Non Statutory Objectors
OCC/11 Letters Dated 16 and 19 September 2011 from OCC to Burges Salmon

Documents Submitted at Inquiry

OCC/12 List of OCC Witnesses
OCC/13 Mr D Holgate QC: Opening Submission
OCC/14 Authorities Folder
OCC/15 Compliance with Statutory Procedures
OCC/16 Draft Statement of Common Ground: Developer Funding
OCC/17 LTP 3
OCC/18 DfT White Paper
OCC/19 Details of Replacement Witness: Mr J Woods
OCC/20 Details of Replacement Witness: Mr M Hall
OCC/21 Statement of Common Ground on Air Quality
OCC/22 Note on Funding for Complementary Measures
OCC/23 Plan of Location of Play Equipment in Central Witney
OCC/24 Plan of Roads included in Air Quality Model
OCC/25 Note on Responsibilities for Delivering Traffic Evidence
OCC/26 Statement of Common Ground on Noise: Country Park
OCC/27 Statement of Common Ground on Landscape and Visual Impact Assessment
OCC/28 Statement of Common Ground on Ecology
OCC/29 Email dated 18th March 2008: Link Road Flood Studies and Sequential Test
OCC/30 Graham Woodward: Vol 3a Corrigendum
OCC/31 Fluvial Flood Risk Assessment and Mitigation: August 2011: plus Appendices
OCC/32 Extract of Development of Uniform Flow and its Formulae
OCC/33 Statement of Common Ground Developer Funding (replaces OCC/16)
OCC/34 Photo and Map Extracts re Landscaping Issues
OCC/35 Location of Ground Investigation Boreholes

OCC/36	Note on Funding for Complementary Measures for CLR (replaces OCC/22)
OCC/37	Speaking Note: Mr I Woods: Role of the CLR in Relieving Sensitive and Distributor Roads
OCC/38	Stand Alone Crossing on Witan Way
OCC/39	Fluvial Flood Risk Assessment: Model updates September 2011
OCC/40	CLR/SGSR: Revised Assessment
OCC/41	Extract of Shores Green Slip Roads: Environmental Scoping Report: Vol 1
OCC/42	Fig 1 Overall Landscape and Ecology Mitigation Measures
OCC/43	Shores Green Interchange: Bat and Badger Surveys
OCC/44	ODPM Guide to Good Practice: Planning for Biodiversity and Geological Conservation
OCC/45	Conservation of Habitats and Species Regulations: Part 5: Licences
OCC/46	Extract from Circular 06/2005
OCC/47	Disturbance by Traffic of Breeding Birds: evaluation of the effect and considerations in planning and managing road corridors (Extract)
OCC/48	Letter and Attachments Dated 1 November 2001: from Carter Jonas to WODC
OCC/49	WODC Cabinet: Witney & Cogges Conservation Area Designation of Amendments to Boundary
OCC/50	Cogges Link FFRA: Update 5 October 2011
OCC/51	Signalised Junction General Layout Concept Drawing
OCC/52	Extract from Natural Resource Management: Sustainable Drainage Systems
OCC/53	Assessment of SGSR Westbound Exit Slip Road Diverge Arrangement
OCC/54	Letter dated 2 June from EA to Mr I McNeill
OCC/55	CLR Traffic Briefing Note Reasons for Model Updates v5
OCC/56	Drawing HQ22135/PoE/3/01 'Area of Public Open Space'
OCC/57	Extract of Topographical Survey Data
OCC/58	An Australian Handbook of Stream Roughness Coefficients
OCC/59	Amended Rebuttal to Mr I McNeill
OCC/60	Amended (Red Lined) Proof of Evidence: Mr P Kingston
OCC/61	Amended (Red Lined) Appendices to Proof of Evidence: Mr P Kingston
OCC/62	Updated Rebuttal of Evidence Submitted by Third Party Objectors
OCC/63	Letter dated 28 September 2010 from The Mawle Trustees to Cllr Hudspeth
OCC/64	Note on Impact of A40 Through Trips on Calibration and Validation Counts
OCC/65	Letter dated 26 February 2009 from Burges Salmon to GOSE
OCC/66	Speaking Note: Mr I Woods (supersedes OCC/37)
OCC/67	Extract from RS: Cross Cutting Polices
OCC/68	Extract from Supplement to PPS 1
OCC/69	Table 1: OCC Core Noise Assessment v Mawle Trust: without street canyons: opening year
OCC/70	Extract from Regional Air Pollution: TAG Unit 3.3.4
OCC/71	Extract from: DMRB Scoping Criteria
OCC/72	Drawing of Witan Way Toucan Crossing
OCC/73	Undertaking Relating to Shores Green Slip Road, East Witney
OCC/74	Note on Otter Exclusion Fencing
OCC/75	Unilateral Undertaking

OCC/76 Response to Dr P Kinchesh (OBJ/118/2)
OCC/77 Amended Version of OCC/56 - Drawing HQ22135/PoE/3/01 'Area of Public Open Space'
OCC/78 Mr Elder's rebuttal to the addendum submitted by Dr Whitlow
OCC/79 Corrigenda – OCC/62 and OCC/66
OCC/80 Comments on 50 photos submitted by Mr W Devonald
OCC/81 Response from Mr Elder to OBJ/44 on response to Cogges Link FRA Update (OCC/50)
OCC/82 Note on potential 'rat running' on Burwell Meadow.
OCC/83 Speaking Note – Mr Hall
OCC/84 Speaking Note – Mr Woods
OCC/85 Note on Witan Way toucan and drawing No HQ 22135/PI/1/02 Rev B
OCC/86 Response to MT/32
OCC/87 Note on A40 Westbound Diverge Slip Road at A40/A415 Ducklington Road
OCC/88 Final draft of Unilateral Undertaking
OCC/89 Response to issues raised by Mr Harness
OCC/90 Summary of Notes relating to Proposed Undertaking from the Mawle Trustees
OCC/91 COBA Accident Assessment – Local Accident Rates
OCC/92 Two Extracts of COBA Manual – (i) Valuation of Accidents on Links (ii) Scheme Data: Accidents
OCC/93 Response to Mrs Triggs (OBJ/44) Comments on OCC/40
OCC/94 Data Used by Mr I Woods in Speaking Note
OCC/95 COBA Accident Assessment – SGSR
OCC/96 Further Response to Dr P Kinchesh
OCC/97 Copy of email dated 25th October from OCC to Mr Aldous
OCC/98 Existing Traffic Conditions at Ducklington Lane/Station Lane/ Thorney Leys
OCC/99 Response to Dr Jennison – Technical Note
OCC/100 Rebuttal to Additional Proof of CPRE (Mrs Salway)
OCC/101 Response to Mr Du Croz
OCC/102 Response to Mr Wilcock (OBJ/2/5)
OCC/103 Response to Mrs Triggs (OBJ/44/5) on Flood Risk Matters
OCC/104 Note on Economic Assessment: Cost Sensitivity Tests
OCC/105 Table Comparing 2 way AADT Values for Witan Way/Station Lane Corridor
OCC/106 Note on Economic Assessment: Cost Sensitivity Tests
OCC/107 Final OCC Unilateral Undertaking
OCC/108 Closing Submission
OCC/109 Authorities of the Acquiring Authority

THE STATUTORY OBJECTOR

MT/1/1 Mr S Smallman: Proof of Evidence: Planning
MT/1/2 Mr S Smallman: Summary Proof: Planning
MT/1/3/1-15 Mr S Smallman: Appendices to Proof of Evidence: Planning
MT/1/4 Mr S Smallman: Rebuttal to Ms Dow, Ms Rowley and Mr Elder

MT/2/1 Mr I McNeil: Proof of Evidence: Traffic and Transportation

MT/2/2 Mr I McNeil: Summary Proof: Traffic and Transportation
MT/2/3/1-35 Mr I McNeil: Appendices to Proof of Evidence: Traffic and Transportation
MT/2/4 Mr I McNeil: Rebuttal to Ms Dow

MT/3/1 Mr C Goodrum: Proof of Evidence: Landscape & Visual Impact
MT/3/2 Mr C Goodrum: Summary Proof : Landscape & Visual Impact
MT/3/3 Mr C Goodrum: Appendices to Proof of Evidence: Landscape & Visual Impact

MT/4/1 Dr C Holman: Proof of Evidence: Air Quality
MT/4/2 Dr C Holman: Summary Proof : Air Quality
MT/4/3 Dr C Holman: Appendices to Proof of Evidence: Air Quality
MT/4/4 Dr C Holman: Rebuttal to Mr Taylor

MT/5/1 Dr C Whitlow: Proof of Evidence: Flooding
MT/5/2 Dr C Whitlow: Summary Proof : Flooding
MT/5/3-12 Dr C Whitlow: Appendices to Proof of Evidence: Flooding
MT/5/13 Dr C Whitlow: Rebuttal to Mr Elder

MT/6/1 Mr D Sharps: Proof of Evidence: Noise
MT/6/2 Mr D Sharps: Summary Proof : Noise
MT/6/3 Mr D Sharps: Appendices to Proof of Evidence: Noise

MT/7/1 Dr P Shepherd: Proof of Evidence: Ecology
MT/7/2 Dr P Shepherd: Summary Proof: Ecology
MT/7/3 Dr P Shepherd: Appendices to Proof of Evidence: Ecology

MT/8/1 Mawle Trustees & EJSR Farms Limited: Statement of Case
MT/8/2 Mawle Trustees & EJSR Farms Limited: Document List

MT/9/1 Statement on Behalf of Mawle Trustees & EJSR Farms Limited
MT/9/2 Mawle Trustees & EJSR Farms Limited: Appendices 1 to 6

Documents Submitted at Inquiry

MT/10 Extracts from Oxfordshire Local Transport Plan 2006 - 2011
MT/11 Extracts from South East Plan: Regional Spatial Strategy
MT/12 Extract from DRMB Vol 11: Section 3: Air Quality
MT/13 Extract from TAG 3.3.3
MT/14 Plan of Mass Emissions Road Links
MT/15 Note on Residential Receptors
MT/16 Addendum to Dr C Whitlow's Proof of Evidence (MT 5/14)
MT/17 Undertaking Explanatory Note
MT/18 Undertaking relating to Shores Green Slip Road, East Witney.
MT/19 Opening submission
MT/20 Note on Figures 12 and 13 of Mr M Wright's Vol 2
MT/21 Transcription of text on CD54 Fig 2
MT/22 Disturbance by Traffic of Breeding Birds: evaluation of the effect and considerations in planning and managing road corridors
MT/23 Shores Green Slip Roads: Habitat and Species Overview
MT/24 Second Update to Addendum: Dr C Whitlow

MT/25 Update to Addendum: Dr C Whitlow
MT/26 Third Update to Addendum: Dr C Whitlow
MT/27 Second Update to Addendum (V2): Dr C Whitlow
MT/28 Fourth Update to Addendum: Dr C Whitlow
MT/29 Figures of Flood Progression Images
MT/30 Planning & Regulation Committee: 16th February 2009
MT/31 Figures 2009 CO_2 and NO_x
MT/32 Further Rebuttal Evidence – Mr I McNeill
MT/33 Visual Analysis of CLR and SGSR
MT/34 Undertaking relating to SGSR
MT/35 Undertaking Explanatory Note Updated
MT/36 Comments on the Council's Undertaking
MT/37 Preliminary Arrangement for Staple Hall Junction
MT/38 Mr McNeill's comments on Mr Hall's Speaking Notes
MT/39 Extract of COBA Manual – Vol 13 Section 1 Part 2 and Vol 13 Section 1 Part 7
MT/40 Extract of DMRB – Vol 6 Section 2: Road Geometry Junctions
MT/41 Note on Examination in Chief References
MT/42 Comments on the Council's proposed draft Undertaking relating to SGSR
MT/43 Comments on Unilateral Undertaking
MT/44 Undertaking
MT/45 Closing Submissions
MT/46 Prest v. SoS for Wales (1982) 81 LGR
MT/47 R. (Sainsbury's Supermarkets v. Wolverhampton City Council (2010) UKSC 20

NON STATUTORY OBJECTORS APPEARING AT INQUIRY

OBJ/ 2 Mr N Wilcock: Letter of Objection (included in Folder at INQ/2)
OBJ/ 2/1 Mr N Wilcock: Proof of Evidence
OBJ/ 2/2 Mr N Wilcock: Revised Proof of Evidence
OBJ/ 2/3 Extracts from newspaper dated Wednesday 25th July 2007

OBJ/20 Mrs G Salway on behalf of CPRE: Letter of Objection (included in Folder at INQ/2)
OBJ/20/1 Mrs G Salway on behalf of CPRE
OBJ/20/2 Mrs G Salway on behalf of CPRE: Updated Proof of Evidence

OBJ/26 Mr T Walker: Letter of Objection (included in Folder at INQ/2)
OBJ/26 Mr T Walker: Proof of Evidence

OBJ/ 29 Mr W Devonald: Letter of Objection (included in Folder at INQ/2)
OBJ/ 29/1 Mr W Devonald: Proof of Evidence
OBJ/ 29/2 Series of Photographs (DVD)
OBJ/29/3 Bundle of documents and photographs

OBJ/37 Ms F Basson: Letter of Objection (included in Folder at INQ/2)
OBJ/37/1 Ms F Basson: Proof of Evidence

OBJ/ 39	Mr D Condon on behalf of Witney CPRE & Witney First: Letter of Objection (included in Folder at INQ/2)
OBJ/ 39/1	Mr D Condon on behalf of Witney CPRE & Witney First: Proof of Evidence
OBJ/39/2	Mr D Condon: Revised Proof of Evidence
OBJ/39/3	Petition
OBJ/41	Mr J Aldous: Letter of Objection (included in Folder at INQ/2)
OBJ/41/1	Mr J Aldous: Proof of Evidence (includes Summary)
OBJ/41/2	Mr J Aldous: Summary Updated
OBJ/41/3	Mr J Aldous: Response to Rebuttal
OBJ/44	Mr and Mrs Triggs: Letter of Objection (included in Folder at INQ/2)
OBJ/44/1	Mr and Mrs Triggs: Proof of Evidence
OBJ/44/2	Mr and Mrs Triggs: Response to Rebuttal
OBJ/44/3	Mrs Triggs: Comments on Document OCC/40
OBJ/61	Dr J Maxwell: Letter of Objection (included in Folder at INQ/2)
OBJ/61/2	Dr J Maxwell: Proof of Evidence
OBJ/69	Mr O Edwards: Letter of Objection (included in Folder at INQ/2)
OBJ/69/1	Mr O Edwards: Proof of Evidence
OBJ/69/2	Mr O Edwards: Revised Proof of Evidence
OBJ/69/3	Mr O Edwards: Letter dated 3 October from Max Edwards to Mr Cameron plus Petition
OBJ/03	Objections of Mr S Harness as presented by Mr O Edwards
OBJ/74	Dr K Jennison: Letter of Objection dated 24th March 2011(included in Folder at INQ/2)
OBJ/74/1	Dr K Jennison: Proof of Evidence
OBJ/74/2	Dr K Jennison: Note to accompany proof of evidence
OBJ/74/3	Dr K Jennison: Letter dated 19th Nov 2008 to OCC
OBJ/74/4	Dr K Jennison: Clarification note for Mr Roscoe re his question about St Mary's Mead to Mr Fletcher
OBJ/111	Cllr D Enright Email dated 19 September 2011 (included in Folder at INQ/2)
OBJ/113	Mr S Fletcher: Email of Objection (included in Folder at INQ/2)
OBJ/113/1	Mr S Fletcher: Submission to Inquiry
OBJ/118	Dr P Kinchesh: Email of Objection (included in Folder at INQ/2)
OBJ/118/1	Dr P Kinchesh: Letter dated 7 October/Submission to Inquiry
OBJ/128	Mr M Kavanagh: Letter of Objection (included in Folder at INQ/2)

OTHER REPRESENTATIONS

EA/1	Email dated 22 September 2011 from the EA to the Programme Officer
REP/1	Letters dated 13 July and 10 August 2011 from Witney Town Council